APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

Atlantic.Net Broadband, Inc.
Atlas Communications, Ltd.
ATN, Inc. d/b/a AMTEL NETWORK, INC.
AT&T Communications of the Southern States, LLC d/b/a AT&T
Auglink Communications, Inc.
Available Telecom Services, Inc.
Azul Tel, Inc.
Backbone Communications Inc.
BAK Communications, LLC
Baldwin County Internet/DSSI Service, L.L.C.
Bar-Lyn Enterprises Inc d/b/a Swiftphone
Basic Phone, Inc.
Baytel Communications, Inc.
Beauty Town, Inc. d/b/a Anns Communication
Bellerud Communications, LLC
BellSouth BSE, Inc.
BellSouth Telecommunications, Inc.
Birch Telecom of the South, Inc. d/b/a Birch Telecom and d/b/a Birch
Broadview Networks, Inc.
Broadwing Local Services Inc.
Broward Business Service, Inc. dba Festival Telephone Services, Inc. and dba Communication Service Centers BT Communications Sales LLC
Budget Phone, Inc.
BudgeTel Systems, Inc.
BullsEye Telecom, Inc.
Burno, Inc. d/b/a Citywide-Tel
Business Communications, Inc.
Business Telecom, Inc. d/b/a BTI
Buy-Tel Communications, Inc.
C.E.F. Answering and Telecommunications Service Inc.
C.I.O., Inc.
C2C Fiber of Florida, Inc.
Cable & Wireless USA, Inc.
Calpoint (Florida), LLC
Campus Communications Group, Inc.
CariLink International, Inc.
CAT Communications International, Inc.
Cbeyond Communications, LLC
Cellutel Communications Inc
Centennial Florida Switch Corp.
CeriStar, Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

Choctaw Communications, Inc. d/b/a Smoke Signal Communications
CI2, Inc.
Ciera Network Systems, Inc.
Cinergy Communications Company
City of Daytona Beach
City of Gainesville, a municipal corporation d/b/a GRUCom
City of Lakeland
City of Ocala
City of Quincy d/b/a netquincy d/b/a netquincy.com d/b/a www.netquincy.com
City of Tallahassee
CityNet Telecom, Inc.
clertech.com.inc. d/b/a clertech.com
CM Tel (USA) LLC
Cogent Communications of Florida LHC, Inc.
Colmena Corp. of Delaware
Columbia Telecommunications, Inc. d/b/a axessa
Comcast Business Communications, Inc.
Comcast Phone of Florida, LLC d/b/a Comcast Digital Phone
Comm South Companies, Inc. d/b/a Florida Comm South
Commodity Partners Inc.
Communications Xchange, LLC
COMUSA, Inc.
Consolidated Networks, Inc.
Coral Telecom, Inc. d/b/a TruComm Southeast
Cordia Communications Corp.
Covista, Inc.
Cox Florida Telcom, L.P. d/b/a Cox Communications
Coyote Metro, LLC d/b/a INET Local Phone Service
Credit Loans, Inc. d/b/a Lone Star State Telephone Co.
CTC Communications Corp.
Cypress Communications Operating Company, Inc.
D-Tel, Inc.
David A. Chesson and Ted J. Moss d/b/a Phone-Out/Phone-On
Deland Actel, Inc. (TX435)
Delta Phones, Inc.
DialTek, LLC d/b/a DTK Telecommunications, LLC
Dialtone Telecom, LLC
DIECA Communications, Inc. d/b/a Covad Communications Company
Direct Telephone Company, Inc.
Direct-Tel USA, LLC
Direct2Internet Corp.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

Dominion Telecom, Inc.
Double Link Communications, Inc.
DPI-Teleconnect, L.L.C.
DSL Internet Corporation d/b/a DSLi
DSL Telecom, Inc.
DSLnet Communications, LLC
DukeNet Communications, LLC
DV2, Inc.
E.Com Technologies, LLC d/b/a Firstmile Technologies, LLC
Eagle Communications, Inc. d/b/a Eagle Telco, Inc.
Eagle Telecommunications, Inc.
Easy Telephone Services Company
El Paso Networks, LLC
ElectroNet Intermedia Consulting, Inc.
Electronic Technical Services (E.T.S.)
eMeritus Communications, Inc.
Enhanced Communications Network, Inc. d/b/a Asian American Association
Enron Telecommunications, Inc.
EPICUS, Inc. d/b/a EPICUS
Ernest Communications, Inc.
Esodus Communications, Inc. d/b/a Excelink Communications d/b/a Instatone
essential.com, inc.
Essex Acquisition Corporation
Essex Communications, Inc. d/b/a eLEC Communications
Everest Broadband Networks of Florida, Inc.
Excel Telecommunications, Inc.
Express Phone Service, Inc.
EZ Talk Communications, L.L.C.
F.J.M.R. Investments, Inc. d/b/a Sunshines Communications Network
Fair Financial LLC d/b/a Midstate Telecommunications
Fast Connections, LP
Fast Phones, Inc. of Alabama
FeroNetworks, Inc.
Fiber Media, LLC
First Choice Local Communications Inc.
FLATEL, Inc. d/b/a Florida Telephone Company d/b/a Oscatel d/b/a Telephone USA
Florida City-Link Communications, Inc.
Florida Digital Network, Inc. d/b/a FDN Communications
Florida Multi-Media Services, Inc. d/b/a Florida Multi Media
Florida Municipal Power Agency
Florida Phone Service, Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

Florida Phone Systems, Inc.
Florida Public Telecommunications Association, Inc.
Florida Telephone Services, LLC
Focal Communications Corporation of Florida
Fort Pierce Utilities Authority d/b/a GigaBand Communications
Foxtel, Inc.
FPL FiberNet, LLC
France Telecom Corporate Solutions L.L.C.
Frontier Communications of America, Inc.
Ganoco, Inc. d/b/a American Dial Tone
Georgia Public Web, Inc.
Georgia Telephone Services, Inc.
Global Connection, Inc of America
Global Crossing Local Services, Inc.
Global Crossing Telemanagement, Inc.
Global Dialtone, Inc. d/b/a Atlantic Phone
Global Metro Networks Florida, LLC
Global NAPS, Inc.
Global Telecom Systems, Inc.
Globalcom Inc. d/b/a GCI Globalcom Inc.
Globaltron Communications Corporation
Globcom, Inc.
GoBeam Services, Inc.
Grande Communications Networks, Inc.
Granite Telecommunications, LLC
Group Long Distance, Inc.
GTC Telecom, Inc. d/b/a Curbside Communications
Gulf Coast Telecom, Inc.
Harbor Communications, LLC
Hayes E-Government Resources, Inc.
Heritage Technologies, Ltd.
High Tech Communications of Central Florida, Inc.
Hosting-Network, Inc.
HTG Services, L.L.C.
I-Link Communications, Inc.
ICG Telecom Group, Inc.
IDS Telcom LLC
IDT America, Corp. d/b/a IDT
Image Access Communications, Inc. d/b/a NewPhone
Intellicall Operator Services, Inc. d/b/a ILD
Intelligence Network Online, Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

Intellitec Consulting Inc. d/b/a STS
Intelogistics Corp.
Interactive Services Network, Inc. d/b/a ISN Communications
InterCept Communications Technologies, Inc.
Intercontinental Communications Group, Inc. d/b/a Fusion Telecom
Interlink Telephony, Inc.
Intermedia Communications, Inc.
International Exchange Communications, Inc. d/b/a IE Com
International Telcom, Ltd.
International Telnet, Inc.
Intertoll Communications Network Corporation
Intrado Communications Inc.
ITC^DeltaCom Communications, Inc. d/b/a ITC^DeltaCom d/b/a Grapevine
ITS Telecommunications Systems, Inc.
Kenarl Inc. d/b/a Lake Wellington Professional Centre
Kernan Associates, Ltd. d/b/a St. Johns Estates
Kevin M. Brown d/b/a Miracle Communications
King Communications & Services, Inc.
KingTel, Inc.
Kissimmee Utility Authority
KMC Data LLC
KMC Telecom III LLC
KMC Telecom V, Inc.
Knology of Florida, Inc.
Laser Telecom, LLC
LecStar Telecom, Inc.
Level 3 Communications, LLC
LightWave Communications, LLC
Lightyear Communications, Inc.
Lionhart of Miami, Inc. d/b/a Astral Communications
Litestream Technologies, LLC
Local Line America, Inc.
Looking Glass Networks, Inc.
LPGA International Communications, LLC
M/C Southern Communications, Inc.
Madison River Communications, LLC
Max-Tel Communications, Inc. d/b/a Florida's Max-Tel Communications, Inc.
MCI WorldCom Communications, Inc.
MCI WorldCom Network Services, Inc.
MCImetro Access Transmission Services LLC
McGraw Communications, Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

McLeodUSA Telecommunications Services, Inc.
Melbourne Venture Group, LLC d/b/a SwiftTel
Mercury Long Distance, Inc.
Meridian Telecom, Inc.
MET Communications, Inc.
Metric Systems Corporation
Metro Teleconnect Companies, Inc.
Metromedia Fiber Network Services, Inc.
Metropolitan Fiber Systems of Florida, Inc.
Metropolitan Telecommunications of Florida, Inc. d/b/a MetTel
Microsun Telecommunications, Inc.
Midwestern Telecommunications, Incorporated
Momentum Business Solutions, Inc.
Movie, Television & Graphics Corp. d/b/a M.T.G.
Mpower Communications Corp.
MSN Communications, Inc.
MY-TEL INC.
Myatel Corporation
MYCOMP INS AGENCY CORP.
National Telecom & Broadband Services, LLC
National Telecom, LLC
NationNet Communications Corporation
Navigator Telecommunications, LLC.
Net One International, Inc.
Network International Solutions, Inc.
Network Multi-Family Security Corporation d/b/a Priority Link
Network Operator Services, Inc.
Network Telephone Corporation
NetworkIP, L.L.C.
New Access Communications LLC
New Connects, Inc.
New Edge Network, Inc. d/b/a New Edge Networks
NewSouth Communications Corp.
nii Communications, Ltd.
North American Telecommunications Corporation
North American Telecommunications Corporation d/b/a Southeast Telephone Company
North County Communications Corporation
NOS Communications, Inc. d/b/a International Plus d/b/a O11 Communications d/b/a The Internet Business Association d/b/a I Vantage Network Solutions
Novus Communications, Inc.
NOW Communications, Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

NTERA, Inc.
NUI Telecom, Inc.
NuStar Communications Corp.
NuVox Communications, Inc.
O1 Communications of Florida, Inc.
O1 Communications of Florida, LLC
Ocius Communications, Inc.
OCMC, Inc. d/b/a One Call Communications, Inc., OPTICOM, 1-800-MAX-SAVE, Advanttel, RegionTel, LiveTel, and SuperTel
Oltronics, Inc.
One Call Communications, Inc. d/b/a Opticom, a Division of One Call Communications, Inc.
OnePoint Communications-Georgia, LLC d/b/a Verizon Avenue
OneStar Long Distance, Inc.
OnFiber Carrier Services, Inc.
OpTel (Florida) Telecom, Inc. d/b/a OpTel
Orlando Telephone Company
Oronoco Networks, Inc.
Pacific Centrex Services, Inc.
PaeTec Communications, Inc.
Palm Beach Community College
Pan American Telecom, Incorporated
Phantom Networks, Inc.
Phone 1 Smart LLC
Phone Club Corporation
Phone-Link, Inc.
Pilgrim Telephone, Inc.
PNG Telecommunications, Inc. d/b/a PowerNet Global Communications
Preferred Carrier Services, Inc. d/b/a Telefonos Para Todos and d/b/a Phones For All
Premiere Network Services, Inc.
Primus Telecommunications, Inc.
Pro Telecom, Inc.
ProfitLab, Inc.
Progress Telecom Corporation
Public Telephone Network, Inc.
Quality Telephone Inc.
Quantum Phone Communications, L.L.C.
QuantumShift Communications, Inc.
Qwest Communications Corporation
Qwest Interprise America, Inc.
Qwik.net ALEC, Inc.
R & D Network Services, Inc.

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RCN Telecom Services, Inc.
Re-Connection Connection
Rebound Enterprises, Inc. d/b/a REI Communications
Reliant Communications, Inc.
ReTel Communications, Inc.
Rightlink USA, Inc.
Ring Connection, Inc.
Saluda Networks Incorporated
Sandhills Telecommunications Group, Inc. d/b/a SanTel Communications
SATCOM Communication Corporation d/b/a SATCOM Communication
SBA Broadband Services, Inc.
SBC Telecom, Inc.
ServiSense.com, Inc.
Seven Bridges Communications, L.L.C.
Shands Teaching Hospital and Clinics, Inc.
Smart City Networks
Smart City Solutions, LLC
Solution Telecom, Inc
Source One Communications, Inc. d/b/a Quick Connects
Southeastern Services, Inc.
Southern Light, LLC
Southern ReConnect, Inc.
Southern Telcom Network, Inc.
Southern Telecom, Inc. d/b/a Southern Telecom of America, Inc.
Spectrotel, Inc.
Speedy Reconnect, Inc.
Sprint Communications Company Limited Partnership
Strategic Technologies, Inc.
Sun-Tel USA, Inc.
Suntel Metro, Inc.
Super-Tel.Com, Inc.
Supra Telecommunications and Information Systems, Inc.
Symtelco, LLC
T-Netix, Inc.
T3 Communications, LLC d/b/a Tier 3 Communications d/b/a Naples Telephone and d/b/a Fort Myers Telephone
TAC License Corp.
Talk America Inc.
Talk and Pay, Inc.
Talk Unlimited Now, Inc.
TalkingNets Holdings, LLC

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

Tallahassee Community College
Tallahassee Memorial Telephone Company
Tallahassee Telephone Exchange, Inc.
TCG South Florida
Tel West Communications, LLC
TeleCents Communications, Inc.
Telecom Connection Corp.
TeleConex, Inc. d/b/a TeleConex
TELECUBA, INC.
Telefyne Incorporated
Telepak Networks, Inc.
Telephone One Inc.
Telephone Systems of Georgia, Inc.
Teligent Services, Inc.
TelQuest Communications, Corp.
TelSouth Communications, Inc.
Telsys, Inc.
Terra Telecommunications Corp.
THC Merger Corp. d/b/a THC Internet Solutions
The Gulas Group, L.L.C.
The Mobile Phone Company, Inc.
The Other Phone Company, Inc. d/b/a Access One Communications
The Sunshine State Telephone Company, L.L.P.
The Ultimate Connection, L.C. d/b/a DayStar Communications
Tiburon Telecom, Inc.
Time Warner Cable Information Services (Florida), LLC d/b/a Time Warner Cable Information Services d/b/a Time Warner Cable d/b/a Time Warner Communications
Time Warner Telecom of Florida, L.P.
TotalCom America Corporation
Touch 1 Communications, Inc.
Trans National Communications International, Inc.
Transparent Technology Services Corporation d/b/a North Palm Beach Telephone Company
Tristar Communications Corp.
U.S. TelePacific Corp. d/b/a TelePacific Communications
Unicom Communications, LLC
United Communications HUB, Inc.
United States Telecommunications, Inc. d/b/a Tel Com Plus
Universal Access, Inc. d/b/a UAI of Florida, Inc.
Universal Telecom, Inc.
University Club Communications, LLC
US LEC of Florida Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 6/30/03

US South Communications, Inc.
USA Telecom, Inc.
USA Telephone Inc. d/b/a CHOICE ONE Telecom
Utilities Commission, New Smyrna Beach
Utility Board of the City of Key West d/b/a Keys Energy Services
VarTec Telecom, Inc. d/b/a VarTec Telecom, Inc. and Clear Choice Communications
VBNet, Incorporated
Verizon Florida Inc.
Verizon Select Services Inc.
VGM International, Inc.
VIVO-FLA, LLC
Volo Communications of Florida, Inc. d/b/a Volo Communications Group of Florida, Inc.
Vox2 Voice, L.C.
Vycera Communications, Inc.
W.G.I. Communications, Inc. d/b/a Boomerang Communications, Inc.
Wholesale Carrier Services, Inc.
WilTel Local Network, LLC
Winstar Communications, LLC
Wireless One Network Management, L.P.
WS Telecom, Inc. d/b/a eXpeTel Communications
XO Florida, Inc.
Xspedius Management Co. of Jacksonville, LLC
Xspedius Management Co. Switched Services, LLC
Yipes Enterprise Services, Inc.
Z-Tel Communications, Inc.
Zone Telecom, Inc.

GLOSSARY

Access Line	A telephone line extending from the telecommunications company's central office to a point of demarcation, usually on the customer's premises. (See also - "Local Loop")
ALEC	Alternative Local Exchange Company. Any company certificated by the Florida Public Service Commission to provide local exchange telecommunications service in the State of Florida on or after July 1, 1995. Pursuant to Law, the term ALEC was changed to CLEC on May 23, 2003.
Broadband	A descriptive term for evolving digital technologies offering consumers a single switched facility offering integrated access to voice, high-speed data services, video-demand services, and interactive information delivery services. Broadband is also used to define an analog transmission technique for data or video that provides multiple channels.
Central Office	CO. A telephone company facility housing the switching system and signaling equipment that provides telephone service for customers in the immediate geographical area.
CLEC	Competitive Local Exchange Company. Any company certificated by the Florida Public Service Commission to provide local exchange telecommunications service in the State of Florida on or after July 1, 1995. Pursuant to Law, the term ALEC was changed to CLEC on May 23, 2003.
Circuit	A fully operative two-way communications path.
Collocation	In a collocation arrangement, a competitor leases space at an incumbent local exchange carrier's (LEC's) premises for its equipment.
Dark Fiber	Optical Fiber through which no light is transmitted and which, therefore, no signal is being carried. The fibers that the carrier is using immediately are "lit," and those currently that are unused are left "dark."
DS	Digital Signal (level). A hierarchy of digital signal speeds used to classify capacities of digital lines and trunks. The fundamental speed is DS-0, which is a voice grade channel. The full hierarchy is as follows: DS-1, DS-1C, DS-2, DS-3, DS-4.
Exchange	A central office or group of central offices, together with the subscriber's stations and lines connected thereto, forming a local system which

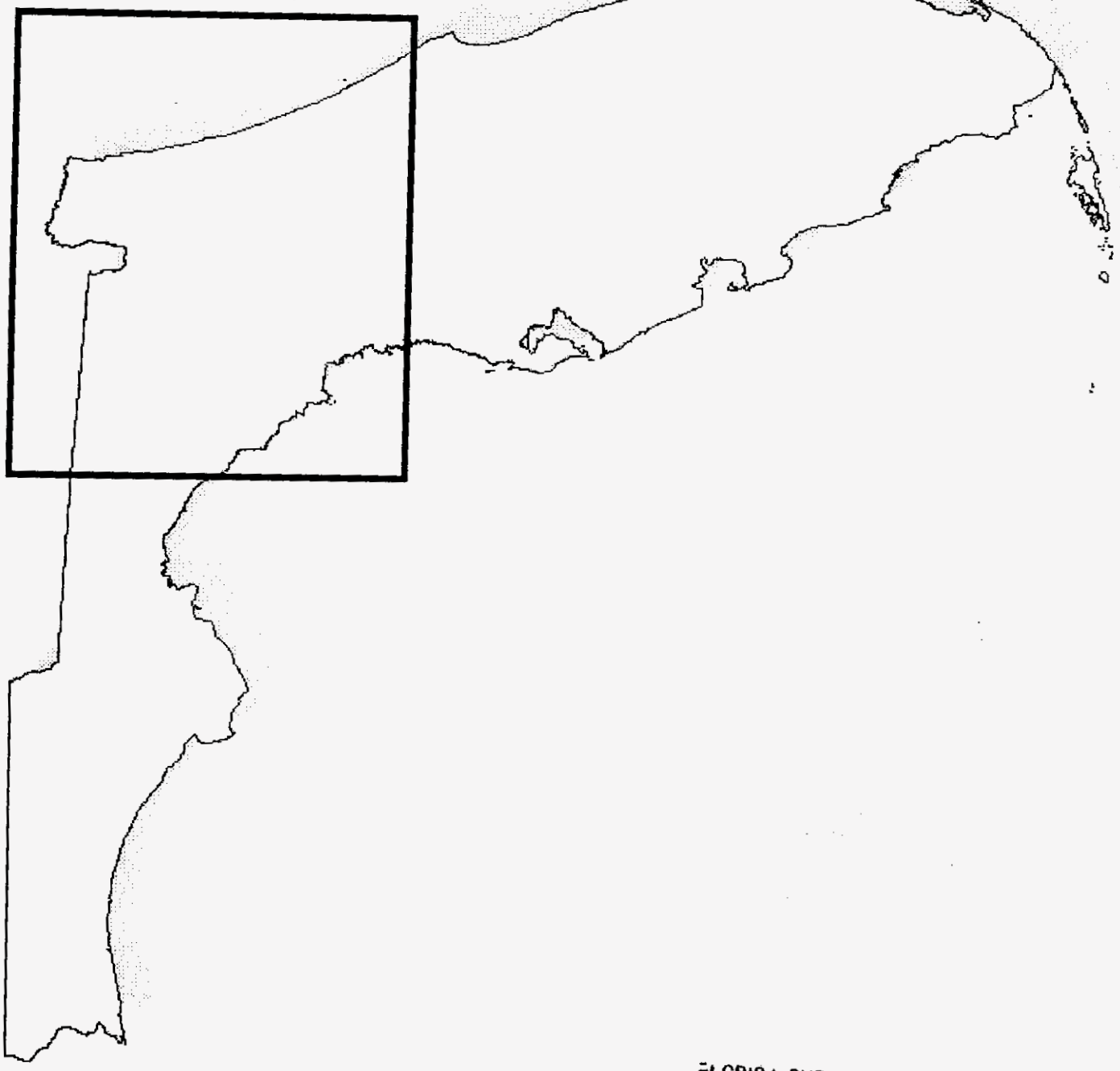
	furnishes means of telephonic intercommunication without toll charges between subscribers within a specified area, usually a single city, town, or village.
InterLATA	Telecommunications services that originate and terminate in different local access and transport areas (LATAs).
Intermodal	The use of more than one form of carrier to transport telecommunication services from origination to termination.
Internet Protocol	Refers to all the standards that keep the Internet running. Describes software that tracks the Internet address of nodes, routes outgoing messages, and recognizes incoming messages.
IntraLATA	Telecommunications services that originate and terminate in the same Local Access and Transport Area
Last Mile	An imprecise term that typically means the link between an end-user and the telephone company central office-local, long distance, or internet.
LATA	Local Access and Transport Areas. Geographic regions which presented the post-divestiture service areas of the 22 Bell operating companies (BOCs). All telephone service within a LATA is defined as exchange service, while all telephone service between LATAs is defined as interexchange service. LATAs are loosely based on standard metropolitan statistical areas (SMSAs).
LEC	Local Exchange Company or Carrier, Local exchange telecommunications company. Means any company certificated by the commission to provide local exchange telecommunications service in this state on or before June 30, 1995.
Local Loop	A circuit connecting telephone equipment to a switching facility or distribution point. (See also - "Access Line")
OC	Optical Carrier. A hierarchy of optical signal speeds used to classify capacities of optical lines and trunks.
OSS	Operations Support System. Methods and procedures (mechanized or not) which directly support the daily operation of the telecommunications infrastructure. The average local exchange company has hundreds of OSSs, including automated systems supporting order negotiation, order processing, line assignment, line testing and billing.

Packet Switching	A data transmission method whereby a channel is occupied only for the duration of transmission of "packets" of data. The packet switch sends the different packets from different data sources along the best route available, in no particular order. At the other end, the packets are reassembled to form the original message which is then sent to the receiving computer. Because packets need not be sent in a particular order, and because they can go by any route as long as they reach their destination, packet switching networks can choose the most efficient route and send the most efficient number of packets down that route, before switching to another route to send more packets.
PBX	Private Branch eXchange. A small version of a telephone company's larger central switching office that is owned by the customer.
POTS	Plain Old Telephone Service. The basic service supplying single line telephones, telephone lines and access to the public switched network.
PSTN	Public Switched Telephone Network. The telephone network that provides switching and transmission facilities to the general public.
RBOC	Regional Bell Operating Company. Originally, one of seven regional holding companies which were created in 1984 as part of the breakup of AT&T. After mergers and acquisitions, there are now 5 regional holding companies; BellSouth, SBC Communications, Ameritech, Verizon and Qwest.
Resale	Buying local and/or long distance phone lines in quantity at wholesale rates then selling them to someone else.
Section 271	Section of the Telecommunications Act of 1996 specifying the standards that must be met by a regional Bell Operating Company prior to in-region, interLATA entry. The standard seeks to measure whether the barriers to competition that Congress sought to eliminate with the 1996 Act have in fact been fully eliminated and whether there are objective criteria to ensure that competitive local exchange carriers will continue to have nondiscriminatory access to the facilities and services they will need from the Bell Operating Company in order to enter and compete in the local exchange market.
Switch	A mechanical, electrical or electronic device which opens or closes circuits, completes or breaks an electrical path, or selects paths or circuits.
Switched Access	Telephone company provided exchange access services that offer switched interconnections between local telephone subscribers and long

	distance or other companies. Long distance companies use for origination and termination of ordinary user-dialed calls. Switched access is the single largest cost item for the long distance industry.
Tariff	A statement by a communications company that sets forth the services offered by that company, and established customer rates, terms, and conditions under which regulated services are provided, and state general obligations of the company and customer. Tariffs are subject to review by regulatory agencies and must be followed by the common carrier to ensure nondiscrimination between customers.
TELRIC	Total Element Long Run Incremental Cost. A method of figuring out what phone service should cost based on incremental cost of equipment and labor, not counting the embedded cost of old cost.
TS	Transport Stream. Synonymous with DS in North America.
UNE	Unbundled Network Element. The Telecommunications Act of 1996 requires that the incumbent local exchange companies unbundle their network elements and make them available to the competitive local exchange companies on the basis of incremental cost. UNEs are defined as physical and functional elements of the network, e.g., Network Interface Devices, local loops and subloops, circuit-switching and switch ports, interoffice transmission facilities, signaling and call-related databases, OSSs, operator services and directory assistance, and packet or data switching. (Newton)
UNE-L	Unbundled Network Element - Loop.
UNE-P	Unbundled Network Element - Platform. When combined into a complete set in order to provide an end-to-end circuit, the UNEs constitute a UNE-P.
Universal Service	This term describes the financial support mechanisms that constitute a universal fund which helps to compensate telephone companies or other communication entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular, high cost areas, and to public institutions.
VoIP	Voice over Internet Protocol. The technology used to transmit voice conversations over a data network using the Internet Protocol.
Wireline	A term used to describe the technology used by a company to provide telecommunications services; it is synonymous with "landline" or land

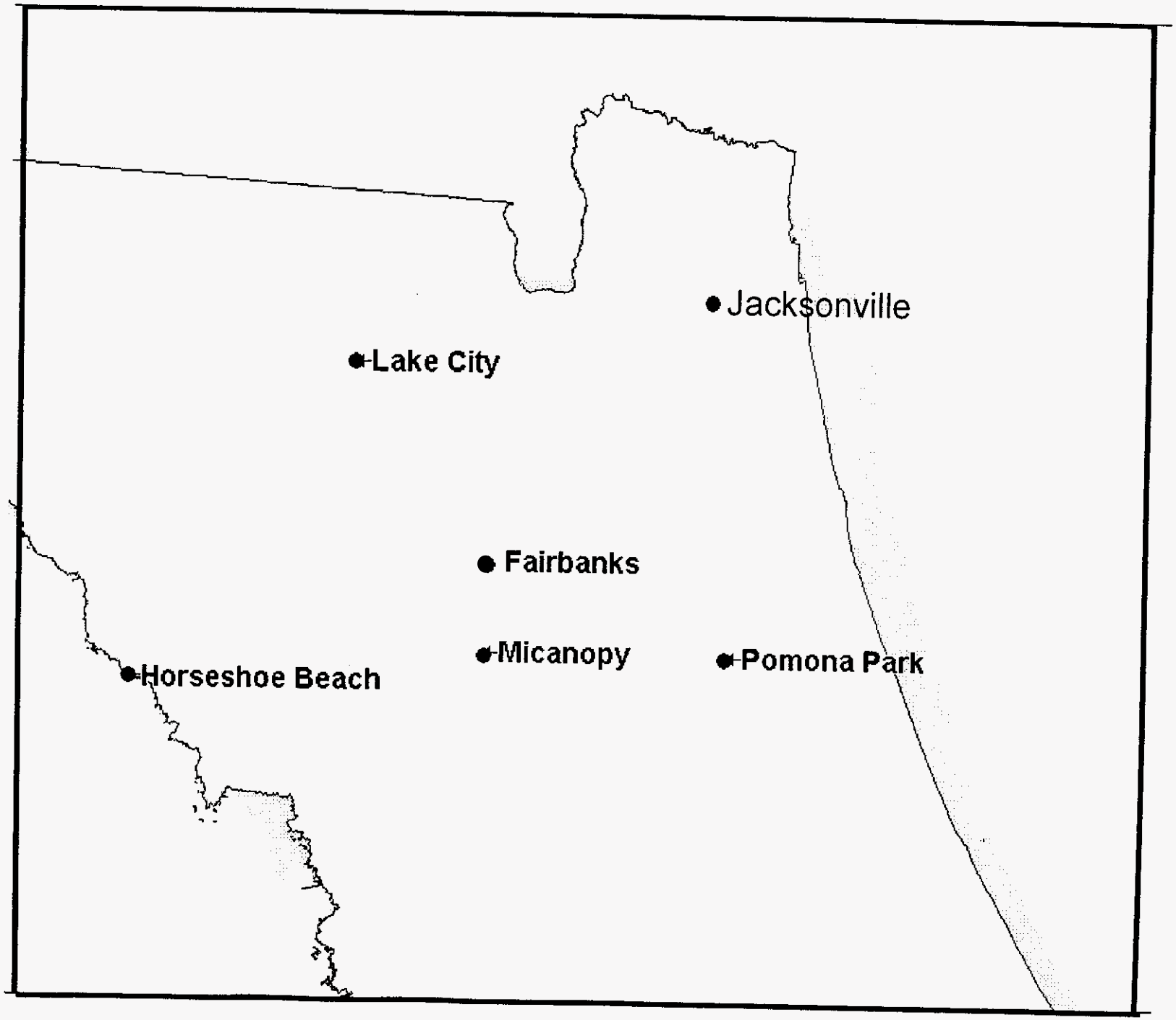
based technology, which "refers to standard telephone and data communications systems that use in-ground and telephone pole cables in contrast to wireless cellular and satellite services." (Techweb.com)

Exhibit 83
[redacted].pic
Boater Info
Mark Info
Sprint Northern Fla



FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 83
COMPANY/ Sprint/ Info Maps
WITNESS: of Northeast Florida
DATE: 02/24-27/04


Jacksonville
Gainesville
Ocala
Daytona Beach
Deltona


Jacksonville
Lake City
Fairbanks
Micanopy
Pomona Park
Horseshoe Beach

"Georgia Interrogatory Resp"
Exh. #84

INTERROGATORY NO. 25: Provide a forecast for the next five years, or the longest available forecast if a five-year forecast is not available, identifying the number and percent of loops in BellSouth's nine-state region that BellSouth intends to serve via:

(a) DLC loop arrangements; and

(b) NGDLC loop arrangements.

RESPONSE: BellSouth does not develop forecasts by technology type. Forecasts are developed by service type. Current status of the serving arrangements in BellSouth's nine-state region is provided below.

State	Copper	%	Universal DLC	%	Integrated DLC	%	Universal NGDLC	%	Integrated NGDLC	%
AL	1,272,655	64%	210,716	11%	417,795	21%	39,754	2%	51,488	3%
FL	3,396,599	51%	596,945	9%	2,347,424	36%	157,906	2%	100,872	2%
GA	1,826,598	44%	687,657	17%	1,286,512	31%	226,880	5%	104,767	3%
KY	854,806	68%	131,865	11%	199,620	16%	42,914	3%	26,635	2%
LA	1,810,481	76%	246,148	10%	272,920	11%	43,292	2%	24,205	1%
MS	868,943	62%	145,008	10%	336,113	24%	29,868	2%	21,064	2%
NC	1,321,278	52%	270,813	11%	845,471	33%	59,846	2%	43,291	2%
SC	827,067	55%	68,430	5%	604,242	40%	7,742	1%	8,216	1%
TN	1,617,081	59%	282,261	10%	703,448	26%	58,602	2%	59,289	2%
Total	13,795,508	56%	2,639,843	11%	7,013,545	29%	666,804	3%	439,827	2%

INTERROGATORY NO. 26: Please identify the number and percent of hot cut LSRs received by BellSouth in the last 12 months for which data is available that have required a field dispatch to remove a customer from an access line(s) provisioned on an IDLC system.

(a) If available, provide the information by month and by CO.

(b) Please explain how you calculated or estimated the percentage.

RESPONSE: See file provided by BellSouth in response to AT&T's 1st Production of Documents, Item No. 5 in this Docket, for the percentage of conversions during the last 12 months that have required a field dispatch to remove a customer from an access line(s) provisioned on an IDLC system. From September 2002 until April 2003, the determination of a dispatch was based on the Routing Code used on the service order in SOCS. Starting in May 2003, the OCB field identifier (FID) is used to determine if a dispatch occurs. From September

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 84
COMPANY/ Georgia
WITNESS. Interrogatory Responses
DATE 02/24-27/04

(85)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for emergency relief by Supra Telecommunications & Information Systems against BellSouth Telecommunications, Inc., concerning collocation and interconnection agreements.	DOCKET NO. 980800-TP ORDER NO. PSC-99-0060-FOF-TP ISSUED: January 6, 1999

The following Commissioners participated in the disposition of this matter:

J. TERRY DEASON
SUSAN F. CLARK
E. LEON JACOBS, JR.

APPEARANCES:

Suzanne Fannon Summerlin, Esquire, 1311-b Paul Russell Road, #201, Tallahassee, Florida 32301.
On behalf of Supra Telecommunications & Information Systems, Inc.

Nancy B. White, Esquire, 150 South Monroe Street, Suite 400, Tallahassee, Florida 32301.
On behalf of BellSouth Telecommunications, Inc.

Beth Keating, Esquire, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850.
On behalf of Commission staff.

FINAL ORDER RESOLVING COMPLAINT
REGARDING PHYSICAL COLLOCATION

BY THE COMMISSION:

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 85
COMPANY/ Supra FPSC Order
WITNESS 99-0060-FOF-TP
DATE 02/24-27/04

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LIST OF ACRONYMS

AIN	Advanced Intelligence Network
ALEC	Alternative Local Exchange Carrier
BellSouth	BellSouth Telecommunications, Inc
CO	Central Office
FCC	Federal Communications Commission
GGCO	Golden Glades Central Office
HVAC	Heating/Ventilation/Air Conditioning
ILEC	Incumbent Local Exchange Carrier
IXC	Interexchange Carrier
MCI	MCI Metro Access Transmission Services, Inc. & MCI Telecommunications Corporation
SCP	Signal Control Point
STP	Signaling Transfer Point
TCAP	Transaction Capability Application Part
UNE	Unbundled Network Element

I. CASE BACKGROUND

On June 30, 1998, Supra Telecommunications & Information Systems (Supra) filed a Petition for Emergency Relief against BellSouth Telecommunications, Inc. (BellSouth). By its Petition, Supra asked that we require BellSouth to permit Supra to physically collocate in BellSouth's North Dade Golden Glades and West Palm Beach Gardens central offices. On July 20, 1998, BellSouth filed its Answer and Response to Supra's Petition.

Subsequent to Supra's Complaint, on August 7, 1998, BellSouth filed Petitions seeking waivers of the requirements of the Telecommunications Act of 1996 (Act), Section 251(c)(6), and paragraphs 602-607 of the Federal Communications Commission's First Report and Order (96-325) to provide physical collocation. By its Petitions, BellSouth claimed that it can no longer provide physical collocation in its West Palm Beach Gardens and North Dade Golden Glades central offices, because it no longer has sufficient space.

By Order No. PSC-98-1417-PCO-TP, issued October 22, 1998, we determined that Supra should have first priority in the North Dade Golden Glades and West Palm Beach Gardens central offices for purposes of pursuing its complaint in this Docket. We reasoned that Supra should have priority in this specific instance. Order at p. 10.

On October 21, 1998, we held a hearing in which we received testimony concerning space availability and interpretation of BellSouth's obligations under its collocation agreement with Supra. Set forth herein is our determination on the issues addressed at hearing.

II. REQUIREMENT TO PROVIDE PHYSICAL COLLOCATION

First, we were asked to consider the threshold question of whether or not the parties' collocation agreement requires BellSouth to provide physical collocation when requested by Supra.

Supra witness Ramos argued that pursuant to the parties' Collocation Agreement and applicable laws, BellSouth is required to provide space to Supra for physical collocation. Witness Ramos did not, however, reference any clause in the agreement supporting his argument.

BellSouth witness Thierry testified that there is no

provision in the collocation agreement that requires BellSouth to fulfill every request for collocation by Supra. The witness noted that the collocation agreement between BellSouth and Supra contains the following introductory provisions:

> WHEREAS, Interconnector wishes the right to occupy the BellSouth Central Office(s) delineated herein for the purpose of interconnection to BellSouth's facilities; and
>
> WHEREAS, BellSouth has space available in its Central Office(s) which Interconnector desires to utilize; and
>
> WHEREAS, BellSouth is willing to make such space available to Interconnector with its Central Office(s) subject to all terms and conditions of this agreement.

See Transcript at p. 247; and Exhibit 25. BellSouth witness Thierry added that the agreement specifically contemplates space being available.

We note that Section I.E., Scope of the Agreement states that:

> A collocation space will be provided to Interconnector at each Central Office identified at Exhibit B attached hereto, which Exhibit shall be updated from time to time as additional Central Offices are made subject to the terms of this Agreement.

Although this provision requires BellSouth to provide space for collocation to any and all Central Offices listed on Exhibit B to the Agreement if requested by Supra, review of Exhibit B indicates that there are no Central Offices listed. It appears that BellSouth did not commit specific space in any Central Office for Supra at the time the parties negotiated the agreement. Nevertheless, the portions of the Agreement referred to herein clearly contemplate that space will be provided, if it is available.

Upon consideration, we find that the agreement requires

BellSouth to fill a request for physical collocation by Supra in accordance with the terms and conditions set forth in the agreement. BellSouth must, however, do so only if space is available in the requested central office.

III. FACTORS

We also considered factors that would be used to determine whether space is available in the North Dade Golden Glades and West Palm Beach Gardens central offices to allow physical collocation. In this section, we have addressed the propriety of each factor separately. We have applied the factors that we determined are appropriate for these offices in Section IV. on Space Availability.

A. EXISTING BUILDING CONFIGURATION AND THE PROCESS USED TO EVALUATE THE FACILITY FOR SPACE AVAILABILITY

BellSouth witness Bloomer stated that BellSouth's evaluation of the existing building configuration included consideration of the location of doors, hallways, stairs, lounges, air handling, the building outline, and the physical capacity of the structure. Witness Bloomer explained that the following steps were used by BellSouth to evaluate these central offices for space availability:

1) The gross building space was determined;

2) Unavailable space (air handling rooms, pump rooms, transformer and cable vaults, restrooms, stair towers, janitor closets, main corridors, vestibules, and light shafts) was subtracted;

3) Occupied space (space occupied by equipment such as switches, transmission, frame and power equipment)was subtracted;

4) Space reserved for future equipment growth was subtracted;

5) Vacant space/unusable space (space unusable due to configuration problems, lack of exits, less than 100 square feet, etc.) was subtracted; and

6) The net space possibly available for collocation was

then determined.

See Transcript at p. 457-458.

Regarding this evaluation process, Supra witness Nilson noted that:

> While most of this [BellSouth's] procedure is fairly self-explanatory, the determination whether collocation space is available is made at the last step. All possible future needs of BellSouth, for an unspecified time in the future, are subtracted before the first square foot is allocated for collocation.

See Transcript at p. 134. Supra witness Ramos argued that the following factors should be used:

> 1) The proper amount of administrative space to be utilized by BellSouth for its own purposes;
>
> 2) The appropriate amount of space for BellSouth to reserve for its own future use; and
>
> 3) Whether BellSouth has utilized a design for the central offices that maximizes the opportunity for physical collocation by other telecommunications service providers such as Supra.

See Transcript at pgs. 43 - 44.

Upon consideration, we find that review of the existing building configuration provides an appropriate basis upon which to begin evaluating whether there is space available in these central offices for physical collocation.

Based upon the evidence and arguments presented, we also find that the process used by BellSouth to evaluate the facility for space availability is reasonable. We acknowledge that Supra objected to BellSouth's reservation of space in the central offices for its own future use prior to allocating space for physical collocation. The FCC has, however, stated in its First Report and Order that:

> Incumbent LECs are allowed to retain a

> limited amount of floor space for defined future uses. Allowing competitive entrants to claim space that incumbent LECS had specifically planned to use could prevent incumbent LECs from serving their customers effectively.

See FCC Order 96-325 at ¶604. It is, therefore, appropriate for us to allow BellSouth to reserve space for its own future use prior to allocating space for physical collocation. We emphasize, however, that in reaching this conclusion, we are not making a determination at this time as to whether the amount of space reserved for future use by BellSouth is reasonable.

B. USAGE OF EXISTING SPACE, INCLUDING ADMINISTRATIVE SPACE

Supra also argued in its brief that we should consider whether BellSouth has designed its central offices to maximize the opportunity for physical collocation by other telecommunications service providers such as Supra. Supra witness Graham stated that BellSouth is using outdated arrangements of computer work stations, and that BellSouth could install computer work stations that are set up to monitor numerous switches, as opposed to having a separate work station for each switch. Witness Graham further explained that BellSouth has supply cabinets, file cabinets, and piles of various equipment and supplies scattered throughout these central offices in a disorganized fashion. Witness Graham indicated that BellSouth is using several areas of space as "staging" areas for current projects being done by vendors. He suggested that this equipment could be stored in a truck outside the central office.

Supra witness Nilson also indicated that BellSouth is using administrative space designs that are inefficient and outdated. He asserted that BellSouth is, effectively, warehousing space for its own future use.

In addition, Supra witness Ramos alleged that BellSouth had duplicated the administrative work space in order to crowd the central office. He also believed that BellSouth had installed unnecessary desks in various locations of the central office.

BellSouth witness Bloomer defined administrative space as:

> Administrative space is any space NOT directly supporting the installation or repair of both telephone equipment and customer service. Examples of this space are storerooms, lounges, shipping-receiving rooms, and training areas.

See Transcript at p. 458. The witness explained that administrative space is necessary for code, life safety, or contractual reasons. Witness Bloomer also asserted that administrative space may also include any regular office space used by work groups performing company functions other than the equipment support.

BellSouth witness Bloomer contended that equipment relocations are made to consolidate service areas and maximize space usage. Witness Bloomer also stated that he evaluated the equipment layout in both the West Palm Beach Gardens and North Dade Golden Glades central offices and believed that the equipment was placed efficiently.

Upon consideration of the evidence and arguments presented, we agree with Supra that the administrative space in both central offices is used inefficiently. We also believe that the evidence supports Supra witness Graham's assertion that the technology is available to allow BellSouth to set up computer workstations that can monitor numerous switches, instead of requiring a separate workstation for each switch. The evidence is not, however, clear that this is a viable option for BellSouth, or what effect it may have on BellSouth's operations. As such, we simply encourage BellSouth to investigate this technology as a possible way to improve efficiency of space and operations.

C. SPACE RESERVED FOR FUTURE USE

Supra also disputed the amount of space that BellSouth indicated that it had reserved for its own future use. Witness Nilson compared the amount of space that BellSouth is currently reserving for its own future use with the amount that BellSouth reserved for itself in 1993 when it applied to the FCC for waivers for these same two central offices for the collocation requirements. He states that in 1993 BellSouth requested permission from the FCC to reserve 2,100 square feet and 1,000 square feet of space in the West Palm Beach Gardens and North Dade Golden Glades central offices, respectively. He noted that,

in comparison, BellSouth is now reserving 3,544 square feet and 4,796 square feet of space in the West Palm Beach Gardens and North Dade Golden Glades central offices, respectively. As such, the witness believed that the reliability of BellSouth's growth figures was questionable. Supra witness Nilson also indicated that there is more space available in these central offices than BellSouth has indicated. Supra witness Nilson added that he believes that BellSouth is attempting to reserve space for the next five years' growth.

BellSouth witness Bloomer testified that there are 4,035 square feet and 3,197 square feet of space reserved for BellSouth's future use in the North Dade Golden Glades and West Palm Beach Gardens central offices, respectively. Witness Bloomer stated that BellSouth reserves space for forecasted needs of equipment growth for the next two years. BellSouth witness Milner agreed that BellSouth forecasts the provision of collocation equipment and terminations for the next two years.

BellSouth witness Bloomer further contended that:

> It is only expected that the numbers have changed. Equipment forecasts and the proposed space allocations derived from these forecasts are snapshots in time. This means that the forecast is good only until the next forecast is completed.

See Transcript at p. 469.

Upon consideration, we find that space reserved for future use should be a factor in determining whether space is available for physical collocation in the North Dade Golden Glades and West Palm Beach Gardens central offices. We note that the FCC addressed this issue in its First Report and Order by stating:

> Incumbent LECs are allowed to retain a limited amount of floor space for defined future uses. Allowing competitive entrants to claim space that incumbent LECs had specifically planned to use could prevent incumbent LECs from serving their customers effectively. Incumbent LECs may not, however, reserve space for future use on terms more favorable than those that apply to other telecommunications carriers seeking to

> hold collocation space for their own future use.

See FCC Order 96-325 at ¶604.

We emphasize that Supra did not argue that BellSouth should not be allowed to reserve space for future use. Instead, Supra disputed the amount of space held by BellSouth for future use. BellSouth indicated that it reserves space for two years of forecasted equipment growth, and that it allows collocators to do the same. We find that this policy is reasonable. Nevertheless, there is evidence in the record indicating that BellSouth has space available in these central offices for its equipment growth beyond two years. We address this evidence in the subsequent section of this Order pertaining to Space Availability.

Supra also noted that there has been an increase in reserved space in these two central offices since BellSouth filed its petitions for waivers from the physical collocation requirements with the FCC in 1993. Based on the evidence and arguments presented, we believe that the removal and addition of equipment, and advancements in technology, as well as other factors, have contributed to the increase in space in these offices.

D. BUILDING CODE AND LOCAL REGULATIONS

BellSouth contended that building codes and local regulations are factors that should be considered when determining if space is available in a central office for physical collocation. Specifically, BellSouth witness Milner indicated that the National Fire Protection Act and the Southern Building Code are codes to which BellSouth must adhere.

The primary point of contention between Supra and BellSouth regarding code requirements pertains to fire-rated walls. Regarding the North Dade Golden Glades and the West Palm Beach Gardens central offices, BellSouth witness Bloomer stated that the local building officials take the position that collocation is a leased multi-tenant occupancy requiring a full fire-rated wall from floor to ceiling, served by a fire-rated corridor to the two exit doors. Witness Bloomer asserted that this type of construction is impossible, because the wall must cross through all the overhead racking, ducts, and conduits. Supra's witness Nilson responded, however, that Supra has requested physical collocation in an unenclosed space, and, therefore, fire-rated walls should not be necessary.

Upon consideration, we agree that BellSouth must adhere to all building codes and local regulations, and that these codes must be considered as factors when evaluating whether space is available in these central offices for physical collocation. It would not, however, be appropriate for us to make a decision concerning the specific requirement of the fire-rated wall. The local building code officials are charged with interpreting the local building codes and issuing construction permits. We note that BellSouth has obtained an opinion on this requirement from the Southern Building Code Congress International to assist in its efforts to have local building code officials review their interpretation of this code. We do encourage the parties to work together and with the local building code officials regarding future review and interpretation of this code requirement.

We add that we do not believe that the requirement of a fire-rated wall should preclude BellSouth from providing physical collocation in these two central offices. The evidence shows that BellSouth has provided physical collocation in its Miami Grande central office, which included fire-rated walls. This type of construction is, therefore, possible.

IV. SPACE AVAILABILITY AND ALLOCATION

The Act requires ILECs to provide physical collocation. The ILEC is relieved of this duty only when a State commission determines that space is unavailable or technically infeasible to provide. Specifically, Section 251(c)(6) states:

> Collocation.-The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.

In order to resolve Supra's Petition and to ensure compliance with the Act, we must determine whether or not there is sufficient space in both the North Dade Golden Glades and West Palm Beach Gardens central offices for Supra to physically

collocate.

In this Section, we apply the factors identified in the previous Section of this Order. We also considered a substantial amount of evidence relating to the physical characteristics of these central offices, including diagrams of the floor layout for each office, and video tapes made when members of Supra, BellSouth, and our staff participated in visits to both central offices.

North Dade Golden Glades Central Office

Supra identified separate areas in the Golden Glades Central Office (Golden Glades CO) that it believes are areas suitable for physical collocation. All but two areas identified by Supra are being reserved by BellSouth for future use. The other two areas were designated as administrative space by BellSouth. Supra did not indicate why each of these areas are suitable for collocation. Supra did, however, identify, rank by choice, and discuss certain areas that it asserted are suitable. Below, we have applied each of the factors addressed in Section III to the Golden Glades CO.

A. EXISTING BUILDING CONFIGURATION AND THE PROCESS USED TO EVALUATE THE FACILITY

BellSouth witness Bloomer provided the following description of the Golden Glades CO:

> The Golden Glades facility is a first and partial second-floor facility built on an irregular shaped site in northern Dade County. The building contains 26,225 gross square feet. It is a major switching center with a large interoffice trunking presence.

See Transcript at p. 461.

Supra questioned the amount of gross space in the Golden Glades CO. Supra contended that BellSouth had provided Supra with different figures on the amount of gross space in the office. Supra asserted that BellSouth had provided gross square footage numbers ranging from 23,115 square feet to 27,968 square feet in its responses to Supra's Requests for Production of Documents.

In response, BellSouth witness Bloomer stated that he did

not know who made the square footage calculations when BellSouth requested the FCC collocation waiver, or who identified the number found on the space report form used in that application for the waiver. Witness Bloomer testified that there are 26,225 square feet in the Golden Glades CO. He explained that he calculated the amount of space himself. Witness Bloomer divided the gross space into categories and provided space assessments for each category. These space allocation assessments are shown below.

BELLSOUTH SPACE ALLOCATION ASSESSMENT
FOR THE GOLDEN GLADES CENTRAL OFFICE (SQUARE FEET)

Gross Space	**Unavailable**	**Available**	**Occupied**	**Reserved**	**Unusable**
26,225	2,812	23,443	18,989	4,035	389

We find it worthy of note that BellSouth provided different responses regarding the total amount of space in this central office. Nevertheless, witness Bloomer's assessment that there are 26,225 square feet in this office appears to be accurate.

BellSouth witness Rubin also provided testimony supporting the reservation of space in the Golden Glades CO. Witness Rubin determined that there were 3,596 square feet of reserved space in this CO. Witness Rubin explained that the difference in the BellSouth witnesses' calculations is due to the fact that his calculation is only for the actual equipment, including the space in front and behind the equipment. Witness Rubin noted that his number does not include space for the aisles that must be added as equipment is installed.

B. USE OF EXISTING SPACE INCLUDING ADMINISTRATIVE SPACE

Witness Bloomer indicated that there are 1,710 square feet of administrative space in the Golden Glades CO. Witness Bloomer explained that administrative space falls under the category of occupied space, and consists of shipping, receiving, training, lounge, and a restoration center work area in the Golden Glades CO. Witness Bloomer asserted that administrative space is "any space not directly supporting the installation or repair of both telephone equipment and customer service." See Transcript at p. 458.

In particular, BellSouth has designated an area in the Golden Glades CO as administrative space and labeled it as a

work/restoration center. The room consists of 341 square feet and contains six desks. Witness Bloomer indicated that this space was used by BellSouth during Hurricane Andrew, and is currently used by those who work in the building to prepare work reports. Witness Bloomer stated that there are three major uses for this area. Witness Bloomer explained that this area would be used in a natural disaster, a catastrophic service failure, or if there was a disaster in the building itself. Witness Bloomer added that this room will soon become a Property Inventory Control system (PICs) receiving center. BellSouth witness Rubin indicated that the work/restoration center is currently being utilized as a circuit pack storage area.

Supra witness Nilson asserted that this room is suitable for physical collocation, because it is already surrounded by walls. Witness Nilson was not certain if the walls were considered fire rated or not. Witness Nilson noted that BellSouth had changed the purpose of the room between the first and second visits made to the central office by the parties and our staff.

C. BUILDING CODE AND LOCAL REGULATIONS

As we have discussed herein, there are various building codes at the national, state, and local levels. BellSouth witness Bloomer asserted that Miami/Dade County is the local building authority for the Golden Glades CO. The witness asserted that code enforcement officials in Dade County take the position that collocation "is a leased multi-tenant occupancy requiring a full fire rated wall from floor to ceiling served by a fire rated corridor to the two exit doors." See Transcript at p. 463.

BellSouth witness Mayes stated that an application for a permit for non-fire wall collocation would be the proper way to proceed at this point. Witness Mayes indicated that he believed that BellSouth should approach the local code enforcement officials if the application for non-fire wall collocation is rejected by the local code officials.

Supra witness Nilson asserted that Supra has requested open space, instead of enclosed space, for physical collocation in the Golden Glades CO. Supra witness Nilson questioned why BellSouth insisted that fire rated walls were necessary. He asserted BellSouth has already granted Supra an existing collocation space without fire walls in another central office. Witness Nilson stated that BellSouth offered Supra an existing collocation space

that is caged with chain link fencing in the Miami Palmetto central office. Witness Nilson added that the Miami Palmetto office is also located in Dade County; thus, the Dade County code officials' interpretation that collocation is a multi-tenant situation is applicable.

We are concerned about Supra's allegations that BellSouth allows caged collocation in one central office and requires fire wall construction in another, when both central offices are in the same county. The evidence in this proceeding is, however, inconclusive as to whether a building permit request for non-fire wall collocation would be denied for either of these two central offices.

As previously explained, we will not consider at this time the specific question of whether fire rated walls are a factor in determining space. If the local building code authorities determine that fire wall construction is required, Supra may make a determination at that time regarding whether physical collocation is financially reasonable for Supra.

D. SPACE RESERVED FOR FUTURE USE

BellSouth claimed that there are 4,035 square feet of space that are reserved for future use. BellSouth witness Bloomer stated that this space is being held for equipment that is currently forecasted to be shipped to the Golden Glades CO through the year 2000. Witness Bloomer categorized the reserved space as follows:

Category	**Description**	**Square Feet**
Switch	space for expansion of the local and tandem and operator services switches, the Signal Transfer Point (STP), and Signal Control Point machines.	1,8775.5
Transmission	space for expansion of virtual collocation, and the circuit digital cross connect frame.	1,576.5
Frame		None
Power	space for expansion of the power plant/House Service Panel	142
Administrative		None

Other	new Air Handling room	439

See Transcript at p. 462.

Supra witness Nilson disagreed with BellSouth witness Bloomer's calculation of reserved space. Witness Nilson asserted that BellSouth witness Bloomer did not take into consideration the unused space in the power room. Witness Nilson estimated that there are 1,200 square feet available for power expansion in the room. Supra witness Nilson asserted that there is a total of 5,235 square feet available for physical collocation in the Golden Glades CO. BellSouth witness Rubin responded that the area identified in the power room is designated as a hazardous material storage area.

As mentioned above, Supra identified several areas that it believes are suitable for collocation in the Golden Glades CO that BellSouth has reserved for future use. Supra witness Nilson noted that there are a few areas that Supra prefers over the others. Witness Nilson indicated that Supra's preferred collocation location is an area consisting of 970 square feet that BellSouth has reserved for future transmission equipment. Witness Nilson stated that this area provides access to both the isolated and integrated grounding planes. Witness Nilson explained that this area would allow Supra to install both its switching and transmission equipment in one physically isolated region. Witness Nilson added that this area is close to the main distribution frame, where unbundled loops are provisioned. Witness Nilson also indicated that this area is near the corner of the central office, and, therefore, if construction of fire walls is necessary, this area is suited for such construction.

Witness Nilson also identified two areas in the Golden Glades CO as areas that Supra believed would be acceptable alternative collocation spaces. First, the witness identified a space consisting of 795 square feet reserved for tandem switch and operator switch growth. Witness Nilson contended that BellSouth is attempting to reserve space for six to seven years for the tandem switch, and 25 years worth of space for the operator services switch. Witness Nilson testified that since the reservation time period is so long, it would be reasonable for BellSouth to permit collocation in this area. Witness Nilson also identified a piece of switching equipment that was no longer in service. Witness Nilson stated that 25 frames of the switch were removed from service. He stated that BellSouth informed him that the switch would not be removed for approximately six

months. Witness Nilson asserted that the floor space occupied by this equipment exceeds the amount of space that Supra has requested for physical collocation.

The second alternative area identified by Supra consists of 337 square feet of future space reserved for virtual collocation. Witness Nilson stated that this area was chosen because it is suitable for collocation of transmission equipment and had been identified by BellSouth as one of the available virtual collocation spaces in the Golden Glades CO.

Supra witness Nilson also testified that Supra would find collocation acceptable in divided locations on the first and second floors of the central office. The witness explained that the space on the first floor could supply the integrated grounding plane for the transmission equipment, and the space on the second floor could supply the isolated grounding plane necessary for the switching equipment. The space on the first floor is the space identified by BellSouth as reserved for virtual collocation. The space on the second floor is space that BellSouth has reserved for growth of its DSO local switch. Witness Nilson stated that BellSouth is reserving future growth space for the DSO switch for four to five years. Witness Nilson added that the time period could be extended by the upgrades that are already in progress.

BellSouth witness Rubin stated that the area preferred by Supra is reserved for a new digital cross-connect system with a capacity of 2,048 DS1s. Witness Rubin further explained that half of the DS1 capacity is currently to be installed by December 31, 1998, with the remainder to be installed during the first quarter of 1999. Witness Rubin added that each digital cross-connect addition will also require four DSX1 cross-connect bays, or eight total bays in this area. Witness Rubin asserted that the area designated by Supra includes the fire exit aisle, where no equipment can be placed. We note that switching equipment is located in an isolated grounding plane, and transmission equipment is located in an integrated grounding plane, as explained by BellSouth witness Bloomer.

BellSouth witness Rubin admitted that there are 25 years' worth of space for the 03T tandem switch in the space plan that he prepared. Witness Rubin stated, however, that his plan lists two aisles for growth of the 03T. Witness Rubin asserted that in this case, BellSouth is only reserving one aisle for growth. We note that witness Rubin testified at hearing that one aisle would

not equal 12.5 years of growth. Instead, it would equal only six and a half years of growth. Witness Rubin reasoned that the 25 years of space for growth may have been based on the addition of one frame per year as opposed to two frames per year.

As for the divided location identified by Supra, BellSouth witness Rubin argued that there is not enough contiguous space in the reserved area on the second floor to accommodate physical collocation. Witness Rubin asserted that the DSO switch is growing at a rate of six frames per year. Witness Rubin also stated that there are some empty spaces in the body of the DSO switch. He asserted that in two years BellSouth will begin utilizing the space.

In addition, BellSouth witness Ream stated that, in addition to the fire walls, BellSouth would have to create a common space in order to provide physical collocation to Supra. The witness asserted that this common space would be for the placement of point-of-termination bays. In addition, witness Ream stated that separate walkways must be constructed so that the collocator can access its collocation space. BellSouth witness Bloomer added that the collocation floor space necessary must also accommodate POTS bays, DC power bays, "and other termination bay requirements needed to support the collocator's request." See Transcript at p. 479. Witness Ream explained that this is necessary because

> The collocator has to have a separate entrance to get into his space separate from our equipment areas. They just can't walk down our aisle at 3:00 a.m. in the morning. . . amongst our equipment when it's an unmanned office to get to their area. So it forces us to set up aisles for them. . . . So that's why it requires much more space than the initial 200-foot requirement.

See Transcript at p. 447. Based on the evidence, it appears to us that requirement for separate egress corridors is, however, an internal BellSouth policy, not a requirement of local building authorities. BellSouth's desire to keep unauthorized personnel from wandering around its central offices is understandable. We note that BellSouth does provide security escorts for collocators. Thus, we do not believe that the lack of space to build caged or walled-off aisles is a reason for denying physical collocation.

Determination

Upon consideration of the evidence and arguments presented, it appears to us that there is adequate space to permit physical collocation in the Golden Glades CO. BellSouth has at least one area that it is reserving for what appears to be an excessively long period of time. This space is the 987 square feet for the 03T and 04T tandem switches and the STP. BellSouth witness Rubin stated that 393 square feet is solely for the equipment, with the remainder of the identified space reserved for required aisles. This area is being reserved to meet six years of growth requirements. By making this determination, we are not making a determination on the appropriate amount of time or space that BellSouth can reserve for its own future use. We have simply determined that, based on the evidence presented in this docket, BellSouth has enough space in the North Dade Golden Glades central office to allow Supra to collocate, and that space appears to be available in the 987 square feet held for the 03T and 04T tandem switches and the STP.

Based on the foregoing, we find that BellSouth has enough space in the North Dade Golden Glades central office to allow Supra to collocate. We shall not require BellSouth to provide Supra with physical collocation in a specific room or area discussed herein. It is appropriate for BellSouth to determine where in this central office Supra shall be allowed to physically collocate. Nevertheless, we emphasize that BellSouth shall be required to allow Supra to physically collocate as set forth herein.

Based on our determination that there is space in this office, we shall require BellSouth to allocate 200 square feet of space in the North Dade Golden Glades central office to Supra for collocation. We shall also require BellSouth to allocate space to Supra for the POT bays and other infrastructure equipment necessary for Supra to interconnect with BellSouth's network.

West Palm Beach Gardens Central Office

Supra identified two areas in this office where it would prefer to physically collocate. Both areas are places that BellSouth has reserved for its own future use. Supra also mentioned other possible areas in which it believed space could be made available for physical collocation. Below, we have applied each of the factors addressed in Section III to the West Palm Beach Gardens CO.

A. EXISTING BUILDING CONFIGURATION AND THE PROCESS USED TO EVALUATE THE FACILITY

BellSouth witness Bloomer stated that the West Palm Beach Gardens central office facility is a single floor facility. He explained that it is built on a rectangular-shaped site and is located in southern Palm Beach County. He further explained that the building contains 20,314 gross square feet and is a major switching center with a large inter-office trunking presence.

Witness Bloomer noted that there are 2264 square feet of unavailable space in this office. He asserted that this unavailable space is composed of non-assignable areas, which include such things as the entrance lobbies, main corridors, hall spaces, inside stairways, fire towers, all toilet rooms, and any other space that is essential to building operations.

B. USE OF EXISTING SPACE, INCLUDING ADMINISTRATIVE SPACE

Witness Bloomer explained that there were 644 square feet of administrative space in this office. He asserted that this space is used for shipping and receiving, a training room, and a lounge.

Regarding the shipping/receiving room, Supra witness Graham asserted that:

> The West Palm Beach Gardens central office has an extremely large supply room with a very high ceiling that could easily be redesigned and reorganized to accommodate all of the supply storage needs of this central office. This reorganization and redesign would free up a significant amount of space in many areas of the central office.

See Transcript at p. 219. BellSouth witness Ream identified this same space as an uncrating and storage room.

Supra witness Nilson also explained that he believed that this shipping/receiving room is an area that could be used for physical collocation. Witness Nilson noted that the area already has walls in place and that it would be quite easy to add fire rated walls around the remainder of that area.

C. BUILDING CODE AND LOCAL REGULATIONS

As for the building codes and local regulations governing the West Palm Beach Gardens central office, witness Bloomer testified that both Palm Beach County and Palm Beach Gardens maintain that collocation is a leased multi-tenant occupancy requiring a full, fire rated wall from floor to ceiling. The witness also indicated that the local officials are of the view that any leased area must also be served by a fire rated corridor to the two exit doors. Supra offered no testimony disputing the witness's assertion.

D. SPACE RESERVED FOR FUTURE USE

The evidence demonstrates that there are several areas in the West Palm Beach Gardens central office where BellSouth has reserved space for future use. Among the areas discussed was 246 square feet reserved in the power area. BellSouth witness Ream stated that this space is reserved, because BellSouth will add a new 48 volt battery string next year. The witness noted that the remaining space will only support one more 48 volt battery string. Witness Ream explained that these additions were planned by BellSouth's power vendor to make sure that the office has sufficient reserves in case of a commercial power failure.

We note, however, that the document entitled West Palm Beach Gardens Central Office, Second Floor Planning Meeting, which was hearing Exhibit 17, demonstrates that the space reserved for growth of this equipment is not projected to exhaust until year-end 2003. Witness Ream agreed at hearing that this is correct.

Another area discussed was 68 square feet that is reserved for miscellaneous toll equipment that does not have to be placed next to each other or in close proximity to existing toll equipment. Witness Bloomer explained that this area is too small for collocation. We note that Supra requested 200 square feet.

In addition, Witness Ream stated that there are 143 square feet reserved for fiber optic frame growth. The witness indicated that this space is also too small for collocation, and referred to witness Bloomer's testimony, which outlined in greater detail why this area was unsuitable for physical collocation. Again, as we have noted, Supra has indicated it would need 200 square feet for collocation.

BellSouth's witness Ream also indicated that there are 403 square feet reserved for Signal Transfer Point (STP) and Signal

Control Point (SCP) growth. On cross-examination by Supra, the witness did indicate that the West Palm Beach Gardens Central Office, Second Floor Planning Meeting document shows that space available for the growth of this equipment is not projected to exhaust until the year-end 2003 for the STP and year-end 2000 for the SCP.

As explained by witness Ream, there are also 686 square feet reserved for growth of the toll switch and the DSX1. Witness Ream noted that a virtual collocator is located in the middle of the space. The area is, therefore, divided into two parts, one part for the DSX1 and the other occupied by the Central Office Supervisor. Witness Ream also stated that BellSouth has recently placed two bays in this area for the DSX1 lineup. Upon cross-examination by Supra, the witness agreed that the West Palm Beach Gardens Central Office, Second Floor Planning Meeting document shows that the space available for this piece of equipment is projected to exhaust at year end 2000. Because this area will exhaust by year-end 2000, it does not appear suitable for physical collocation.

Still another area addressed at hearing was the 329 square feet that have been reserved for the TOPS DMS switch, which is used for Operator Services. Supra witness Nilson asserted that this area is suitable for physical collocation by Supra based on forecasting information that Supra received. Witness Nilson testified that there is sufficient capacity on this switch. Furthermore, as demonstrated by Exhibit 17, the space available for growth of this equipment is not projected to exhaust until year-end 2003. Witness Ream responded that this is the TOPS host for all of Florida and that the fire rated walls required for physical collocation in this office would block the air return for the office. The witness asserted that, consequently, there is not enough room available for physical collocation.

As for the 526 square feet reserved for the local DMS switch, Exhibit 17 demonstrates that the space available for the growth of this switch is not projected to exhaust until year-end 2002.

Witness Ream also discussed the 712 square feet that have been reserved for tandem switch growth. Supra indicated in Hearing Exhibit 14 that this is an area in which it would like to collocate. Supra witness Nilson testified that there have been three lineups worth of equipment reserved in this area. He noted that based on the growth rate of this equipment, the space

equates to six years' growth. We note that Exhibit 17 shows that the space available for the growth of this tandem switch is not projected to exhaust until year-end 2003.

In addition, Supra witness Nilson identified an area where there are three workstations installed along a wall. Witness Nilson testified that he believed that the workstation in the middle was a duplicate, and, therefore, the area should be considered for physical collocation. Witness Nilson also indicated that there is a large area that holds equipment and administrative workspace, which appears to be used inefficiently and should be considered for physical collocation. BellSouth witness Ream responded, however, that this is currently being used as a new equipment staging area.

Evidence was presented at hearing, particularly through Exhibit 17, which demonstrated that BellSouth has space available for growth of BellSouth equipment beyond two years. On cross-examination, witness Ream read the following provision from BellSouth's Property Management and Physical Collocation Guidelines:

> BellSouth is not required to relocate its own equipment or personnel within a facility in order to accommodate physical collocation. However, BellSouth is required to offer any space reserved for growth outside of a two year period. If at this point there is absolutely no space available, an exemption must be filed with the State, and the collocator may choose to enter into a virtual expanded interconnection service.

See Transcript at pgs. 429-430. Witness Ream emphasized, however, that the equipment that BellSouth expects to place in this central office in the next two years will not leave enough space for physical collocation. While this may be accurate, it is nonetheless noteworthy that BellSouth will still benefit from an additional two to three years' worth of space to accommodate its own equipment growth.

It is also noteworthy that BellSouth has a planned addition scheduled for this building. Witnesses Bloomer and Ream did not know whether funding for the addition was approved. Regarding approval of the building expansion, BellSouth witness Cruit indicated, however, that the expansion would simply have to be

done and would, eventually, be approved.

Determination

Upon consideration of the evidence and the arguments presented, we find that there is adequate space to permit physical collocation by Supra in the West Palm Beach Gardens central office. The evidence demonstrates that BellSouth has space available in this central office to accommodate up to five years of growth for some of its equipment. The evidence also demonstrates that there is an addition scheduled for this central office and that BellSouth will not exhaust all of the available space prior to the completion of this addition.

In particular, it appears that the administrative space used by BellSouth as its uncrating area and its equipment staging area is suitable for collocation. As Exhibit 31 demonstrates, the uncrating room contains 454 square feet. BellSouth witness Ream explained that this is an area where vendors uncrate equipment, especially when it rains. BellSouth did not indicate that this is a room that would be necessary for expansion of its own equipment. As further explained by BellSouth's witness, the room is simply used for uncrating of equipment prior to being installed on the central office floor and for some storage.

Supra witness Nilson noted there are already walls around this area that would facilitate meeting the fire rated wall requirement. This area is currently accessed by two doors, one that leads to the central office floor and the other to the outside. These doors make the location easily accessible and provide exits for any personnel who would need to access the collocation area. It appears that providing Supra with collocation space in this room, along with any additional space that would be required for termination bays would still leave space for BellSouth to uncrate equipment.

The equipment staging area is directly adjacent to the uncrating room. BellSouth did not indicate that this is an area that would be necessary for the expansion of its own equipment. Witness Ream indicated that this area is used for staging of equipment and associated parts prior to being installed on the central office floor.

Based on the evidence presented, it appears to us that the functions of the uncrating area and the equipment staging area could be performed in an area smaller than BellSouth currently

uses. Thus, it appears that some of this space could be allocated to Supra for physical collocation. We shall not require BellSouth to provide Supra with physical collocation in a specific room or area discussed herein. It is appropriate for BellSouth to determine where in this central office Supra shall be allowed to physically collocate. Nevertheless, we emphasize that BellSouth shall be required to allow Supra to physically collocate as set forth herein.

Based on our determination that there is space in this office, we shall require BellSouth to allocate 200 square feet of space in the West Palm Beach Gardens central office to Supra for collocation. We shall also require BellSouth to allocate space to Supra for the POT bays and other infrastructure equipment necessary for Supra to interconnect with BellSouth's network.

V. TIME REQUIREMENTS

We have also considered the amount of time in which BellSouth is required to provide physical collocation to Supra pursuant to the parties' Collocation Agreement. Section IV.F. of the agreement provides that:

> BellSouth will make reasonable efforts to provide for occupancy of the collocation space on the negotiated date and will advise Interconnector of delays.

Supra witness Nilson testified that during joint interconnection planning meetings with BellSouth, BellSouth informed Supra that it would take six to eight months to install the first switch for Supra. Witness Nilson contended that Supra cannot conduct its business with these uncertain time frames over which it has no control. Thus, witness Nilson stated that Supra requests that we determine that three months is a reasonable time frame for the provision of physical collocation, as we determined in the MCI/BellSouth arbitration.

Witness Ramos contended that BellSouth's contractors perform network construction work for BellSouth in two to four weeks, yet cannot provide physical collocation for Supra in three months. Supra witness Ramos alleged that BellSouth has not demonstrated to Supra why BellSouth cannot meet the three month time frame to provide physical collocation that was outlined in Order No. PSC-96-1579-FOF-TP, issued December 31, 1996, in Dockets Nos. 960833-TP, 960846-TP, and 960916-TP. In that Order, we stated

that

> . . . we conclude that maximum time periods for the establishment of physical collocation of three months and virtual collocation of two months are reasonable for ordinary conditions. If MCI and BellSouth cannot agree to the required time for a particular collocation request, BellSouth must demonstrate why additional time is necessary.

Order at p. 102.

Witness Ramos also argued that Supra should be permitted to select the contractor and participate in the process of acquiring the building permit. He indicated that Supra would be willing to relieve BellSouth of its duty to apply for the building permit, by taking full responsibility for applying and meeting the requirements necessary to acquire the building permit.

BellSouth witness Thierry responded that BellSouth individually negotiates the time interval for each specific collocation request. Witness Thierry asserted that BellSouth uses best efforts to complete collocation installations ". . . as soon as possible and, when feasible, within the three month interval prescribed in the Florida Commission's Order." See Transcript at p. 251. We note that BellSouth requested clarification of the three month time frame to complete physical collocation set forth in Order No. PSC-96-1579-FOF-TP. The Commission responded by stating:

> The purpose of the three month time frame is to serve as a guideline of what we consider reasonable. We find that our Order is clear as to our intent that the parties to a request for collocation would attempt to resolve any problems with that time frame on a case by case basis, and would only come to us if they were unable to resolve their problems.

Order No. PSC-98-0595-PCO-TP at p. 7.

BellSouth witness Mayes noted that it is the contractor who obtains the building permit. Witness Mayes explained that BellSouth's involvement is limited to checking with the

contractor on a weekly basis for a status report. Witness Mayes added that the permitting process is beyond the control of BellSouth and should be excluded from the provisioning time frame.

In response, Supra witness Ramos stated that if Supra can use a contractor of its choice that is approved by BellSouth, and can participate in the building permit process with the contractor, then Supra is more than willing to relieve BellSouth of the three month time line.

Conclusion

Upon consideration of the evidence presented, we find that the contract is silent on time frames for providing physical collocation. The agreement does, however, provide that the parties are to negotiate a completion date. We agree with Supra that BellSouth's estimate of six to eight months is excessive. BellSouth has not demonstrated why any of Supra's applications for physical collocation require six to eight months to complete. BellSouth did outline when permits are filed and when they are received. The range in days runs from as little as 22 days to as much as 106 days. BellSouth did not, however, provide any information on the duration of the actual construction phase for physical collocation.

Based on the arguments presented, we believe that three months is a reasonable time frame for the provision of physical collocation. The evidence does not suggest that it would take three months just to perform the construction work. Since Supra and BellSouth were unable to negotiate a mutually agreeable time frame, we shall require BellSouth to provide physical collocation to Supra in three months, unless BellSouth can demonstrate to us why it is not technically feasible to do so.

In addition, we believe that Supra should be allowed to participate in the permitting process. While the parties' Collocation Agreement is silent on the process for obtaining the building permit, it does state that only contractors approved by BellSouth may be used. Therefore, we encourage BellSouth to provide any information on contractors and permitting that would allow Supra to become involved in the process of obtaining the building permit.

VI. EQUIPMENT

The final issue that we address pertains to the parties' dispute regarding the types of equipment that Supra can and cannot physically collocate in BellSouth's central offices. Only the disputed equipment was addressed by the parties. The pieces of equipment at issue are the Ascend TNT equipment and the Cisco Systems equipment, which are both referred to as remote access concentrators.

Both parties referred to the FCC's Memorandum Opinion and Order and Notice of Proposed Rulemaking, FCC Order 98-188, issued August 6, 1998. Therein, the FCC stated that it was issuing its Order and Notice in response to six petitions that had suggested to the FCC that it take certain actions in an effort to facilitate the deployment by wireline carriers of advanced services. One issue that the FCC indicated that it intends to address is equipment. The FCC stated:

> In addition, we seek to facilitate the ability of competing carriers to offer advanced services on an equal footing with incumbent carriers and their affiliates. In particular, to provide advanced services, new entrants may need to collocate equipment on an incumbent LEC premises for interconnection and access to unbundled network elements, such as loops.

FCC Order 98-188 at Paragraph 14.

We also note that the parties' Collocation Agreement addresses equipment at Section III, Paragraph A, where it states, in part:

> Nature of Use: BellSouth shall permit Interconnector to place, maintain and operate in the Collocation Space any equipment that Interconnector is authorized by BellSouth and by Federal or State regulators to place, maintain and operate in collocation space and that is used by Interconnector to provide services which Interconnector has the legal authority to provide.

See Transcript at pgs. 55-56.

BellSouth witness Milner indicated that the reason BellSouth has rejected Supra's request to collocate the Ascend TNT equipment and the Cisco equipment is that this equipment provides only enhanced services. The witness asserted that BellSouth is not required to provide for the collocation of equipment that can only provide enhanced services. Witness Milner further cited FCC Order 98-188 at Paragraph 132, where the FCC states that ". . . we tentatively conclude that we should continue to decline to require collocation of equipment used to provide enhanced services." See Transcript at p. 533. BellSouth witness Milner did add, however, that if the equipment serves both telecommunications and enhanced services or information services, and the ALEC is using it for both purposes, it may be collocated.

Supra witness Ramos argued, however, that the FCC only included this restriction to discourage pure enhanced service providers from collocating equipment in central offices. Witness Ramos referred to 47 C.F.R. § 51.100(b), which reads:

> A telecommunications carrier that has interconnected or gained access under sections 251(a)(1),251(c)(2), or 251(c)(3) of the Act, may offer information services through the same arrangement, so long as it is offering telecommunications services through the same arrangement as well.

Witness Ramos argued that this section supports Supra's argument that it should be able to collocate any equipment it believes it needs to collocate. Witness Ramos complained that BellSouth narrowly construes 47 C.F.R. § 51.100(b) to require that each item of equipment placed in the central office must physically be able to perform basic telecommunications services. Witness Ramos contended that the Ascend TNT equipment provides both basic telecommunications services and enhanced services, and that the Ascend TNT will enable concentration of both voice and data.

Supra witness Nilson added that BellSouth should not prohibit Supra from collocating this equipment, because it is in the same equipment arrangement that Supra will use to provide basic telecommunications service in the future. Witness Nilson stated that the Ascend TNT is a remote switch that will be used in Supra's network for efficiency and optimization of trunks for voice, data, and advanced services. He asserted that the Cisco equipment is used for transmitting data traffic to data networks.

Witness Nilson further explained that the equipment mounts modems that are interconnected. He indicated that the data that is produced from the modems can then be directed to specific pieces of equipment or forwarded to the appropriate data networks.

Witness Nilson further asserted that the Ascend TNT can switch calls in combination with the SS7 gateway. He was, however, unsure whether it provides dial tone. Witness Nilson explained that the Ascend TNT, in conjunction with the SS7 gateway, can store digits that a customer dials, translate the digits to be routed, and connect the call to an outgoing trunk. The witness did not know the number of customer lines that can be connected to the Ascend TNT. Witness Nilson also stated that the Ascend TNT generates call detail records for billing. He added that the Ascend TNT has the capability of switching both data and voice conversations, and that Supra will be using it to switch both. He also indicated, however, that "[t]he predominant purpose that this piece of equipment was designed for is to off load the public switch telephone network from congestion." See Transcript at p. 207.

In addition, witness Nilson argued that the Ascend TNT performs some of the same functions that BellSouth's Class 5 switches perform, such as supporting Transaction Capability Application Part (TCAP) and Advanced Intelligence Network (AIN) advanced services and routing voice, fax and data. Supra witness Graham further explained that remote access concentrators are used for billing provisioning, voice mail, and alarm monitoring. We note, however, that on cross-examination, he was asked if these were basic telecommunications services, and witness Graham replied that these were enhanced services. Supra witness Graham also argued that FCC Order 98-188, paragraph 163, supports the collocation of this equipment. This section of the FCC's Order states, in part, that:

> To facilitate competition in the local loop, we tentatively conclude that there should be uniform national standards for attachment of electronic equipment (such as modems and multiplexers) at the central office end of a loop by incumbent LECs and new entrants. The requirements would apply to both incumbent LEC and new entrant equipment. The requirements would serve the same role, for the attachment of equipment to the central office end of a loop, as do the Part 68-

> Connection or Terminal Equipment to the Telephone Network - rules for the attachment of customer premises equipment. Currently, each incumbent LEC sets its own requirements for central office equipment, and each has its own processes for certifying equipment before it can be connected to loop plant. . . .

See Transcript at p. 223, citing FCC Order 98-188 at Paragraph 163.

Determination

We have reviewed the evidence and arguments presented. In making our determination, we have separately addressed the following arguments made by Supra: 1. Supra's assertion that it should be allowed to collocate any type of equipment it needs to conduct its business, as long as Supra provides basic telecommunications service; 2. Supra's assertion that the Ascend TNT equipment is capable of providing both basic telecommunications service and enhanced telecommunications service; and 3. Supra's belief that BellSouth is not providing physical collocation at parity with BellSouth's affiliates.

First, Supra witness Ramos argued that FCC Order 98-188, ¶ 129, supports Supra's position. Here, the FCC states, in part:

> We tentatively conclude that incumbent LECs should not be permitted to impede competing carriers from offering advanced services by imposing unnecessary restrictions on the type of equipment that competing carriers may collocate.

See Transcript at p. 105, citing Order 98-188 at Paragraph 129. Relying upon the FCC's statement that incumbent LECs should not "impede competing carriers from offering advanced services," the witness alleged that BellSouth is imposing an unnecessary restriction on Supra by not allowing it to place its Ascend TNT and Cisco equipment in these BellSouth central offices.

It appears to us, however, that Paragraph 129, cited by witness Ramos, refers to equipment that may have switching functionality. We have reached this conclusion based on the following statements made by the FCC within that same Order:

> With respect to switching equipment, however, the Commission recognized that "modern technology has tended to blur the line between switching equipment and multiplexing equipment." A current trend in manufacturing appears to be to integrate multiple functions into telecommunications equipment. . . . Because incumbent LECs are currently not required by our rules to permit collocation of switching equipment, competing providers argue that incumbent LECs may delay competitive entry by contesting, on a case-by-case basis, the functionality of a particular piece of equipment (which may perform switching functions in addition to its other functions) and whether it may be collocated.

See FCC Order 98-188 at Paragraph 128.

We note that BellSouth does currently allow the placement of switching equipment in physical collocation arrangements, as explained by witness Thierry, but BellSouth is not refusing to allow collocation of this particular equipment because it is switching equipment. Instead, witness Milner explained that BellSouth is refusing to collocate the equipment identified by Supra because the equipment can only be used to provide enhanced services. On this point, the FCC has clearly stated its position, as follows:

> We did not require the LECs to permit collocation of enhanced services equipment because such equipment was not necessary to foster competition in the provision of basic transmission services. We also did not require LECs to allow for the collocation of switches.

See FCC Order 96-325 at Paragraph 576. The FCC further stated:

> We do not find, however, that section 251(c)(6) requires collocation of equipment used to provide enhanced services, contrary to the arguments of the Association of Telemessaging Services International. We

> also decline to require incumbent LECs to allow collocation of equipment without restriction.

Id. at Paragraph 581. The FCC reaffirmed this position in its recently issued Memorandum Opinion and Order and Notice of Proposed Rulemaking where it stated that:

> We further seek comment on whether carriers should be permitted to collocate other equipment on LEC premises. We tentatively conclude that we should continue to decline to require collocation of equipment used to provide enhanced services.

See FCC Order 98-188 at Paragraph 132. Although Supra believes that these statements were intended for enhanced service providers, the FCC did not make this distinction.

Supra witness Nilson explained to us that the Cisco equipment is used to transmit data traffic to data networks. The evidence does not, however, indicate that the Cisco equipment is capable of providing anything other than enhanced services. Based on the evidence and arguments presented, we find that Supra can physically collocate this equipment only if BellSouth allows Supra to do so. In this particular case, BellSouth does not. Thus, we shall not require BellSouth to allow Supra to physically collocate the Cisco equipment.

Supra next argued that the Ascend TNT provides both basic telecommunications and enhanced services, and, therefore, it should be allowed to collocate this equipment. In particular, we note that Supra witness Nilson stated that the Ascend TNT and the Cisco equipment are both modem based. Based on indications made by the FCC in FCC Order 98-188, it appears that the FCC may soon require the collocation of this type of equipment. The evidence presented in this case was not, however, sufficient to demonstrate that this equipment is capable of providing basic telecommunications service. Thus, we shall not require BellSouth to allow Supra to collocate this equipment.

Supra further argued in its brief that BellSouth is not providing physical collocation to Supra at parity with BellSouth's affiliates. In its brief, Supra indicated that BellSouth's subsidiaries provide enhanced services and Internet

services that complement BellSouth's local exchange telecommunications services from BellSouth's central offices. At hearing, BellSouth witness Milner indicated that under Open Network Architecture, BellSouth provides enhanced services from its central offices. Supra witness Ramos responded that BellSouth is, therefore, not providing physical collocation to Supra at parity with BellSouth's affiliates. Witness Ramos further emphasized that the FCC has clearly indicated at Paragraph 11 of its Further Notice of Proposed Rulemaking, issued in FCC Docket No. 95-20, on January 30, 1998, that BellSouth must provide to all other service providers the same kinds of collocation arrangements or provisions that BellSouth provides to its affiliates.

Upon review, we do not agree with witness Ramos' interpretation of the FCC's statements in its Further Notice of Proposed Rulemaking, issued in CC Docket NO. 95-20. Paragraph 11 refers to Bell Operating Companies providing access to additional unbundled network elements and not for the placement of additional types of equipment. Furthermore, there is no evidence in this docket regarding the terms of the agreement that BellSouth has with its affiliates or that proves BellSouth is not compliant with the above stated rules. Supra has not offered any evidence to support its argument. Thus, there is no basis upon which to make a determination regarding Supra's allegations that BellSouth is not providing physical collocation to Supra at parity with the manner in which BellSouth provides physical collocation to its affiliates.

For all of these reasons, we shall not require BellSouth to allow Supra to physically collocate the Ascend TNT and the Cisco equipment.

VIII. CONCLUSION

We have based our determination herein upon the evidence presented. We believe it is consistent with the agreements between the parties, which were approved by us pursuant to the Telecommunications Act of 1996, 47 U.S.C. §252(e).

Based on the foregoing, it is therefore

ORDERED by the Florida Public Service Commission that the Petition for Emergency Relief filed by Supra Telecommunications & Information Systems against BellSouth Telecommunications, Inc. is resolved as set forth in the body of this Order. It is further

ORDERED that this Docket shall be closed.

By ORDER of the Florida Public Service Commission this 6th day of January, 1999.

/s/ Blanca S. Bayó

BLANCA S. BAYÓ, Director
Division of Records and Reporting

This is a facsimile copy. A signed copy of the order may be obtained by calling 1-850-413-6770.

(S E A L)

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Director, Division of Records and reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

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BEFORE THE CPR INSTITUTE FOR DISPUTE RESOLUTION ARBITRAL TRIBUNAL

SUPRA TELECOMMUNICATIONS
& INFORMATION SYSTEMS, INC.,

Claimant,

v. Arbitration I

BELLSOUTH
TELECOMMUNICATIONS INC.,

Respondent.

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BELLSOUTH
TELECOMMUNICATIONS INC.,

Claimant and
Counterclaim Respondent,

v. Arbitration II

SUPRA TELECOMMUNICATIONS
& INFORMATION SYSTEMS, INC.,

Respondent and
Counterclaimant.

AWARD OF THE TRIBUNAL IN CONSOLIDATED ARBITRATIONS

ARBITRAL TRIBUNAL

M. SCOTT DONAHEY
JOHN L. ESTES
CAMPBELL KILLEFER

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 86
COMPANY/ Supra / BellSouth
WITNESS. Arbitration Award 6/5/01
DATE: 02/24-27/04

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AWARD OF THE TRIBUNAL IN CONSOLIDATED ARBITRATIONS

Introduction

This Award resolves two arbitration proceedings arising out of and relating to the Interconnection Agreement between Supra Telecommunications & Information Systems, Inc. ("Supra") and BellSouth Telecommunications, Inc. ("BellSouth") effective on October 5, 1999. In accordance with the dispute resolution provisions of the Interconnection Agreement, Supra and BellSouth appointed three neutral arbitrators to decide various disputes: M. Scott Donahey of the law firm Tomlinson Zisko Morosoli & Maser LLP; John L. Estes of the law firm Locke Liddell & Sapp; and Campbell Killefer of the law firm Venable, Baetjer, Howard & Civiletti, LLP. The three arbitrators designated Mr. Donahey to serve as chairman.

This award begins with a summary of the procedural history of the two arbitration proceedings. The award then provides a description of the legal authorities that govern the arbitration proceedings, including the Telecommunications Act of 1996, relevant federal court decisions, and rulings by the Federal Communications Commission ("FCC") and Florida Public Service Commission ("FPSC"). A short description of the relationship between Supra and BellSouth before the effective date of the Interconnection Agreement is provided to give context to the discussion of the arbitration issues. The majority of this award covers the many claims and counterclaims between Supra and BellSouth in the two arbitrations and then concludes with a discussion of damages and other relief.

II. Procedural History

This section summarizes the procedural history of the two arbitrations, including descriptions of rulings by the Tribunal that governed both arbitrations. Some rulings also may govern possible future disputes between Supra and BellSouth (e.g., whether

consequential damages may be recovered under the Interconnection Agreement). Both Supra and BellSouth vigorously litigated the many issues between them, which led to many discovery rulings by the Tribunal as well as legal rulings on various provisions of the Interconnection Agreement. The arbitrations were conducted under the Rules for Non-Administered Arbitration of the CPR Institute for Dispute Resolution.

A. Arbitration I

Supra initiated the first arbitration with its Notice of Arbitration and Complaint served on October 25, 2000. Supra's Complaint argued that the disputes between the parties were "disputes affecting service" within the meaning of Section 9.1 of Attachment 1 – Alternative Dispute Resolution – to the Interconnection Agreement and therefore must be resolved on an even more expedited basis than a "normal" dispute, which must be decided within 90 days of the filing of the Complaint. After the parties served legal memoranda and a conference call for oral argument was conducted, the Tribunal unanimously ruled by Order dated November 16, 2000 (attached hereto as Annex A and incorporated herein by reference), that Supra had failed to carry its burden to show that its claims were "disputes affecting service" and the arbitration would therefore proceed on a normal schedule. Then BellSouth timely filed its Answer to Supra's Complaint.

The Tribunal set a schedule for written discovery, depositions and the filing of direct and rebuttal testimony in advance of the arbitration hearing. The hearing in Arbitration I was originally scheduled to occur on January 18-20 and 22-23, 2001 By agreement of both parties to waive the 90-day decision requirement under the Interconnection Agreement (*see,* Revised Memorandum Re: Scheduling dated January 7, 2001, at 2, ¶1, attached hereto as Annex B and incorporated herein by reference), the dates for the hearing were extended several times. The first extension of the hearing schedule was in connection with Supra's motion for leave to file an amended complaint

to add a claim expressly asserting a contractual breach concerning BellSouth's providing nondiscriminatory access to its Operational Support Systems ("OSS") for Supra's pre-ordering and ordering of telecommunications services from BellSouth. Supra's motion was granted and Supra duly served its Amended Complaint and BellSouth served its Answer.

The parties presented many discovery disputes to the Tribunal, which were briefed by the parties and ruled upon after conference calls for oral argument. One major discovery dispute related to Supra's request to conduct a videotape deposition of knowledgeable BellSouth witnesses while operating the OSS and related databases. A simulated demonstration was conducted at the suggestion of the Tribunal to settle the discovery dispute without intruding in the BellSouth OSS and databases operating in a production environment. The Tribunal understands that the demonstration by BellSouth and for the benefit of Supra included the OSS, various electronic interfaces to databases, and related functionality.

A major legal issue decided before the hearing in Arbitration I was whether Supra could recover consequential damages, including alleged future lost profits, under the Interconnection Agreement. BellSouth served a motion to strike Supra's demand for consequential damages. The parties were directed to serve simultaneous opening and reply memoranda on the issue. In preparation for a conference call on the damages issue, Arbitrator Killefer prepared and served a four-page legal memorandum on the damages issues on February 14 to help focus the paries' arguments. The conference call was conducted as scheduled on February 19, 2001.

The Tribunal unanimously ruled on February 21, 2001, that consequential damages are recoverable under the Interconnection Agreement if a party can prove that a contractual breach is "willful or intentional misconduct," i.e., with tortious intent to harm

the other party (the Order Re: Damages, dated February 21, 2001, is attached hereto as Annex C and is incorporated herein by reference). BellSouth served a Motion for Reconsideration and for Preservation of Error on March 2 , 2001 The parties were directed to file simultaneous briefs on the issue and a conference call for oral argument was conducted on March 13, 2001. The Tribunal unanimously issued a "Clarification of Order re: Damages" on March 15, 2001, that held as follows:

> The Panel concludes that "willful or intentional misconduct" is broad terminology which embraces willful or intentional breach of contract to the extent that it is done with the tortious intent to inflict harm on the other party to the contract. The panel's interpretation of this phrase is supported by judicial authority, including *Metropolitan Life Insurance Co. v. Noble Lowndes Int'l, Inc.*, 643 N.E.2d 504, 506-508 (N.Y. 1994) and *Wright v. Southern Bell Tel. & Tel. Col., Inc.*, 313 S.E.2d 150 (Ga. App 1984).
>
> Accordingly the Tribunal unanimously finds that **to the extent that Supra can prove that BellSouth intentionally or willfully breached the Agreement at issue in this case with the tortious intent to inflict harm on Supra, at least in part through the means of such breach of contract**, and that as a direct and foreseeable consequence of that breach Supra suffered damages in an amount subject to proof, Supra can recover consequential damages in this action.

March 15 Order at ¶¶ 1-2 (emphasis added). (The Clarification of Order Re: Damages is attached hereto as Annex D and is incorporated herein by reference).

The parties timely filed their respective direct and rebuttal testimony with exhibits as well as Prehearing Statements. Page and line designations of deposition testimony were also served by Supra and BellSouth.

The hearing in Arbitration I was scheduled for six days, but was concluded in four days on April 16-19, 2001, at the Westin Peachtree Plaza Hotel in Atlanta, Georgia. Post-hearing briefs were served by the parties on May 14, 2001.

B. Arbitration II

On January 31, 2001, BellSouth initiated a second arbitration regarding billing and payment disputes under the parties' Interconnection Agreement. On February 20, 2001, Supra timely filed its Notice of Defense and Counterclaim.

On March 12, 2001, BellSouth filed a motion to dismiss Supra's Counterclaim. Supra filed its opposition on March 19, 2001, and BellSouth filed its reply in support of the motion on March 26, 2001. On March 29, 2001, a conference call was held to discuss various issues in Arbitration II, including BellSouth's motion to dismiss Supra's counterclaim.

During the March 29 conference call, the Tribunal ordered that Supra and BellSouth submit legal memoranda on the issue of the Tribunal's jurisdiction to decide certain disputes relating to the parties' Interconnection Agreement in light of ongoing proceedings between Supra and BellSouth in (1) federal district court in Miami, Florida in Case No. 99-1706-CIV-SEITZ, and (2) before the Florida Public Service Commission. Supra and BellSouth timely filed their legal memoranda on April 2, 2001

On April 5, 2001, the Tribunal unanimously ruled in a seven-page Order that the Tribunal has jurisdiction to decide issues only as expressly authorized by the terms of the Interconnection Agreement and well settled case law under the Federal Arbitration Act, 9 U.S.C. §1, *et seq*. The Tribunal was very concerned that Supra and BellSouth notify the Tribunal of any legal proceedings that conflict or overlap with the jurisdiction being exercised by the Tribunal:

> This tribunal is not aware of any such FPSC proceeding relating to post-October 5, 1999 billing disputes, but the parties are ordered immediately to notify this tribunal in writing of such FPSC proceedings if any exist presently or arise in the future. This tribunal will scrupulously avoid exercising jurisdiction that would conflict or overlap with FPSC, federal district court, or other legal proceedings.

April 5 Order, at 5. Accordingly, the Tribunal granted in part and denied in part BellSouth's Motion to Strike Supra's counterclaim in Arbitration II:

> (1) No recovery may be awarded for pre-October 5, 1999 acts or omissions;
> (2) No recovery may be awarded for claims over which the FPSC or any federal district court retains jurisdiction;
> (3) No recovery may be awarded in Arbitration II for those Supra claims that are presented for the Arbitration I hearing on April 16-21, 2001; and
> (4) The parties agree, and the tribunal orders, that lost profits might be recoverable as consequential damages, but "lost revenues" is an improper measure of damages.

April 5 Order, at 6. The Tribunal also ruled that, as the Tribunal had forewarned the parties, "[b]asic fairness suggests that the tribunal's award in Arbitration I either be issued before Arbitration II or be set off against the Arbitration II award if warranted by the evidence." *Id.* (The Order Regarding BellSouth's Motion to Dismiss Supra's Counterclaims and Related Issues, dated April 5, 2001, is attached hereto as Annex E and incorporated herein by reference). In a conference call held on April 10, 2001, the parties agreed to waive the provision in the Interconnection Agreement that requires an award to be issued within 90 days of filing, and agreed that the award in Arbitration II would be issued no later than June 5, 2001. (A copy of a letter dated April 11, 2001, confirming the new agreed schedule is attached hereto as Annex F and incorporated herein by reference).

In advance of the hearing in Arbitration II, the Tribunal ruled on various discovery disputes. Less than a week before the scheduled start of the Arbitration II hearing, on April 26, 2001, the Tribunal conducted a conference call regarding various issues. The Tribunal issued an unanimous order that same day. That order denied Supra's motion to strike the rebuttal damages testimony of BellSouth expert witness Freeman and allowed Supra to file sur-rebuttal damages testimony of Supra expert

witness Wood under specified conditions. The April 26, 2001 Order also ruled that a "reasoned award" as opposed to a "naked award" would be issued in both arbitrations pursuant to the Rules for Non-Administered Arbitrations of the CPR Institute for Dispute Resolution. (A copy of the Order Regarding Supra's Motion to Strike Rebuttal Testimony of Professor Freeman and Other Matters Discussed During April 26 Conference Call is attached hereto as Annex G and is incorporated herein by reference).

The hearing in Arbitration II was scheduled to be conducted over six days. In fact, the hearing concluded in only four days beginning Sunday, April 29, 2001, and finishing Wednesday, May 2, 2001, at the Georgian Terrace Hotel in Atlanta, Georgia. The parties served simultaneous post-hearing memoranda on May 14, 2001 The Tribunal committed to a June 5, 2001 deadline for issuance of an award in both arbitrations.

III. The Radical Revision of Telecommunications Law

In 1996, the United States Congress passed the Telecommunications Act of 1996 (the "1996 Act"), a statute which was intended to revolutionize the telecommunications industry. In its First Report and Order, released August 8, 1996, FCC 96-325, the Federal Communications Commission ("FCC") characterized the sweeping changes heralded by the Act in the following language:

> The Telecommunications Act of 1996 fundamentally changes telecommunications regulation. In the old regulatory regime government encouraged monopolies. In the new regulatory regime, we and the states remove the outdated barriers that protect monopolies from competition and affirmatively promote efficient competition using tools forged by congress. Historically, regulation of this industry has been premised on the belief that service could be provided at the lowest cost to the maximum number of consumers through a regulated monopoly network. State and federal regulators devoted their efforts over many decades to regulating the prices and practices of these monopolies and protecting them against competitive entry. The 1996 Act adopts precisely the opposite approach. Rather than shielding telephone

> companies from competition, the 1996 Act requires telephone companies to open their networks to competition.

Id., at 7.

The effect of this legislation was to require the existing monopolistic regional telecommunications providers, now known as Incumbent Local Exchange Carriers ("ILECs") to assist would-be competitors to compete against them in the telecommunications marketplace, in part by providing potential competitors with access to the monopolists' equipment and services. The 1996 Act has three principal goals:

> (1) Opening the local exchange and exchange access markets to competitive entry; (2) promoting increased competition in telecommunications markets that are already open to competition, including the long distance services market; and (3) reforming our system of universal service so that universal service is preserved and advanced as the local exchange and exchange access markets move from monopoly to competition.

Id.

In its first Report and Order the FCC established numerous rules to promote entry and competition in the telecommunications marketplace. This order was promptly challenged by ILECs and state utility commissions on the grounds that the FCC had exceeded its jurisdiction. These actions were consolidated in the United States Court of Appeals for the Eighth Circuit. That appellate court agreed with those who argued that the primary authority to implement the 1996 Act resided in the individual state commissions, and it vacated the FCC's order. *Iowa Utilities Board v. FCC*, 120 F. 3d 753, 800, 804, 805-806 (8th Cir. 1997). The case was thereafter appealed to the Supreme Court.

In *AT&T Corp., et al. v. Iowa Utilities Board, et al.*, 525 U.S. 366, 119 S. Ct. 721, 142 L. Ed. 834 (1999), the United States Supreme Court largely reversed the appellate court and remanded the case. While the Supreme Court generally upheld the FCC's rule-

making powers and the rules that the FCC had established in its First Report and Order, the Court was not satisfied that the FCC had properly applied the "necessary and impair" standards in its promulgation of Rule 319.

Section 251(a)(2) of the 1996 Act provides:

> In determining what network elements should be made available for purposes of subsection (c)(3) of this section, the [FCC] shall consider, at a minimum, whether --
>
> (A) Access to such network elements as are proprietary in nature is **necessary**; and
>
> (B) The failure to provide access to such network elements would **impair** the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

Emphasis added. The statutory provision and Rule 319 deal with the obligation of the ILEC to make network elements available to Competitive Local Exchange Carriers ("CLECs").

Ultimately, the FCC set out to comply with the instructions of the United States Supreme Court in the Federal Communications Commission Third Report and Order and Fourth Further Notice of Proposed Rulemaking, FCC 99-238, Released November 5, 1999 ("Third Report and Order"). The FCC determined that "without access to unbundled network elements, a [CLEC] may choose not to enter a particular market because the cost and delays associated with deploying its own facilities would be too high given the revenues obtainable from the market and the relative attractiveness of other potential new markets." Third Report and Order, §13 at 8. The FCC defined a "necessary element" as "if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element would, as a practical, economic, and operational matter, **preclude** a requesting

carrier from providing the services it seeks to offer." *Id.*, at 9 (emphasis added). The FCC defined "impairs" as "if, taking into consideration the availability of alternative elements outside the [ILEC's] network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of that element **materially diminishes** a requesting carrier's ability to provide the service it seeks to offer. *Id.*, at 9-10 (emphasis in original).

Applying those definitions, the FCC determined that ILECs must unbundle and make available the following network elements: 1) Loops, including high-capacity, xDSL-capable loops, dark fiber, and inside wire owned by [ILECs]; 2) subloops, or portions thereof; 3) Network Interface Devices ("NIDs"); 4) local circuit switching, except for local circuit switching used to serve end users with 4 or more lines in access density zone 1 in the top 50 Metropolitan Statistical Areas ("MSAs"), provided that ILECs provide non-discriminatory, cost-based access to the enhanced extended link throughout zone 1; 5) Packet Switching, only in the limited circumstances in which ILECs have placed digital loop carrier systems in the feeder section of the loop or have DSLAM in a remote terminal; 6) dedicated interoffice transmission facilities, or transport; 7) signaling links and signaling transfer points; and 8) Operations Support Systems ("OSS"). Id., at 11-13.

Focusing on one key unbundled network element, the ILEC's OSS, the FCC found that "[ILECs] must offer unbundled access to their operations support systems. OSS consists of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an [ILEC's] databases and information. The OSS element includes access to all loop qualification information contained in any of the [ILEC's] databases or other records, including information on whether a particular loop is capable of providing advanced services." *Id.*, at 13. *See, also, id.*, §425 at 189. The FCC

determined that OSS is not proprietary, and therefore it did not have to be analyzed under the "necessary" standard. In performing the "impair" analysis required by the Supreme Court, the FCC concluded that "lack of access to the [ILEC's] OSS impairs the ability of requesting carriers to provide the services they seek to offer." Id., §433 at 192.

IV. Supra's and BellSouth's Relationship Before the October 5, 1999 Effective Date of the Interconnection Agreement

Supra and BellSouth had experienced over two years of dealing with one another by the time they entered into their Agreement effective October 5, 1999, which adopted and incorporated by reference the Agreement between BellSouth and AT&T Communications of the Southern States, Inc. effective on June 10, 1997 ("Interconnection Agreement"). The Tribunal already has ruled that "[n]o recovery may be awarded for pre-October 5, 1999 acts or omissions" in these arbitrations (April 5, 2001 Order, at 6), but a summary of the parties' relationship leading up to the Interconnection Agreement will provide helpful context for the discussion of both liability and damages issues.

As set forth in greater detail in the preceding Section III regarding the "Radical Revision of Telecommunications Law," Supra and BellSouth may have been pre-ordained to suffer an inherently adversarial relationship. In accordance with the 1996 Act and implementing orders of the FCC, BellSouth was forced to allow Supra and other CLECs to lease equipment, facilities and services owned by BellSouth and use those very telecommunications elements to compete against BellSouth. At least in the early stages of the parties' relationship, essentially every new Supra telephone customer was won away from BellSouth, with a resulting decrease in BellSouth's revenues.

BellSouth and other ILECs exercised their legal rights and challenged the 1996 Act and implementing FCC orders. BellSouth won some litigation fights and lost others, most notably being compelled against its wishes to lease unbundled network elements ("UNEs") and UNE combinations ("UNE Combos") by the FCC First Report and Order, the United States Supreme Court's decision in *AT&T Corp. v. Iowa Utilities Board*, 525 U.S. 366 (1999), and the ensuing FCC Third Report and Order.

Supra's 1997 business plan (Arb. II, Supra Ex. 90) and hearing testimony show that Supra's competitive strategy involved beginning its telecommunications services as a reseller of BellSouth services, which enabled Supra to lease equipment with discounts off BellSouth's retail prices. After establishing a market presence, Supra planned to become what is known as a facilities-based UNE provider, which would enable Supra to lease UNEs and UNE Combos from BellSouth and to collect long distance telephone access and other charges not available to Supra while operating as a reseller of BellSouth services. Supra planned eventually to collocate Supra's own switches in BellSouth central offices and other facilities and offer Digital Subscriber Line ("DSL") and other advanced services. The final competitive stage, once Supra had gained sufficient residential and business customers and perhaps become a "carrier's carrier" -- providing services to other CLECs -- would be for Supra to build its own telecommunications network and expand operations into other states beyond Florida.

Testimony and exhibits in the two arbitration hearings show that Supra's and BellSouth's business relationship started on the wrong foot from the outset. Supra entered into a Resale Agreement with BellSouth effective May 19, 1997, that was executed on a take-it-or-leave-it basis. Mr. Olukayode Ramos, CEO of Supra, became aware of the Interconnection Agreement between AT&T and BellSouth during the summer of 1997. Ramos requested that BellSouth send a copy of the AT&T/BellSouth

Interconnection Agreement for Supra to opt into that agreement. Through miscommunication or by design, Mr. Patrick Finlen of BellSouth sent Ramos a "generic" Interconnection Agreement that did not reflect the terms negotiated by AT&T. Ramos promptly executed the "generic" agreement without the benefit of expert review by a telecommunications lawyer or consultant or of even checking the public files of the FPSC to ensure that Supra actually had the AT&T/BellSouth Agreement.

It is undisputed that, before the executed agreement was filed with the FPSC, Finlen compiled a different version with an Attachment 2 that deleted BellSouth's obligation to provide UNE Combos and a new signature page with mis-aligned paragraphs. It also cannot be disputed that the replaced Attachment 2 in Supra's agreement appeared only days after the Eighth Circuit Court of Appeals had ruled in *AT&T v. Iowa Utilities Board*, 124 F. 3d 934 (8th Cir. 1997) calling into question an ILEC's duty to provide UNE Combos to CLECs such as Supra.

Finlen of BellSouth testified that the replaced pages were an honest mistake and immaterial. Ramos of Supra testified that the switch was deliberate and intended to deprive Supra of the benefits of the "true" AT&T/BellSouth agreement.

In any event, the "switched" agreement episode led to an atmosphere of distrust and adversarial relations that is reflected in the contemporaneous documents submitted as exhibits and in the personal *animus* that was apparent during testimony of some witnesses at the hearings in these two arbitrations. Marcus Cathey of BellSouth described the relationship with Supra as "always tempered with suspicion and fear of reprisal." Arb. II, Tr., at 958, lines 16-17. "Of all the relationships, while none [were] completely perfect with the CLECs, not one approaches the awkwardness of the BellSouth/Supra relationship." *Id.* at lines 18-20.

Supra's and BellSouth's adversarial business relationship led to extensive battles in almost every conceivable forum even before these two arbitrations. Supra has pursued enforcement proceedings before the FCC, a variety of proceedings before the FPSC and one before the Georgia Public Service Commission, and antitrust and other claims against BellSouth in federal district court. *Supra Telecommunications & Information Services, Inc. v. BellSouth Telecommunications, Inc.*, No. 99-1706-CIV-SEITZ (S.D. Fla.).

While neither company can be faulted for zealously pursuing its available legal rights, the long running legal battles have contributed to a poisonous business relationship. That unfortunate relationship has contributed to poor communications between the companies and to both companies' adopting some extreme, unreasonable positions in these arbitrations.

V. Liability Issues

A. UNE Provider

Among the many claims between the parties, the most important may be whether Supra requested and BellSouth impeded Supra's operation as a facilities-based provider of UNEs and UNE Combos. Supra clearly stated its intent to order UNEs and UNE Combos as early as September 1997 and continuing to the present. Arb. II, Supra Ex. 96, 29, 32. Based on the 8th Circuit's 1997 decision in *Iowa Utilities Board*, BellSouth initially took the position that Supra was not entitled to order UNE Combos (Arb. II, BellSouth Ex. 30, 31, 34) despite the clear provisions to the contrary in General Terms and Conditions ("GTC") Sections 1, 1A, 1.1, 1.2, 29, and 30, and Attachment 2 to the Interconnection Agreement.

The United States Supreme Court reversed the Eighth Circuit, making clear as an FCC regulatory matter that CLECs such as Supra could order UNEs and UNE Combos. BellSouth then changed its position to argue that, although Supra could order UNEs and

UNE Combos, Supra had failed properly to request UNEs and UNE Combos. BellSouth maintained that position through testimony of its employees Finlen and Cathey at the second arbitration hearing.

The Tribunal finds that BellSouth failed for well over a year to provide Supra with the necessary instructions and information to order UNEs and UNE Combos using the Local Exchange Navigation System ("LENS") interface to BellSouth's ordering systems. In late 1999 and early 2000, BellSouth considered the UNEs and UNE Combos available to Supra to be "obsolete" because the Interconnection Agreement was due to expire at the end of its three-year term in June 2000. Arb. II, Tr., at 967, lines 18-25. AT&T had negotiated a separate so-called "UNE-P" agreement covering different UNEs and UNE combinations and different prices and BellSouth was focusing its marketing and service resources on the UNE-P marketplace. Arb. II, Tr., p. 968, lines 2-23.

BellSouth's ordering "profile" for Supra did not recognize a UNE-provider order for UNEs and UNE Combos under the Interconnection Agreement. There were no BellSouth written procedures in early 2000 for Supra to submit UNEs and UNE Combo orders through LENS. Arb. II, Tr., at p. 963, lines 13-19. After repeated requests from Supra, BellSouth processed four "test" orders for UNEs that were typed by BellSouth "directly into the system. There was no mechanical way we could determine for them to do that." Arb. II, Tr., p. 964, lines 21-23. Even the BellSouth team worked 5-6 days to complete the test orders. Arb. II, Tr., p. 983, lines 15-17.

Neither Cathey nor other BellSouth witnesses could satisfactorily answer the Tribunal's inquiry "[w]hy is it that when the AT&T interconnection agreement had an effective date of 1997, procedures had not been written by early 2000 to allow the ordering of UNE Combos?" Arb. II, Tr., p. 966, lines 3-6. In addition, BellSouth dragged its feet in providing Universal Service Ordering Code ("USOC") numbers for

ordering UNEs and UNE Combos. Arb. II, Supra Ex. 49 and 50. In fact, it took until October 2000 for Supra to be able to order a UNE successfully, and that was essentially by accident. An order to switch a customer "as is" to Supra was successfully processed electronically rather than manually because the customer was switched from IDS, another CLEC. Arb. II, Tr., p. 987, lines 6-19.

Cathey of BellSouth conceded at the second arbitration hearing, as he must, that "[j]ust because we don't have a particular procedure doesn't mean we don't have an obligation to help and assist a customer getting an order placed." Arb. II, Tr., p. 969, lines 11-13. Supra was far from perfect in the documentation of its inability to submit Local Service Requests ("LSRs") to order UNEs and UNE Combos electronically. But BellSouth took too long in responding to Supra's requests for assistance, rarely provided critical information or practical assistance, and repeatedly fell back on advice that would **not** work -- to wit, that Supra must submit a LSR.

BellSouth knew internally that a LSR from Supra would **not** work in summer 2000 because BellSouth "had no idea of how long it would take to get the USOC codes and I had no idea how long it would take to modify the LENS programming so that the LSRs could be submitted electronically." Arb. II, Supra Ex. 49. Yet BellSouth advised Supra in writing on July 14, 2000, that Supra must submit a LSR to convert the UNE Combos. Arb. II, Supra Ex. 50. Apropos of a dispute on a separate, but related, TAG interface issue, BellSouth was evasive and uncooperative because for "[t]his customer of all customers to communicate this lack of resource issue to [us] is very inopportune. Supra is so litigious, we endeavor to keep the ball in their court as much as possible." Arb. II, Supra Ex. 51. In the view of the Tribunal, BellSouth attempted to give the impression of responding to Supra in a substantive manner, without actually doing so, until just before the hearing in the second arbitration in April 2001.

In summary, the Tribunal finds that BellSouth breached the Interconnection Agreement in not cooperating with and facilitating Supra's ordering of UNEs and UNE Combos.

B. Collocation

Supra contends that BellSouth has breached its obligations to allow Supra to collocate its equipment and unbundled elements to BellSouth's own network elements.

BellSouth initially took the position that insufficient space was available in BellSouth's central offices to provide for collocation. Nilson DT, Arb. II, at 28, line 1; Tr., Arb. II, 584, lines 3-13; Ex. S0234 Arb. II. The Florida Public Service Commission ultimately required BellSouth to collocate.

Next BellSouth took the position that Supra had been unable over a period of a year and a half to complete the necessary forms accurately, this despite the fact that a number of Supra's applications had been previously approved. Subsequent applications by Supra were routinely rejected by BellSouth.

Among other equipment, Supra wishes to collocate class 5 switches. BellSouth takes the position that Supra is required to produce evidence that Supra **owns** such switches. The Tribunal disagrees. Supra has presented evidence that it leases the switch. In any event, if BellSouth provides space for collocation of a switch, and Supra cannot produce a switch to collocate, BellSouth's obligation would be fulfilled.

A dispute has arisen between BellSouth and Supra as to the pricing of "make-ready" construction by BellSouth and of BellSouth services attendant to collocation.

Finally, BellSouth again objects to the Tribunal's jurisdiction over the collocation claims, despite two prior rulings by the Tribunal that it had jurisdiction of such claims that were based on events on or after October 5, 1999, the effective date of the Interconnection Agreement. The gravamen of BellSouth's objection is that since Supra

first raised this issue pursuant to the 1997 Collocation Agreement, which agreement has expired and been entirely replaced by the Interconnection Agreement, that the Tribunal is divested of jurisdiction to resolve claims concerning collocation for which applications were submitted prior to the effective date of the Interconnection Agreement.[1] Once again, the Tribunal disagrees and reasserts its proper jurisdiction over the collocation claims.

Attachment 3 of the Interconnection Agreement deals with collocation. It provides in pertinent part that

> BellSouth **shall** provide space, as requested by [Supra] to meet [Supra's] needs for placement of equipment, interconnection, or provision of service.

Interconnection Agreement, Attach. 3, §2.3.1 (emphasis added).

> 2) BellSouth **shall** provide interoffice facilities . . . as requested by [Supra] to meet [Supra's] need for placement of equipment, interconnection or provision of service.

Id., at §2.22 (emphasis added).

> 3) [Supra] may collocate the amount and type of equipment **[Supra] deems necessary** in its collocated space . . . . BellSouth shall not restrict the types of equipment or vendor of equipment to be installed. . . .

Id., at §2.2.4 (emphasis added).

The Interconnection Agreement grants to this Tribunal very broad jurisdiction:

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[1] The Tribunal believes BellSouth's objection to be disingenuous. By BellSouth's own logic, since Supra had objected to BellSouth's billing procedures prior to the effective date of the Interconnection Agreement, the Tribunal should be barred from deciding such disputes, which should proceed under one of the prior agreements that does not contain an arbitration provision. However, BellSouth aggressively pursues its billing claims before this tribunal. Moreover, in January 2000, when rejecting Supra firm orders for collocation, BellSouth stated: "[T]he Interconnection Agreement under which Supra operates does not contain an expedited dispute resolution process for space preparation charges assessed for physical collocation. The billing procedures for physical collocation are found in Attachment 6, Section 4 of the Interconnection Agreement." Ex. S0075, Arb. II.

Supra would have the Tribunal sanction BellSouth for their repetition of the same jurisdictional objections overruled twice previously, especially in light of BellSouth's admission that the Interconnection Agreement governs the dispute. While the Tribunal acknowledges that Section 7 of Attachment 1 empowers the Tribunal to issue such sanctions, the Tribunal declines to do so.

> Negotiation and arbitration under the procedures provided herein shall be the exclusive remedy for all disputes between BellSouth and [Supra] arising under or related to this Agreement including its breach, except for: (i) disputes arising pursuant to Attachment 6, Connectivity Billing; and (ii) disputes or matters for which the Telecommunications Act of 1996 specifies a particular remedy or procedure. Except as provided herein, BellSouth and [Supra] hereby renounce all recourse to litigation and agree that the award of the arbitrators shall be final and subject to no judicial review, except on one or more of those grounds specified in the Federal Arbitration Act (9 USC §§1, et seq.), as amended, or any successor provision thereto.

Interconnection Agreement, Attach. 1, §2.

> If, for any reason, the Federal Communications Commission or any other federal or state regulatory agency exercises jurisdiction over and decides any dispute related to this Agreement or to any BellSouth tariff and, as a result, a claim is adjudicated in both an agency proceeding and an arbitration proceeding under this Attachment 1, the following provisions shall apply:
>
> To the extent required by law, the agency ruling shall be binding upon the Parties for the limited purposes of regulation within the jurisdiction and authority of such agency.
>
> The arbitration ruling rendered pursuant to this Attachment 1 shall be binding upon the Parties for purposes of establishing their respective contractual rights and obligations under this Agreement, and for all other purposes not expressly precluded by such agency ruling.

Id., at §§2.1.2, 2.1.2.1, and 2.1.2.2.

> The Arbitrators shall receive complaints and other permitted pleadings, oversee discovery, administer oaths and subpoena witnesses pursuant to the United States Arbitration Act, hold hearings, issue decisions, and maintain a record of proceedings. The Arbitrators shall have the power to award any remedy or relief that a court with jurisdiction over this Agreement could order or grant, including, without limitation, the awarding of damages, pre-judgment interest, specific performance of any obligation created under the Agreement, issuance of an injunction, or imposition of sanctions for abuse or frustration of the arbitration process, except that the Arbitrators may not: (i) award punitive damages; (ii) or any remedy rendered unavailable to the Parties pursuant to Section 10.3 of the General Terms and Conditions of the Agreement; or (iii) limit, expand, or otherwise modify the terms of this Agreement.

Id., at §7.

The contractual obligations concerning collocation are broad and far reaching. The disputes raised by Supra regarding denial of collocation arise under or are related to the Interconnection Agreement. Accordingly, this Tribunal properly takes jurisdiction of these claims.

BellSouth next interposes an objection to the Tribunal's jurisdiction over pricing of collocation to Supra.[2] Supra argues BellSouth could have taken the collocation rate dispute to the Florida Public Service Commission (the "FPSC"). However, BellSouth fails to argue or to demonstrate that Supra was obligated to take such disputes to the FPSC or that the FPSC has exclusive jurisdiction over such disputes. The Interconnection Agreement indicates that the Tribunal's jurisdiction may be concurrent with that of the FPSC. Interconnection Agreement, Attach. 1, §2.1.2.

Rates for certain collocations are set out in Table 2, pages 60 and 61, attached to the letter amendment of July 24, 1998, which AT&T and BellSouth incorporated into the Interconnection Agreement that Supra later adopted. To the extent that Supra objects to rates for "make-ready" work that are not covered by Table 2, the Interconnection Agreement provides that Supra may retain a contractor on BellSouth's certified list to perform such work at Supra's expense. Interconnection Agreement, Attach. 3, §7.4.4.

The Tribunal orders that BellSouth collocate forthwith all such equipment as Supra has included in all prior applications to BellSouth at the rates indicated in Table 2 attached to the July 24, 1998, letter incorporated into the Interconnection Agreement. To

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[2] In making this second jurisdictional objection, BellSouth states: "There is no dispute that Supra is entitled to collocation. There is also no dispute that BellSouth has offered collocation to Supra. The only dispute between the parties is Supra's allegation that the rates that BellSouth proposes to charge for collocation space were unreasonable." In light of BellSouth's repeated rejection of Supra's collocation applications and the fact that Supra has been unable to collocate a single piece of equipment in any BellSouth facility over a period of some four years, BellSouth's statement is nothing short of breathtaking.

the extent that the collocation involves "make-ready" work that may not be covered by Table 2, Supra may retain a contractor of its choosing from BellSouth's approved contractor list to perform such work at Supra's expense. To the extent that work or services by BellSouth are necessary to collocation and that such work or services are not covered by the rates set out in Table 2, the Tribunal instructs the parties to consult the Interconnection Agreement for guidance and to meet and confer regarding the applicable rates for such work or services. To the extent that the parties are unable to agree on such rates, the parties are to submit their differences over such rates to the Tribunal for resolution.

C. Access to OSS

Supra contends that it is entitled to direct access to BellSouth's OSS, because the FCC has mandated such access in its First Report and Order and in its Third Report and Order, because BellSouth's LENS was unable to perform the ordering function in real time and is inherently unreliable, suffering numerous malfunctions and excessive downtime, and because the contract effectively requires access to BellSouth's OSS.

In contrast, BellSouth argues that Supra, by adopting the Interconnection Agreement, effectively negotiated away the rights and interests it may have been entitled to under the 1996 Act. *See,* 1996 Act, §252(a)(1). BellSouth argues that Supra's rights under the 1999 agreement are not as broad as the rights granted under federal law. The Tribunal disagrees.

The evidence presented shows that Supra must submit local service requests through LENS, an electronic interface supplied by BellSouth. LENS cannot submit local service orders in real time. A local service request is processed through several interfaces (including manual introduction) before the local service request can be processed as an order and provisioned. Ramos DT, Arb. I, at 23, lines 1-15. The orders are subject to

"edit checks" which generate "clarification requests" which delay the process even further. Id., at lines 20-22; at 25, lines 16-18. LENS does not provide Supra with the capability to perform pre-ordering, ordering, provisioning, maintenance and repair and billing functions in real time or in a manner consonant with BellSouth's performance of the process. Arb. I, Exhibit 531; BellSouth Videotape, "This Ol' Service Order."

BellSouth witness Pate admitted that Supra could not place orders in the same manner as BellSouth. Testimony of Ronald Pate, Arb. I, Tr., at 570, line 10, to 573, line 8; at 577, line 24, to 578, line 9; at 578, lines 10-17; at 579, line 2, to 580, line 13; at 586, lines 11-19.

To establish a new account through LENS, Supra is required to first view the Firm Order Menu Screen and obtain the information from the customer and from various BellSouth databases to enable Supra to complete the screen. Supra must validate the customer's service address. If for any reason, Supra is unable to validate the address, Supra cannot complete the pre-ordering process. Supra thereafter selects a telephonic number for the customer. Because of the delay which ensues between the time Supra begins the pre-ordering process and the provisioning of the order (usually several days), Supra must wait to notify the customer of the telephone number assigned.

Next, Supra identifies the features and services the customer wants. However, LENS is frequently inaccurate in the feature selection process. Because of LENS system errors and system failures, the identification of class and services will fall out, resulting in the need to "clarify" the order causing additional delay. A "clarified" order is put on hold, and it must be resubmitted manually.

Following successful completion of identification of services, Supra must identify the type of directory listing selected by the customer. This requires accessing a separate database. In BellSouth's OSS, the database is integrated into the ordering process.

After all pre-ordering information has been entered, LENS will automatically calculate a due date. Supra has no ability to negotiate a due date. Frequently BellSouth overrides the due date provided, and returns the order at a later date with a different due date acceptable to BellSouth. Therefore, Supra has no ability to communicate to a customer a definite due date for the provisioning of service.

Once complete, the order enters BellSouth's Local Exchange Ordering System, a system which serves to edit the LENS generated orders. If errors are found, the order will be sent back to Supra. If the order is error free, it will be sent to be reformatted into a format acceptable to BellSouth's systems. If errors are found, the order is again sent back to Supra. If the orders are error-free, BellSouth representatives re-enter the information into the order entry system for provisioning. Ramos DT, Arb. I, at 26-34.

The time required and the number of possible interventions in this process are profoundly different from the BellSouth ordering process, where all information is entered into one system by the representative taking the call, where due date and telephone number can be provided on line, and where service can be provisioned the **same day**. It is literally impossible for Supra to provision service the same day an order is received, due to the unreliable systems made available to Supra by BellSouth.

The evidence is overwhelming that BellSouth has not provided Supra with Operations Support Systems that are equal to or better than those which BellSouth provides itself. Interconnection Agreement, GTC §30.10.4 ("[E]ach Network Element . . provided by BellSouth to [Supra] shall be made available to Supra on a priority basis . . . that is equal to or better than the priorities that BellSouth provides to itself . . . .") The Interconnection Agreement provides that "BellSouth shall provide **real time** electronic interfaces for transferring and receiving service orders and provisioning data ." Interconnection Agreement, Attach. 4, §5.1 (emphasis added). The evidence is

clear that LENS does not provide real time service order capability. The Interconnection Agreement provides that "BellSouth shall provide **real time** ability (i) to obtain information on all features and services available, in end-office where customer is provisioned; (ii) to establish if a service call is needed to install the line or service; (iii) to determine the due date and provide information regarding service dispatch/installation schedule, if applicable; (iv) . . to provide an assigned telephone number; and (v) . . . to obtain a customer profile, including customer name, billing and residence address, billed telephone numbers, and identification of features and services subscribed to by customer." Id., §5.2 (emphasis added). The evidence is overwhelming that LENS does not provide all these capabilities in real time.

The Interconnection Agreement further provides that

> BellSouth shall provide the ability to enter a service order via Electronic Interface as described in Subsection 5.1 of this Section. The service order shall provide [Supra] the ability to: (i) establish service and order desired features; (ii) establish the appropriate directory listing; and (iii) order intraLATA toll and interLATA toll when applicable in a single, unified order.

Id., at §5.3. The evidence is clear beyond cavil that neither LENS, nor any of the other electronic interfaces offered by BellSouth has such ability. Only BellSouth's OSS has the capabilities set out above.

Because BellSouth has failed to meet its contractual obligations regarding electronic interfaces, and because BellSouth is obligated to provide Supra "network elements equal to or better than BellSouth provides to itself or its customers" (BellSouth's Post-Hearing Memorandum, at 15), the Tribunal finds that BellSouth is obligated to provide Supra nondiscriminatory direct access to BellSouth's OSS and orders that such access be provided by BellSouth to Supra no later than June 15, 2001

D. LENS

LENS Downtime

The electronic interface chosen by Supra from those offered by BellSouth in order to perform the pre-ordering and ordering functions, among others, was the LENS. In the Interconnection Agreement, BellSouth undertakes an obligation to provide Supra with the same quality of services and elements as BellSouth provides itself and its end-users. Interconnection Agreement, GTC §12.1. Regarding the capability to input orders, the Interconnection Agreement provides:

> BellSouth shall provide [Supra] with the capability to have [Supra's] Customer orders input to and accepted by BellSouth's Service Order systems outside of normal business hours, twenty-four (24) hours a day, seven (7) days a week, the same as BellSouth's Customer orders received outside of normal business orders are input and accepted.

GTC, §28.6.10.1

BellSouth witness Hendrix testified that BellSouth cannot place orders on a twenty-four hours a day, seven days a week basis, but he failed to testify as to how much downtime, if any, is scheduled for BellSouth's OSS. Arb. I, Hendrix DT, at 24. BellSouth's witnesses testified that LENS was down for scheduled maintenance three hours a day, Monday through Saturday from 1:00 a.m. to 4:00 a.m. and six hours on Sunday from 12:00 a.m. to 6:00 a.m. Arb. I, Pate DT, at 32; Arb. I, Pate Testimony, Tr., at 558. Thus, the scheduled downtime for the LENS system is twenty-four hours per week, an amount the Tribunal considers to be more than excessive.

In addition to the twenty-four hours each week for scheduled maintenance in which LENS is unavailable, LENS was down additional time due to malfunctions and failures. Arb. I, Mariki Testimony, Tr., at 154, lines 8 - 21; Arb. I, Pate Testimony, Tr., at 649, line 22, to 650, line 5; Arb. I, Supra Ex. 90.

It is clear that the LENS electronic interface is unstable and unreliable. The provision of such a system for pre-ordering and ordering of services is a breach of BellSouth's obligations under the Interconnection Agreement. The Tribunal believes that its order giving Supra direct access to BellSouth's OSS should render this issue moot in the future.

2. Cut Off of Supra's Access to LENS

On May 16, 2000, BellSouth disconnected Supra's access to LENS because Supra had failed to pay disputed billings. It is undisputed that Section 1.2 of the General Terms and Conditions prohibits BellSouth from "discontinu[ing] any Network Element, Ancillary Function, or Combination provided hereunder without the express prior written consent of Supra." Moreover, Section 16.1 of the General Terms and Conditions provides in pertinent par that "[i]n no event shall the Parties permit the pendency of a Dispute to disrupt service to any [Supra] Customer contemplated by this Agreement." BellSouth later acknowledged that "the Interconnection Agreement between BellSouth and Supra does not permit BellSouth to refuse Supra's orders for non-payment of undisputed charges." Arb. II, Ex. S0098. BellSouth's contention that it believed it was proceeding under a prior agreement which had long since expired and which had been entirely superceded by the Interconnection Agreement is not credible. Accordingly, the Tribunal regards BellSouth's act of cutting off Supra's access to LENS a deliberate breach done with the intent to harm Supra.

E. Dedicated Transport and Tandem Switching

Supra argues that BellSouth has breached various sections of the Interconnection Agreement in failing to provision dedicated transport lines between BellSouth tandem switches both between Local Access Transport Areas ("LATA") and within individual

LATAs. These two issues are related – inter-LATA and intra-LATA transport – but require different analysis and can best be discussed separately.

Inter-LATA Transport

BellSouth argues that it may not lease UNEs to Supra that would enable Supra to provide inter-LATA (i.e., long distance) telephone service to Supra's customers when section 271(a) of the 1996 Act bars BellSouth from providing inter-LATA service. BellSouth also argues that, if Supra wishes to provide certain specified DSI Interoffice Transport facilities that are in fact available under the Interconnection Agreement in a manner which would cross LATA boundaries, then Supra will need to order intra-LATA trunking from BellSouth and also order inter-LATA trunking from an IXC (long distance provider).

Supra argues at considerable length that, regardless of the fact that BellSouth cannot itself provide inter-LATA service, Supra can lease the UNEs and dedicated transport from BellSouth and then Supra, as a certificated IXC, would be deemed to provide the inter-LATA service rather than BellSouth. The major problem with Supra's argument is that Supra cites no convincing FCC or federal court authority in support of Supra's argument that Supra can lease UNE Combos and tariffed services from BellSouth which BellSouth cannot provide directly to its customers. The Tribunal therefore finds that Supra has failed to carry its burden of proof on the issue of inter-LATA service.

2. Intra-LATA Transport Between Tandem Switches

Supra devoted nine pages to the issue of "Feature Group-D Switched Access Service Between BellSouth Access Tandems" as described by Supra at pages 62-71 of its Post-Hearing Brief. BellSouth claims that Supra mis-describes both the service Supra seems to be seeking and the issues presented by its requests, which have not been submitted to BellSouth via a LSR. Unfortunately, the parties' testimony at the arbitration

hearing and their respective Post-Hearing Briefs provided scant assistance to the Tribunal's assessment of this issue.

The Tribunal finds that "Feature Group-D" is a switched access service provided by BellSouth to interexchange carriers ("IXCs") that can be ordered from the BellSouth Access Services tariffs filed with the FCC and the FPSC. BellSouth argues that "Feature Group D" is inherently a long-distance service, not local service available to Supra under the Interconnection Agreement.

To the extent Supra may be requesting interoffice trunking between BellSouth switches, Supra has failed to show that it owns and operates a local switch connected to BellSouth's network. BellSouth made the better arguments on this issue, including citations to relevant provisions of the Interconnection Agreement referring to the need for switches. The Tribunal therefore finds that Supra failed to carry its burden of proof.

F. Regional Street Address Guide ("RSAG") Download

Supra contends that BellSouth is contractually obligated to provide it with a download of RSAG, citing Attachment 15, Sections 7.2.1 and 7.2.2. Because of the incessant downtimes of LENS (*see*, Section V.D.1, above), Supra argues that without a download it does not have the same access to information as does BellSouth, which violates the Interconnection Agreement's "parity" provisions. *See, e.g.*, Interconnection Agreement, GTC, §30.10.4. Supra argues that BellSouth's Hendrix admitted that AT&T was entitled to receive a batch feed of the RSAG database as part of a unique interface that was to be created. Supra seeks an initial download of the RSAG database, followed by daily updates.

There is no dispute that the "unique interface" contemplated by the Interconnection Agreement was never developed. The burden for the development of the electronic interface falls equally on Supra and BellSouth. (*See*, Attach. 15, §§7.1.1 and

7.1.2) ("BellSouth and [Supra] agree to develop an interface ."; "[Supra] and BellSouth will establish a transaction-based electronic communications interface. . . ."). The provision of batch feeds was dependent on the unique interface which had not been developed. ("**When the interface is operational,** BellSouth will transmit the initial batch feed of the data . . . ." Interconnection Agreement, Attach. 15, §7.2.2 (emphasis added).)

The Tribunal finds that the obligation to develop the unique interface fell jointly on Supra and BellSouth. Supra produced no evidence which would suggest that the failure to develop the unique interface was entirely due to BellSouth's actions or inactions. Since the joint development of the unique electronic interface was a condition precedent to the obligation to provide the initial batch feed of RSAG, and since the condition precedent never occurred, the Tribunal finds that BellSouth had no contractual obligation to provide Supra with a download of RSAG. In any event, since the Tribunal has ordered BellSouth to provide nondiscriminatory direct access to the BellSouth OSS, Supra should have real time access to RSAG, including all updates.

G. 100 Number Blocks of Telephone Numbers

Supra argues that the Interconnection Agreement requires BellSouth to reserve up to 100 telephone numbers per NPA-NXX for Supra's exclusive use. Interconnection Agreement, GTC, §28.1.1.4. BellSouth does not dispute this. BellSouth contends that since LENS enables Supra to reserve up to 25 numbers in a single session, Supra can reserve 100 numbers in four such sessions. BellSouth contends that this satisfies the contractual requirement.

Supra argues that this sequential ordering is inadequate in that Supra is unable to use the 25 numbers in any manner of Supra's choosing. However, Supra also states that "[s]hould BellSouth be ordered to provide Supra with access to BellSouth's retail OSS

this issue becomes moot." Supra's Post-Hearing Brief, at 62. As the Tribunal has found that Supra is entitled to nondiscriminatory direct access to BellSouth's OSS (*see*, Section V.C, above), this issue is now moot.

H. QuickServe

QuickServe is the BellSouth name for the provision of expedited service in situations where the phone line at the customer's location is already connected for service (*i.e.*, has "soft dial tone") and only requires electronic intervention, as opposed to having to dispatch a service technician to the location. Pate DT, Arb. I, at 27.

BellSouth acknowledges that LENS could not in the past provide same-day service at QuickServe locations, but that a work around, executed at some unstated time, had been put in place. Pate, DT, Arb. I, at 29. Now, BellSouth asserts that LENS has been "recently updated" to provide QuickServe capability. Pate, Reb.T., Arb. I, 53-54.

The Tribunal finds that its order requiring BellSouth to provide Supra with nondiscriminatory direct access to BellSouth's OSS provides Supra with the same ability to provide QuickServe as has BellSouth. Thus, this issue is effectively moot.

I. Branding

General Terms and Conditions, Section 19, sets out BellSouth's obligations to brand services offered by Supra that incorporate services and elements made available under the Interconnection Agreement.

> The Parties agree that the services offered by [Supra] that incorporate Services and Elements made available to [Supra] pursuant to this Agreement shall be branded as [Supra] services, unless BellSouth determines to unbrand such Services and Elements for itself, in which event BellSouth may provide unbranded Services and Elements. [Supra] shall provide the exclusive interface to [Supra] Customers, except as [Supra] shall otherwise specify. In those instances where [Supra] requires BellSouth personnel or systems to interface with [Supra] Customers, such personnel shall identify themselves as representing [Supra], and shall not identify themselves are representing BellSouth. Except for

> material provided by [Supra], all forms, business cards or other business materials furnished by BellSouth to [Supra] Customers shall be subject to [Supra's] prior review and approval. In no event shall BellSouth, acting on behalf of [Supra] pursuant to this Agreement, provide information to [Supra] local service Customers about BellSouth products or services. BellSouth agrees to provide in sufficient time for [Supra] to review and provide comments the methods and procedures, training and approaches to be used by BellSouth to assure that BellSouth meets [Supra's] branding equipment. For installation and repair services, [Supra] agrees to provide BellSouth with branded material at no charge for use by BellSouth ("Leave Behind Material"). [Supra] will reimburse BellSouth for the reasonable and demonstrable costs BellSouth would otherwise incur as a result of the use of the generic leave behind material. BellSouth will notify [Supra] of material supply exhaust in sufficient time that material will always be available. BellSouth may leave a generic card if BellSouth does not have [a Supra] specific card available. BellSouth will not be liable for any error, mistake or omission, other than intentional acts or omissions or gross negligence, resulting from the requirements to distribute [Supra's] Leave Behind Material.

Supra produced evidence that it raised the branding issue with BellSouth concerning the Memory Call service (Arb. II, Ex. S0117) and in a more general context (Arb. II, Ex. S0119). There is no evidence that BellSouth ever concretely responded to these concerns. *See, e.g.*, Cathey Testimony, Arb. II, Tr., at 992, line 23, to 995, line 6.

The Tribunal finds that BellSouth breached it obligation to brand the services and elements provided under the Interconnection Agreement, and that such breach was willful and is continuous. Accordingly, the Tribunal orders that BellSouth shall provide by June 15, 2001, branding of services and elements provided to Supra under the Interconnection Agreement, including, but not limited to voice mail, operator services, and directory assistance, under the terms and conditions of and as required by General Terms and Conditions Section 19 of the Interconnection Agreement. The Tribunal further orders that such branding by BellSouth is to continue until such time as Supra is able to reproduce such elements and services with unbundled network elements and combinations thereof. To the extent that Supra seeks damages for such breaches, Supra

has failed to offer any proof as to the damages that resulted from these breaches by BellSouth. Accordingly, Supra's claim for damages is denied.

J. TAG Interface Development

Supra alleges that it suffered damages in attempting to establish an interface to the TAG electronic interface provided by BellSouth. However, outside of bare assertions by Mariki in his rebuttal testimony, Supra produces no convincing evidence that BellSouth is responsible for Supra's failure to complete the interface. The exhibits cited by Supra wholly fail to establish that BellSouth is responsible for the failure of this project. Accordingly, Supra fails to carry its burden of proof on this issue.

K. Toll Free Number Database

Supra claims that BellSouth has failed to provide access to the BellSouth Toll Free Number Database as required under Section 13.5 of Attachment 2 to the Interconnection Agreement. BellSouth responds that it would be willing to provide access to Supra, but Supra does not own and operate a local switch that meets the interface technical requirements of § 13.5.1.2 and § 13.5.1.2 of Attachment 2 to the Interconnection Agreement. While there was conflicting evidence at the arbitration hearings on whether Supra has leased a local switch, there is no dispute that Supra does not presently operate its own local switch connected to BellSouth's network.

The Tribunal finds that Supra has failed to carry its burden of proof that it meets the contractual interface requirements for gaining access to the BellSouth Toll Free Number Database. In light of the Tribunal's order that BellSouth collocate Supra's equipment, including switches in BellSouth central offices (see Section V.B, above) and Supra's testimony that it has leased at least one switch, Supra's claim regarding the Toll Free Number Database may well become moot.

L. Same Services as BellSouth

Supra claims that BellSouth has failed to provide the same features, functions, and capabilities that BellSouth provides itself through its local switches in breach of Section 7 of Attachment 2 to the Interconnection Agreement. BellSouth responds that Supra failed to order the services properly as required under the Interconnection Agreement. The contested services are the following:

- Centrex
- ACD
- Data switching
- Frame relay services
- Basic and primary rate ISDN
- Dialing parity
- Voice service

  Fax transmissions
- Operator Services
- Switched and non-switched digital data services
- Video Services
- Coin (pay phone) services
- Frame relay and ATM
- Private line services

The only service listed above that Supra clearly requested from BellSouth was Centrex. Arb. II, Supra Ex. 113; BellSouth Ex. PCF-18. BellSouth faults Supra for not requesting Centrex or other services via a LSR, but as made clear in the section of this Award regarding UNE Provider (*see,* Section V.A, above), BellSouth impeded and

frustrated Supra's ability to order services via a LSR submitted through LENS. Regarding the Centrex service, however, Supra failed to prove any damages resulting from BellSouth's failure to lease Centrex services. As to all the other services listed above, Supra failed to carry its burden of proof that it had unequivocally requested the services. In any event, this claim should become moot in light of the Tribunal's order that BellSouth provide direct access to its OSS and that Supra be permitted to lease UNE and UNE Combos as required under the Interconnection Agreement.

M. Alleged Breach of 1996 Act

Supra seeks from the Tribunal a determination that BellSouth's conduct constitutes a breach of the Telecommunications Act of 1996. Supra contends that Paragraph 7 of Attachment 1 to the Interconnection Agreement creates the Tribunal's jurisdiction and constitutes the Tribunal's authority to make such a determination. That section provides:

> Duties and Powers of the Arbitrators
>
> The Arbitrators shall receive complaints and other permitted pleadings, oversee discovery, administer oaths and subpoena witnesses pursuant to the United States Arbitration Act, hold hearings, issue decisions, and maintain a record of proceedings. The Arbitrators shall have the power to award any remedy or relief that a court with jurisdiction over this Agreement could order or grant, including, without limitation, the awarding of damages, pre-judgment interest, specific performance of any obligation created under the Agreement, issuance of an injunction, or imposition of sanctions for abuse or frustration of the arbitration process, except that the Arbitrators may not: (i) award punitive damages; (ii) or any remedy rendered unavailable to the Parties pursuant to Section 10.3 of the General Terms and Conditions of the Agreement; or (iii) limit, expand, or otherwise modify the terms of this Agreement.

Nothing in this section expressly grants to the Tribunal the authority to determine breaches of the 1996 Act.

BellSouth contends that this Tribunal has no jurisdiction to determine that BellSouth has violated any provision of the 1996 Act, and states that such determinations might lead to inconsistent outcomes, citing Sections 2.1.2, 2.1.2.1, and 2.1.2.2 of Attachment These sections provide:

> If, for any reason, the Federal Communications Commission or any other federal or state regulatory agency exercises jurisdiction over and decides any dispute related to this Agreement or to any BellSouth tariff and, as a result, a claim is adjudicated in both an agency proceeding and an arbitration proceeding under this Attachment 1, the following provisions shall apply:
>
> To the extent required by law, the agency ruling shall be binding upon the Parties for the limited purposes of regulation within the jurisdiction and authority of such agency.
>
> The arbitration ruling rendered pursuant to this Attachment 1 shall be binding upon the Parties for purposes of establishing their respective contractual rights and obligations under this Agreement, and for all other purposes not expressly precluded by such agency ruling.

It is clear from these sections that the parties anticipated that the Tribunal's jurisdiction could be co-extensive with that of regulatory agencies, and that the Tribunal's ruling would bind the parties with respect to their respective contractual obligations under the Interconnection Agreement. However, these sections neither establish nor preclude arbitral jurisdiction to determine breaches of the 1996 Act.

Neither party addresses section 2.1 of Attachment 1 which provides, in pertinent part:

> Negotiation and arbitration under the procedures provided herein shall be the exclusive remedy for all disputes between BellSouth and [Supra] arising under or related to this Agreement including its breach, **except for: . . (ii) disputes or matters for which the Telecommunications Act of 1996 specifies a particular remedy or procedure.**

Emphasis added. Clearly, if a provision of the 1996 Act specifies a particular remedy or procedure, the Tribunal has no jurisdiction.

The Tribunal has grave doubts as to whether it has jurisdiction to determine that BellSouth has violated the 1996 Act. However, it need not determine that issue. Supra has not cited any particular provision that it alleges BellSouth has violated, nor what conduct by BellSouth violated the terms of such provision. The Tribunal cannot and will not proceed in a vacuum. Even assuming, *arguendo*, that the Tribunal has jurisdiction to determine particular violations of the 1996 Act, no violations have been alleged with sufficient specificity to permit the Tribunal to do so.

N. BellSouth Invoices

With respect to the claim of BellSouth on its unpaid invoices, BellSouth submitted evidence that the sum of $6,374,369.58 has been invoiced by BellSouth to Supra, and that Supra has failed to pay this amount.

The Tribunal finds that BellSouth presented a *prima facie* case as to this claim and this amount, subject to various offset claims and further subject to the results of the audit requested by Supra and ordered by the Tribunal elsewhere herein.

Accordingly, the Tribunal awards BellSouth the amount of $6,374,369.58, subject to offset in the amounts awarded Supra elsewhere in this Award and further subject to the results of the Audit ordered elsewhere herein (including the elimination of late charges).

O. Supra's Audit Request

Supra's claim that it be permitted to audit BellSouth's invoices, which was presented in Arbitration I, is closely tied to BellSouth's claim for unpaid invoices, which was presented in Arbitration II. In short, Supra has consistently challenged BellSouth's invoices since October 1999 and has refused payment since that time. Supra has demanded both Bill Accuracy Certification from BellSouth in accordance with section 12 of Attachment 6 of the Interconnection Agreement and an "audit" of BellSouth's billings

in accordance with Sections 11.1.1 and 11.1.3 of the General Terms and Conditions of the Interconnection Agreement.

The billing audit dispute boils down to the proper scope of documents and information reasonably necessary to assess the accuracy of BellSouth's invoices. Two sections of the General Terms and Conditions of the Interconnection Agreement provide clear guidance:

> Subject to BellSouth's reasonable security requirements and except as may be otherwise specifically provided in this Agreement, **[Supra] may audit BellSouth's books, records and other documents once in each Contract Year for the purpose of evaluating the accuracy of BellSouth's billing and invoicing.** [Supra] may employ other persons or firms for this purpose. Such audit shall take place at a time and place agreed on by the Parties no later than thirty (30) days after notice thereof to BellSouth.

Section 11.1.1 (emphasis added). The breadth of material subject to an audit is further explained:

> BellSouth shall cooperate fully in any such audit providing **reasonable access to any and all appropriate BellSouth employees and books, records and other documents reasonably necessary to assess the accuracy of BellSouth's bills.**

Section 11.1.3 (emphasis added).

BellSouth argues that its detailed monthly invoices transmitted both on paper and electronically in a Disk Analyzer Billing ("DAB") format are more than sufficient to allow Supra to audit BellSouth's billings. The Tribunal disagrees and finds BellSouth's position that Supra can "audit" BellSouth's invoices by intensively reviewing the bills themselves to be patently unconvincing.

The language quoted above from the parties' Interconnection Agreement contemplates access to "any and all appropriate BellSouth employees and books, records and other documents reasonably necessary to assess the accuracy of BellSouth's bills," which is a very broad audit provision. This conclusion is supported by the expert

testimony of Supra's certified public accountant, Stuart Rosenberg. He testified convincingly at the Arbitration I hearing that Supra must be permitted to conduct its requested audit in accordance with Generally Accepted Auditing Standards ("GAAS"). BellSouth utterly failed to rebut his testimony or Supra's commonsense position that Supra must be permitted to review sufficient records and information, including access to knowledgeable BellSouth employees, to evaluate the facts that give rise to BellSouth's billing (*e.g.*, verify that BellSouth's bill correctly starts on the date service actually began for each Supra customer, which cannot be determined by Supra from its local service requests).

Accordingly, the Tribunal orders BellSouth to fully cooperate with and to facilitate Supra's audit of BellSouth's invoices from October 1999 to the present under GAAS. The audit shall begin within ten (10) calendar days of this award (*i.e.*, no later than June 15, 2001) and be completed by July 31, 2001, which date may only be extended for good cause shown. Failure of BellSouth to timely cooperate in the audit process may be considered good cause. Supra will bear its own costs of the audit, unless the audit identifies adjustments greater than the two percent (2%) threshold set forth in Section 11.1.5 of the General Terms and Conditions of the Interconnection Agreement, in which case BellSouth will reimburse Supra's expenses of the audit.

Once the audit is completed and the necessary adjustments to BellSouth's invoices are identified (both reductions and increases), then the resulting adjustments will be offset against the amount to be recovered by BellSouth on its claim for unpaid invoices in Arbitration II. Copies of the audit report and calculations will be served on BellSouth and on the Tribunal.

VI. Damages

A. Introduction

This introduction to the Tribunal's assessment of damages makes three necessary points about the parties' approaches to alleged damages.

First, both parties pursued risky strategies on damages through their respective expert witnesses -- Wood for Supra and Freeman for BellSouth. On the one hand, Supra's damages expert relied on unverified factual underpinnings (*e.g.*, a list of "lost customers" that was repudiated by Supra's fact witness), explained his damages assumptions and methodology only cryptically, and calculated extraordinarily high and speculative lost future profits of Supra through 2004 and in many states beyond Supra's existing service area of south Florida. BellSouth's expert witness Freeman correctly characterized Supra's alleged damages as "breathtaking."

On the other hand, BellSouth adopted an equally high-risk damages strategy of attacking Supra's methodology and numbers, but not providing any alternative calculations to the Tribunal. That damages approach was made infamous in the *Pennzoil v. Texaco* state court litigation in Texas regarding the takeover of Getty Oil to the tune of a $7 billion judgment against Texaco. Although BellSouth's expert effectively attacked large elements of Supra's damages, BellSouth's failure to provide alternative damages figures in the areas in which Supra prevailed on liability left the Tribunal with little choice but to grant Supra's requested damages in some areas.

Second, Supra failed to tie any damages to certain liability claims. For example, as described in Section V.L above, Supra could have recovered damages for BellSouth's failure to lease Centrex services, but Supra did not tie any damages specifically to that claim and therefore failed to carry its burden of proof.

Third, as discussed above in Section II regarding procedural history, the Tribunal ruled that consequential damages, including lost profits, could be recovered upon a particular showing:

> The Panel concludes that "willful or intentional misconduct" is broad terminology which embraces willful or intentional breach of contract to the extent that it is done with the tortious intent to inflict harm on the other party to the contract. The panel's interpretation of this phrase is supported by judicial authority, including *Metropolitan Life Insurance Co. v. Noble Lowndes Int'l, Inc.*, 643 N.E.2d 504, 506-508 (N.Y. 1994) and *Wright v. Southern Bell Tel. & Tel. Col., Inc.* 313 S.E. 2d 150 (Ga. App. 1984).
>
> Accordingly the Tribunal unanimously finds that **to the extent that Supra can prove that BellSouth intentionally or willfully breached the Agreement at issue in this case with the tortious intent to inflict harm on Supra, at least in part through the means of such breach of contract**, and as a direct and foreseeable consequence of that breach Supra suffered damages in an amount subject to proof, Supra can recover consequential damages in this action.

March 15 Order, at ¶¶ 1-2 (emphasis added). (The Clarification of Order Re: Damages is attached hereto as Annex D and is incorporated herein by reference).

In the course of these two arbitrations, the Tribunal has reviewed hundreds of pages of pre-filed direct and rebuttal testimony and thousands of pages of exhibits. The Tribunal also has judged the demeanor of witnesses during a total of eight days of live testimony in the hearings and has reviewed the transcripts of that testimony. The evidence shows that BellSouth breached the Interconnection Agreement in material ways and did so with the tortious intent to harm Supra, an upstart and litigious competitor. The evidence of such tortious intent was extensive, including BellSouth's deliberate delay and lack of cooperation regarding UNE Combos, switching Attachment 2 to the Interconnection Agreement before it was filed with the FPSC, denying access to BellSouth's OSS and related databases, refusals to collocate any Supra equipment, and deliberately cutting-off LENS for three days in May 2000.

The Tribunal does not make this finding of "tortious intent" lightly, but the full record belies BellSouth witnesses' mantra-like testimony that BellSouth's aim was to profit from Supra's success. BellSouth attempted to give the appearance of cooperating with Supra, while deliberately delaying, obfuscating, and impeding Supra's efforts to compete.

The major elements of Supra's damages are discussed in the following sections.

B. Supra's Damages

1. Incremental Net Income Operating As UNE Provider

As discussed in Section V.A, above, the Tribunal finds that BellSouth breached the Interconnection Agreement in not cooperating with and facilitating Supra's ordering of UNEs and UNE Combos. Supra's damages tied to this breach are set forth in two exhibits in Arbitration II of Supra damages expert Wood -- DJW-5 and DJW-6. Those exhibits show incremental net income to Supra for its residential and business customers, but must reflect the following necessary revisions: (1) the calculations of monthly damages for October 1997 through September, 1999 must be **deleted** to reflect the Tribunal's prior ruling that no recovery may be awarded for acts or omissions before the October 5, 1999 effective date of the Interconnection Agreement; and (2) the damages for October 1999 must be pro-rated to remove any October 1-4, 1999 recovery, which damages occurred prior to the effective date of the Interconnection Agreement. With those necessary revisions, Supra's damages for residential customers is $1,586,840.27 and for business customers is $517,066.26, for a sub-total of $2,103,906.40 of incremental net income if Supra had been permitted to operate as a UNE provider. No prejudgment interest is appropriate because Wood already included a present value calculation in the damages figure.

As part of the audit process, the auditor is directed to determine the number of Supra customers in April, 2001, and the number of the Supra customers in May, 2001 and to report those numbers to the parties and to the Tribunal. The Tribunal will thereafter calculate a revised damages calculation that includes April and May 2001 damages.

2. Supra's Alleged Lost Profits

There are two major areas of alleged lost profits that Supra seeks: (1) lost profits on allegedly "lost customers" who purportedly would have ordered advanced services such as DSL from Supra (described by Supra as Arbitration 2, Category 1 Damages); and (2) lost profits as far out as 2004 for BellSouth's impeding Supra's operations as a facilities based UNE provider by expanding throughout the remaining counties in Florida and using a "cookie cutter" approach into 17 additional states (described by Supra as Arbitration II, Categories 3, 4 and 6 Damages). For the following reasons, none of these alleged damages are awarded to Supra because they have insufficient factual support, are too speculative, and would lead to an unwarranted windfall to Supra.

Considerable fact and expert testimony focused on Supra's original list of allegedly "lost customers" (Supra Ex. 87A) produced in Arbitration I and then the updated list (Supra Ex. 87B) produced in Arbitration II. Supra's damages tied to "lost customers" rely on Supra Ex. 87A, which was repudiated by Supra witness Bentley. Supra expert witness Wood disclaimed any reliance on Supra Ex. 87B, which had almost as many infirmities as the initial "lost customer" list. For all of the reasons set forth at pages 88-93 of BellSouth's Post-Hearing Brief and the total lack of credibility surrounding Supra's Ex. 87A, no damages are awarded based on the Supra alleged "lost customers."

An appreciation of the "breathtaking" nature of Supra's alleged lost profits totaling over $510 million and running through the year 2004 should start with the fact that Supra has enjoyed only modest success as a CLEC operating in south Florida. Its financial survival may well have been due to the fact that Supra has not been paying its bills from BellSouth since October 1999. Based on its 1997 Business Plan and its proffered evidence of many BellSouth breaches of the Interconnection Agreement, Supra would have the Tribunal believe that, if BellSouth had only cooperated, then Supra would have become a telecommunications juggernaut, operating as a facilities-based UNE provider with its own switches, with an expanding network and facilities, and with increasingly profitable operations in 18 states. But nothing in Supra's actual track record suggests such meteoric success and the alleged $510 million in lost profits.

The Tribunal will not award damages based on wishful speculation. The Tribunal cannot grant hundreds of millions of dollars in damages tied to BellSouth's behavior from June 2001 until the end of 2004, when the reasonable assumption should be that BellSouth will forthwith comply with the Interconnection Agreement and this Tribunal's award. In addition, a new agreement that will govern the parties' future relationship is being arbitrated before the FPSC. The Tribunal cannot credibly accept Wood's speculative and unrealistically high "lost profit" dollar numbers for the reasons set forth above, and those set forth in the testimony of BellSouth expert witness Freeman and summarized at pages 95-108 of BellSouth's Post-Hearing Brief.

3. LENS Damages

a. LENS Downtime

Supra damages expert Wood testified to and calculated the damages suffered by Supra as a result of the excessive down time experienced by LENS. Wood's damages

calculation was based on the costs incurred by Supra to maintain its customer support staff in place during those times in which LENS was unavailable.

While this approach was criticized by BellSouth expert witness Freeman, he furnished no alternative damages calculation. Because the Tribunal is certain that Supra suffered damage and because no alternative damages calculation was offered by BellSouth, the Tribunal accepts the calculation offered by Wood (DJW-2) and awards Supra $669,153 in damages directly resulting from this breach by BellSouth.

b. Cut Off of Supra's Access

The Tribunal believes that the calculations of Supra's damages expert as to this issue was reasonable. *See,* DJW-24, and DJW-3, 2 of 2. Accordingly, the Tribunal awards Supra $55,488 as a direct result of the deliberate Cut Off of Supra's access to LENS, which the Tribunal finds was done with the intent to harm Supra.

C. BellSouth Invoices

BellSouth is awarded $6,374,369.58, less any sum awarded Supra herein and subject to the results of the Audit ordered herein.

VII. Other Relief

A. Supra's Request for Audit

As discussed in Section V.O above, the Tribunal orders BellSouth to fully cooperate with and facilitate Supra's audit of BellSouth's billings since October 1999. The audit will be conducted in accordance with GAAS, commence no later than June 15, 2001, and be completed by July 31, 2001, which may only be extended for good cause shown. The results of the audit (reductions or increases) will be offset against the amount of $6,374,369.58 to be recovered by BellSouth after offsets for Supra's damages awarded herein.

The auditor is also directed to determine the number of Supra customers in the month of April, 2001, and in the month of May, 2001, and report those figures to the parties and to the Tribunal. *See*, Section VI.B.1, above.

Finally, the Auditor is directed to remove all late charges assessed by BellSouth in its invoices. *See*, Section VII. E., below.

B. BellSouth's Request for an Injunction for Future Supra Non-Payment

Even with the Supra damages awarded herein and awaiting the results of the audit of BellSouth's billings, it appears likely that Supra will end up owing some net amount to BellSouth. In anticipation of that possible result, BellSouth has requested that the Tribunal order that BellSouth may terminate service provided to Supra if the net amount is not paid by Supra within 30 days of the net amount being calculated.

The Tribunal declines to issue such an injunction for several reasons. First, BellSouth's request has the flavor of an advisory opinion to be issued now about some future unknown scenario. Second, although the Tribunal may have the **authority** to issue an injunction, it is premature. Third, once this award is final and the net amount due to BellSouth is calculated with precision, should Supra fail to pay, then the proper enforcement mechanism is for BellSouth to file an action in a court of competent jurisdiction to enforce the Tribunal's award. The Tribunal therefore denies BellSouth's requested injunction.

C. Liquidated Damages

With respect to Supra's request that the Tribunal assess liquidated damages against BellSouth in the event BellSouth fails to comply with any order of the Tribunal, the Tribunal finds no authority in the Interconnection Agreement or in law to assess liquidated damages.

Liquidated damages are those agreed to by the parties where it is difficult, if not impossible, to assess actual damages. The Tribunal does not find any potential damages that may result from BellSouth's non-compliance with this Award to be impossible or difficult to assess.

Furthermore, Supra is essentially requesting the Tribunal to re-write or add to the Interconnection Agreement which the Tribunal is prohibited from doing by Section 7 of Attachment 1 of the Interconnection Agreement. Supra's request for liquidated damages is denied.

D. Pre- and Post-Judgment Interest

1 Pre-Judgment Interest

No pre-judgment interest is awarded to BellSouth because the gross amount awarded herein already includes interest. Furthermore, all setoffs awarded Supra herein already include interest.

2. Post-Judgment Interest

The ultimate net award shall bear interest at the post-judgment interest rate as provided under Florida law.

E. Late Charges

Pursuant to §14.2 of Attachment 6 of the Interconnection Agreement, late charges are not to be assessed in the event that a Party disputes charges and such dispute is resolved in favor of such Party. One of the disputes concerned Supra's claim that it was entitled to lease UNEs and UNE Combos and to be billed at those rates, rather than at resale rates. As Supra prevailed on that claim, late charges are inappropriate.

The Tribunal orders the Auditor (as ordered elsewhere herein) to remove such charges in the process of the Audit.

F Special Master

Supra's request for the appointment of a Special Master is denied, as the Tribunal sees no necessity for such an appointment at this time.

G. Arbitration Costs and Expenses

Section 13.1 of Attachment 1 provides in pertinent part:

> The Arbitrator(s) fees and expenses that are directly related to a particular proceeding shall be paid by the losing Party. In cases where the Arbitrator(s) determines that neither Party has, in some material respect, completely prevailed or lost in a proceeding, the Arbitrator(s) shall, in his or her discretion, apportion expenses to reflect the relative success of each Party. Those fees and expenses not directly related to a particular proceeding shall be shared equally.

Moreover, the parties have agreed on the application of the CPR Institute for Dispute Resolution Rules for Non-Administered Arbitration. Interconnection Agreement, Attach. 1, §4. Rule 16.2 requires the Tribunal to fix in its award the costs of the arbitration, including the fees and expenses of the arbitrators, travel and expenses of witnesses, legal fees and costs, charges paid to CPR, and the costs of the transcript and any meeting and hearing facilities.

The Tribunal has determined that in a case such as this, where each side has prevailed on particular issues and where the value of the declaratory and injunctive relief granted is impossible to determine, the Tribunal cannot determine a "prevailing" party or a "losing" party, or even determine "the relative success" of each party. Accordingly, the Tribunal determines that each side shall bear the costs that each incurred in conjunction with this arbitration, including the specific categories of costs set out above.

H. All Other Relief Denied

To the extent that the parties have made additional claims and/or requested other relief than that which the Tribunal has expressly addressed in other portions of this Award, all such claims and requests for relief are hereby expressly denied.

I. Retention of Jurisdiction

The Tribunal expressly retains jurisdiction to insure completion of the audit ordered by the Tribunal, to calculate the final damages to be awarded based on the results of the audit, and to issue its Final Award on Damages.

VIII. Summary of Award

This final section summarizes the injunctive relief and damages that the Tribunal orders in these two consolidated arbitrations.

The Tribunal orders that **no later than June 15, 2001**, BellSouth shall:

- Facilitate and provision Supra's requests to provide UNEs and UNE Combos to Supra's customers at the contractually agreed prices in the Interconnection Agreement.

  Collocate all equipment as Supra has included in prior applications to BellSouth at the rates indicated in Table 2 attached to the July 24, 1998 letter incorporated into the Interconnection Agreement, and cooperate with and facilitate any new Supra applications for collocation, including but not limited to collocating any Class 5 or other switches in BellSouth central offices.
- Provide Supra nondiscriminatory direct access to BellSouth's OSS and cooperate with and facilitate Supra's ordering of services.
- Provide branded services and elements requested by Supra under the Interconnection Agreement, including but not limited to voice mail, operator

services and directory assistance, under the terms and conditions of section 19 of the General Terms and Conditions of the Interconnection Agreement.

- Fully cooperate with and facilitate Supra's audit of BellSouth's billings since October 1999 to the present in accordance with GAAS.

The Tribunal awards the following damages:

- BellSouth Invoices. Supra shall pay BellSouth $6,374, 369.58 on BellSouth's unpaid invoices, subject to the adjustments listed below;
- Audit Adjustments. Any adjustments in BellSouth's invoices found necessary by Supra's audit of BellSouth's billings, including the elimination of late charges, shall be reflected as necessary reductions or increases in those invoices to be paid by Supra; and

Supra Damages Set-off. The following damages due to Supra will be adjusted according to the amount Supra will be required to pay on BellSouth's invoices after the audit adjustments and by the amount that the Tribunal calculates Supra is due in incremental net income operating as a UNE provider for the months of April and May, 2001, based on the number of Supra customers in those months as determined by the audit:

• Incremental net income operating as a UNE provider –	$ 2,103,906.40
• LENS-related lost productivity --	$ 669,153
* LENS cut-off	$ 55,488
Subtotals of Supra's Damages Set-off	$2,828,547.40

To the extent that either Supra or BellSouth has requested any other relief, all such relief is hereby denied.

DATED: June 5, 2001

John L. Estes

M. Scott Donahey

Campbell Killefer

EXH 87

TARIFF DISTRIBUTION

FILE CODE: 680.3400 FILE PACKAGE NO.: 778

DATE: January 9, 2004

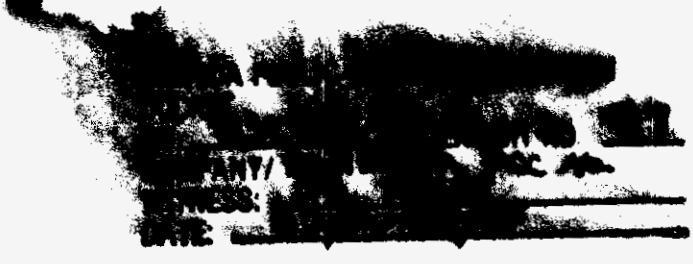
STATE: FCC

EFFECTIVE DATE: 01/09/2004

TYPE OF DISTRIBUTION: Approved

PURPOSE: Introduce Cross Connect Service

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The Title Page and Pages 1 to 29-6 inclusive of this tariff are effective as of the date shown.

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6-2	4th	6-25.13	Original		
6-3	7th	6-25.14	Original	6-60	5th
6-3.1	1st	6-25.15	Original	6-61	3rd
6-4	7th	6-25.16	Original	6-62	5th
6-5	4th	6-26	8th	6-63	3rd
6-6	7th	6-27	11th	6-64	6th
6-7	14th	6-27.0.1	Original	6-65	4th
6-7.1	Original	6-27.1	9th	6-66	3rd
6-8	12th	6-27.2	2nd	6-67	3rd
6-9	6th	6-27.3	2nd	6-68	3rd
6-10	5th	6-27.4	Original	6-69	6th
6-11	9th	6-28	12th	6-70	2nd
6-11.1	6th	6-28.1	4th	6-71	3rd
6-11.2	5th	6-29	10th*	6-72	3rd
6-11.3	2nd	6-30	4th	6-73	4th
6-11.4	4th	6-31	4th	6-74	7th
6-12	5th	6-32	4th	6-75	7th
6-12.1	6th	6-33	5th	6-75.1	10th
6-13	7th	6-34	5th	6-75.2	8th
6-14	6th	6-34.1	4th	6-75.3	3rd
6-15	5th	6-35	4th	6-75.4	4th
6-16	5th	6-36	6th	6-75.5	2nd
6-17	5th	6-37	5th	6-75.6	1st
6-18	5th	6-38	5th	6-75.7	1st
6-18.1	7th	6-39	5th	6-75.8	2nd
6-19	6th	6-40	4th	6-75.9	2nd
6-20	6th	6-41	6th	6-75.10	4th
6-21	7th	6-42	5th	6-75.10.1	Original
6-22	9th	6-43	5th	6-75.11	2nd
6-22.1	5th	6-44	5th	6-75.12	1st
6-23	4th	6-45	7th	6-75.13	4th
6-23.1	3rd	6-46	10th	6-75.14	3rd
6-24	7th	6-47	8th	6-75.15	1st
6-25	10th	6-48	9th	6-75.16	1st
6-25.1	7th	6-49	11th	6-75.17	Original
6-25.2	4th	6-50	9th	6-75.18	1st
6-25.3	9th	6-51	8th	6-75.19	Original
6-25.3.1	2nd	6-52	9th	6-75.20	Original
6-25.4	3rd	6-52.0.1	Original	6-75.21	Original
6-25.5	3rd	6-52.1	5th	6-75.22	1st
6-25.6	4th	6-53	7th	6-75.22.1	Original
6-25.7	2nd	6-53.1	5th	6-75.23	2nd
6-25.8	Original	6-54	6th	6-75.24	Original
6-25.9	1st	6-55	9th	6-76	6th
6-25.10	2nd	6-56	1st	6-77	6th
6-25.10.1	2nd	6-57	5th	6-77.1	5th
6-25.11	Original	6-58	3rd	6-78	6th
6-25.12	Original	6-58.1	1st	6-78.1	3rd
		6-59	4th	6-79	6th

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6-142	6th	6-157.2.2	10th	6-160.25	Original
6-143	1st	6-157.2.3	11th	6-160.26	Original
6-144	4th	6-157.2.4	7th	6-160.27	Original
6-145	4th	6-157.2.5	7th	6-160.28	Original
6-146	4th	6-157.2.6	7th	6-160.29	Original
6-147	5th	6-157.2.6.1	2nd	6-160.30	Original
6-148	6th	6-157.2.7	13th	6-160.31	Original
6-149	4th	6-157.2.8	11th	6-160.32	Original
6-150	5th	6-157.3	4th	6-160.33	Original
6-151	4th	6-158	5th	6-160.34	Original
6-151.1	2nd	6-159	7th	6-160.35	Original
6-152	5th	6-159.1	5th	6-160.36	Original
6-152.1	2nd	6-159.1.1	6th	6-161	25th
6-153	7th	6-159.1.1.1	5th	6-162	5th
6-153.1	1st	6-159.1.2	4th	6-163	5th
6-154	8th	6-159.1.3	2nd	6-164	5th
6-154.1	Original	6-160	6th	6-164.1	12th
6-155	7th	6-160.1	4th	6-165	7th
6-155.1	4th	6-160.2	8th	6-165.1	1st
6-155.2	4th	6-160.3	2nd	6-165.2	2nd
6-156	15th	6-160.4	4th	6-166	6th
6-157	13th	6-160.5	4th	6-167	5th
6-157.1	5th	6-160.6	4th	6-168	6th
6-157.1.0.1	Original	6-160.7	6th	6-169	9th
6-157.1.0.2	1st	6-160.8	5th	6-169.1	Original
6-157.1.0.3	3rd	6-160.9	6th	6-170	5th
6-157.1.0.4	Original	6-160.10	3rd	6-171	5th
6-157.1.0.5	Original	6-160.11	7th	6-172	6th
6-157.1.0.6	1st	6-160.12	Original	6-173	6th
6-157.1.0.7	Original	6-160.13	Original	6-174	3rd
6-157.1.0.8	Original	6-160.14	Original	6-175	4th
6-157.1.1	8th	6-160.15	Original	6-176	20th
6-157.1.1.1	5th	6-160.16	Original	6-177	10th
6-157.1.2	7th	6-160.17	Original	6-177.1	4th
6-157.1.2.1	6th	6-160.18	Original	6-178	8th
6-157.1.3	12th	6-160.19	Original	6-178.1	7th
6-157.1.3.1	8th	6-160.20	Original	6-178.2	6th
6-157.1.4	9th	6-160.21	Original		
6-157.1.5	9th	6-160.22	Original		

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7-3	7th	7-38.1	5th		
7-4	12th*	7-38.2	3rd		
7-4.1	Original	7-38.3	5th		
7-5	6th	7-38.4	4th		
7-6	6th	7-38.5	5th		
7-6.1	7th	7-38.5.1	Original		
7-7	9th	7-38.6	4th		
7-8	7th	7-38.7	1st		
7-8.1	12th	7-38.7.1	Original		
7-8.1.1	3rd	7-38.8	2nd		
7-8.1.2	Original	7-38.9	4th		
7-8.2	4th	7-38.9.1	Original		
7-8.3	4th	7-38.10	3rd		
7-8.3.1	1st	7-38.11	4th		
7-8.4	2nd	7-38.12	Original		
7-9	2nd	7-39	1st		
7-10	2nd	7-40	2nd		
7-11	2nd	7-41	2nd		
7-12	2nd	7-42	1st		
7-13	8th	7-43	1st		
7-13.0.1	1st	7-44	3rd		
7-13.1	3rd	7-45	3rd		
7-14	5th	7-46	3rd		
7-14.1	1st	7-47	5th		
7-14.2	1st	7-48	7th		
7-14.3	1st	7-49	6th		
7-14.4	Original*	7-49.0.1	2nd		
7-15	3rd	7-49.1	5th		
7-16	9th	7-49.4.0.1	Original		
7-17	6th	7-49.1.1	3rd		
7-18	7th	7-49.2	5th		
7-19	9th	7-49.3	7th		
7-20	1st	7-49.3.1	2nd		
7-21	1st	7-49.4	6th		
7-22	2nd	7-49.4.0.1	2nd		
7-23	1st	7-49.4.1	4th		
7-24	1st	7-49.5	4th		
7-25	1st	7-50	3rd		
7-26	3rd	7-51	4th		
7-27	2nd	7-52	4th		
7-28	2nd	7-53	5th		
7-29	2nd	7-54	4th		
7-30	4th				
7-31	2nd				
7-32	3rd				
7-33	2nd				
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7-57.1	7th
7-57.1.1	Original
7-57.2	7th
7-57.2.1	2nd
7-57.3	8th
7-58	8th
7-58.1	5th
7-58.2	3rd
7-58.3	4th
7-58.4	1st
7-58.5	2nd
7-58.6	4th
7-58.6.1	4th
7-58.7	1st
7-58.7.1	3rd
7-58.7.2	Original
7-58.8	5th
7-58.8.1	1st
7-58.9	3rd
7-58.9.1	1st
7-58.10	6th
7-58.10.0.1	Original
7-58.10.1	2nd
7-58.11	6th
7-58.11.1	2nd
7-58.12	7th
7-58.13	8th
7-58.14	6th
7-58.15	3rd
7-58.16	3rd
7-58.17	4th
7-58.17.1	2nd
7-58.18	3rd
7-58.19	1st
7-28.20	Original
7-28.21	Original
7-28.22	Original
7-59	7th
7-60	5th
7-61	4th
7-61.1	1st
7-62	3rd
7-63	2nd
7-64	1st
7-65	5th
7-66	4th
7-67	4th
7-68	5th
7-68.1	1st
7-69	8th
7-70	15th
7-70.1	11th
7-71	3rd
7-71.1	3rd
7-72	2nd
7-73	3rd
7-74	4th
7-74.1	6th
7-75	4th
7-76	1st
7-77	1st
7-78	1st
7-79	24th
7-79.1	Original
7-80	6th*
7-80.1	3rd
7-81	6th
7-81.1	2nd
7-81.2	1st
7-82	4th
7-83	5th
7-84	10th
7-84.1	6th
7-85	12th
7-86	2nd
7-86.1	9th
7-86.1.1	4th*
7-86.2	5th
7-86.2.1	2nd
7-86.3	7th
7-86.3.1	Original
7-86.4	4th
7-87	8th
7-88	2nd
7-88.1	5th
7-89	5th
7-90	6th
7-90.1	5th
7-91	8th
7-91.0.1	1st
7-91.1	1st
7-92	3rd
7-92.1	7th
7-92.2	1st
7-93	2nd
7-94	3rd
7-94.1	2nd
7-95	1st
7-96	2nd
7-97	2nd
7-98	1st
7-99	2nd
7-99.1	1st
7-99.2	1st
7-99.3	1st
7-100	9th
7-100.1	Original
7-101	7th
7-101.1	7th
7-101.2	Original
7-102	8th
7-102.1	7th
7-103	10th
7-103.1	6th
7-103.1.1	2nd
7-103.2	4th
7-103.3	5th
7-103.3.1	3rd
7-103.4	2nd
7-103.5	3rd
7-103.6	7th
7-103.6.1	2nd
7-103.7	4th
7-103.8	5th
7-103.8.1	3rd
7-103.9	1st
7-103.10	3rd
7-103.11	3rd
7-103.11.1	1st
7-103.12	2nd
7-103.12.1	1st
7-103.13	7th
7-103.13.1	Original
7-103.14	7th
7-103.14.1	Original
7-103.15	3rd
7-103.15.1	1st
7-103.16	3rd
7-103.17	1st
7-103.18	3rd
7-103.18.1	4th
7-103.18.2	Original
7-103.19	3rd
7-103.20	3rd
7-103.21	1st

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13-2	4th	13-45	4th	13-76.3	2nd
13-3	1st	13-45.1	2nd	13-76.4	1st
13-4	1st	13-45.2	Original	13-76.5	2nd
13-5	4th	13-46	5th	13-76.6	Original
13-6	5th	13-47	4th	13-76.7	1st
13-7	5th	13-48	1st	13-76.8	2nd
13-8	6th	13-49	1st	13-76.9	2nd
13-9	9th	13-50	2nd	13-76.10	1st
13-10	7th	13-51	1st	13-76.11	Original
13-10.1	5th	13-52	1st	13-76.12	Original
13-11	11th	13-53	1st	13-76.13	1st
13-11.1	4th	13-54	1st	13-76.14	Original*
13-12	11th	13-55	1st	13-76.15	Original*
13-12.1	5th	13-56	Original	13-76.16	Original*
13-13	9th	13-57	Original	13-76.17	Original*
13-14	7th	13-58	Original	13-76.18	Original*
13-15	3rd	13-59	Original	13-77	Original
13-16	4th	13-60	1st	14-1	2nd
13-17	3rd	13-61	5th	15-1	1st
13-18	Original	13-62	3rd	15-2	1st
13-19	Original	13-63	3rd	15-3	1st
13-20	Original	13-64	3rd	15-4	1st
13-21	Original	13-65	2nd	15-5	Original
13-22	Original	13-66	2nd	15-6	1st
13-23	1st	13-67	3rd	15-7	1st
13-24	Original	13-68	2nd	15-8	1st
13-25	Original	13-69	5th	15-9	1st
13-26	2nd	13-70	4th	15-10	Original
13-27	4th	13-71	5th	15-11	1st
13-28	4th	13-72	1st	15-12	1st
13-29	4th	13-73	1st	15-13	1st
13-30	1st	13-74	2nd	15-14	1st
13-31	1st	13-74.1	4th	15-15	1st
13-32	1st	13-74.2	2nd	15-16	Original
13-33	1st	13-74.3	3rd	15-17	Original
13-34	1st	13-74.4	4th	15-18	1st
13-35	1st	13-74.5	3rd	15-19	1st
13-36	1st	13-74.6	3rd	15-20	1st
13-37	1st	13-74.7	3rd		
13-38	1st	13-74.8	3rd		
13-39	1st	13-74.9	3rd		
13-40	1st	13-74.10	3rd		
13-41	1st	13-75	7th		
13-42	1st	13-76	2nd		

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19-3.1	5th	20-34	7th	21-15	1st
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19-4	3rd	20-36	7th	21-17	5th
19-5	8th	20-36.1	6th	21-17.1	Original
19-6	7th	20-37	6th	21-18	1st
19-7	4th	20-37.1	6th	21-18.1	Original
19-8	16th	20-38	8th	21-18.1.1	Original
20-1	11th	20-38.1	6th	21-18.1.2	Original
20-1.1	4th	20-39	17th	21-18.2	1st
20-2	8th	20-39.1	5th	21-18.3	Original
20-2.1	5th	21-1	7th	21-19	1st
20-3	5th	21-1.0.1	1st	21-19.1	Original
20-4	6th	21-1.0.2	Original	21-20	1st
20-4.1	3rd	21-1.0.3	Original	21-21	1st
20-5	6th	21-1.1	4th	21-22	1st
20-6	7th	21-1.1.1	Original	21-23	9th
20-7	5th	21-1.2	Original	21-23.1	1st
20-8	4th	21-2	3rd	21-23.2	Original
20-9	4th	21-2.1	Original	21-24	Original
20-10	4th	21-3	1st	21-25	Original
20-11	5th	21-4	13th	21-25.1	Original
20-12	7th*	21-4.1	Original	21-26	3rd
20-13	6th*	21-5	6th	21-26.0.1	Original
20-14	4th*	21-5.0.1	Original	21-26.0.2	Original
20-15	5th	21-5.1	1st	21-26.1	Original
20-16	4th	21-5.2	Original	21-27	3rd
20-17	5th*	21-5.3	Original	21-27.1	Original
20-18	4th	21-5.4	Original	21-28	1st
20-19	4th	21-5.5	Original	21-29	4th
20-20	5th	21-6	1st	21-29.1	1st
20-21	4th	21-7	6th	21-29.2	Original
20-22	4th	21-7.0.1	Original	21-29.3	Original
20-23	6th	21-7.1	1st	21-30	1st
20-23.1	3rd	21-7.1.1	Original	21-30.1	Original
20-24	11th	21-7.2	Original	21-31	Original
20-25	7th	21-8	6th	21-32	4th
20-26	7th	21-8.1	1st	21-32.0.1	4th
20-27	6th	21-8.2	Original	21-32.1	1st
20-27.1	4th	21-8.3	Original	21-33	1st
20-28	6th	21-8.4	Original	21-34	2nd
20-28.1	5th	21-8.5	Original	21-34.1	1st
20-29	12th	21-9	2nd	21-35	1st
20-29.1	6th	21-10	2nd	21-35.1	Original
20-30	10th	21-11	2nd	21-35.2	Original
20-30.1	7th	21-11.1	Original	21-35.3	Original
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ACCESS SERVICE

EXPLANATION OF SYMBOLS

C	-	To signify changed regulation
D	-	To signify discontinued rate or regulation
I	-	To signify increase
M	-	To signify matter relocated without change
N	-	To signify new rate or regulation
R	-	To signify reduction
S	-	To signify reissued matter
T	-	To signify a change in text but no change in rate or regulation
Z	-	To signify a correction

EXPLANATION OF ABBREVIATIONS

ac	-	alternating current
ACNA	-	Access Carrier Name Abbreviation
ACTL	-	Access Carrier Terminal Location (N)
AML	-	Actual Measured Loss
ANI	-	Automatic Number Identification
AP	-	Program Audio
ASR	-	Access Service Request
ATP	-	Access Transport Parameter
AT&T-C	-	AT&T Communications
BAN	-	Billing Account Number
BCLID	-	Bulk Calling Line Information Delivery
BD	-	Business Day
BHMC	-	Busy Hour Minutes of Capacity
BOC	-	Bell Operating Company
BSA	-	BellSouth SWA Basic Serving Arrangement
BSE	-	Basic Service Element
CAROT	-	Centralized Automatic Reporting on Trunks
CCSAC	-	BellSouth SWA Common Channel Signaling Access Capability
CI	-	Channel Interface
CN	-	Charge Number
CO	-	Central Office
COCTX	-	Central Office Centrex
Cont'd	-	Continued
CPE	-	Customer Provided Equipment
CPN	-	Calling Party Number
CSP	-	Carrier Selection Parameter
CSPP	-	Channel Services Payment Plan
Ctx	-	Centrex
DA	-	BellSouth Directory Assistance
DADAS	-	BellSouth Direct Access to Directory Assistance Service
dB	-	decibel
dBm0	-	Decibel (s) Relative to 1 Milliwatt at 0 TLP
dBrnC	-	Decibel Reference Noise C-Message Weighting
dBrnC0	-	Decibel Reference Noise C-Message Weighted 0

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.10 Jurisdictional Report Requirements[1] (Cont'd)

(A) Jurisdictional Reports (Cont'd)

(1) Percent Interstate Usage (PIU) (Cont'd)

(b) (Cont'd)

The Telephone Company will bill according to actual measured minutes of use or messages for all services listed in (1)(c) and (2) following, with the exception of those listed below:

- BellSouth SWA Local Channel
- BellSouth SWA Dedicated Interoffice Channel
- BellSouth Billing Name and Address
- BellSouth Inward Operator Service
- BellSouth Line Information Data Base Service (LIDB)
- Virtual Access Cross Connect Service (T)
- Physical Access Cross Connect Service (N)
- Intra-Office Collocation Cross Connect Service (N)
- BellSouth Electronic White Pages Access Service
- BellSouth Operator Assistance Access Service
- BellSouth Flat Rated DA Trunk
- Channelization Equipment
- DNALs associated with BellSouth SWA LSBSA
- Public Packet Switching Network (PPSN)

Where the Telephone Company receives insufficient call detail to determine the jurisdiction, the Telephone Company will apply the customer's projected PIU factor to apportion the usage between interstate and intrastate. In the event the customer does not supply the projected PIU and the Telephone Company does not have sufficient call detail to determine the jurisdiction of the call, only then will a PIU of 50 percent be applied. For the purpose of this tariff, where the customer is a Third-Party Provider ("Third-Party Provider") of CCS7 services to its customers ("Third-Party Customers"), the Third-Party Provider will develop its projected PIU factor based upon a weighted average of the PIUs of its Third-Party Customers' end user traffic in accordance with the procedures described below. A Third-Party Provider may elect to have the (M)

Note 1: Except where indicated herein, references to BellSouth SWA FGs will also include the applicable BellSouth Basic Serving Arrangement as detailed in Section 6.1.3.(A)(5)(j) (e.g., the term BellSouth SWA FGA represents both BellSouth SWA FGA and BellSouth SWA LSBSA).

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2 - General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.10 Jurisdictional Report Requirements[1] (Cont'd)

(A) Jurisdictional Reports (Cont'd)

(1) Percent Interstate Usage (PIU) (Cont'd)

(b) (Cont'd)

Telephone Company determine the weighted PIU and in so doing the Third-Party Provider shall name and identify their Third Party Customers. In the event a Third Party Provider does not provide a projected PIU or does not elect to have the Telephone Company determine the PIU, a 50 percent PIU will be utilized for that Third-Party Provider, until such time as the Telephone Company obtains sufficient data to develop the PIU as specified in c. following. (M)

The customer will provide in its initial order the projected Percent Interstate Usage (PIU) at a statewide level on a local exchange company specific basis. When the customer computes the PIU it will subtract the developed PIU from 100 and the difference is the percent intrastate usage. The sum of the interstate and intrastate percentages will equal 100 percent. A PIU of less than 100 percent is not allowed where the interstate service is not also available in the appropriate intrastate access tariff. The projected PIU may include up to two decimals.

The Telephone Company will designate the number obtained by subtracting the projected interstate percentage furnished by the customer from 100 (100 – customer percentage = intrastate percentage) as the projected intrastate percentage of use.

For usage originating from or terminating to an end office that is located in a state that is part of a LATA of a different state (cross boundary), the customer will provide a statewide PIU per service type for the state where the end office is physically located.

(c) When the customer initially orders service(s), as defined in the following, the customer will state in its order the Percent Interstate Usage separately for each, as set forth in (1)(a) and (1)(b) preceding.

Note 1: Except where indicated herein, references to BellSouth SWA FGs will also include the applicable BellSouth Basic Serving Arrangement as detailed in Section 6.1.3.(A)(5)(j) (e.g., the term BellSouth SWA FGA represents both BellSouth SWA FGA and BellSouth SWA LSBSA).

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2 - General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.10 Jurisdictional Report Requirements[1] (Cont'd)

(A) Jurisdictional Reports (Cont'd)

(1) Percent Interstate Usage (PIU) (Cont'd)

(c) (Cont'd)

- BellSouth SWA FGA
- BellSouth SWA FGB
- BellSouth SWA FGD
- BellSouth SWA 500
- 700 Service Access
- BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service
- BellSouth SWA 900
- BellSouth SWA Local Channel
- BellSouth SWA Dedicated Interoffice Channel
- BellSouth CCS7 Access Arrangement
- Channelization Equipment
- DNALs associated with BellSouth SWA LSBSA[2]
- Virtual Access Cross Connect Service
- Physical Access Cross Connect Service
- Intra-Office Collocation Cross Connect Service
- BellSouth Billing Name and Address
- BellSouth Inward Operator Services
- BellSouth Line Information Data Base Service (LIDB)
- BellSouth Electronic White Pages Access Service
- BellSouth Operator Assistance Access Service
- BellSouth Flat Rated DA Trunks
- Public Packet Switching Network (PPSN)
- BellSouth IPTG Terminating Service

(T)
(N)
(N)

The Percent Interstate Usage (PIU) factors associated with BellSouth SWA FGA, BellSouth SWA FGB, BellSouth SWA FGD, BellSouth SWA 500, 700, BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening service, and BellSouth SWA 900, will apply to all associated elements and services, e.g., Carrier Common Line, Local Switching, BellSouth SWA Common Interoffice Channel, Interconnection, Access Tandem Switching, Common Trunk Port service and minute of use based multiplexer rate elements, where applicable.

Note 1: Except where indicated herein, references to BellSouth SWA FGs will also include the applicable BellSouth SWA Basic Serving Arrangement as detailed in Section 6.1.3.(A)(5)(j) (e.g., the term BellSouth SWA FGA represents both BellSouth SWA FGA and BellSouth SWA LSBSA).

Note 2: Where BellSouth SWA LSBSA is provisioned with a DNAL, the DNAL rates should be apportioned between interstate and intrastate using the same PIU factor as is applied to the associated BellSouth SWA LSBSA.

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.10 Jurisdictional Report Requirements[1] (Cont'd)

(A) Jurisdictional Reports (Cont'd)

(1) Percent Interstate Usage (PIU) (Cont'd)

(c) (Cont'd)

The customer will provide a single factor as the projected Percent Interstate Usage (PIU) to apportion the usage between interstate and intrastate. This factor will be applied to the following categories:

- BellSouth SWA Local Channel
- BellSouth SWA Dedicated Interoffice Channel
- Channelization Equipment

The PIU category, BellSouth SWA Local Channel, includes Dedicated End Office Trunk Port Service and Dedicated Tandem Trunk Port Service charges and other flat rated charges not specifically covered by other PIU categories.

The PIU factor provided for each of the foregoing facilities categories (Switched Local Channel, Switched Dedicated Interoffice Channel, Channelization Equipment and Switched Virtual and Physical Access Cross Connect Service) will reflect the combination of all traffic types which traverse such facility category. (T) (T)

Note 1: Except where indicated herein, references to BellSouth SWA FGs will also include the applicable BellSouth Basic Serving Arrangement as detailed in Section 6.1.3.(A)(5)(j) (e.g., the term BellSouth SWA FGA represents both BellSouth SWA FGA and BellSouth SWA LSBSA).

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ACCESS SERVICE
2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies

In case of an interruption to any service, allowance for the period of interruption, if not due to the negligence of the customer, shall be as follows:

(1) For BellSouth SWA Dedicated Interoffice Channels, Channelization Equipment and Switched Local Channels, Dedicated End Office Trunk Port Service and Dedicated Tandem Trunk Port Service Special Access (a.k.a. BellSouth SPA) services other than SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Dedicated Ring, SMARTPath service (a.k.a. BellSouth SPA DS1 Shared Ring), and SMARTPath DS3 Transport service (a.k.a. BellSouth SPA DS3 Shared Ring), LightGate service (a.k.a. BellSouth SPA Point to Point Network), DS1 (a.k.a. BellSouth SPA DS1) service, BellSouth DS1 Diverse Service, Program Audio (a.k.a. BellSouth SPA Program Audio), DS3 Digital Video Service (a.k.a. BellSouth SPA DS3 Digital Video) and Broadcast Quality Video (a.k.a. BellSouth SPA Broadcast Quality Video) services, Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service and Virtual Access Cross Connect Service, no credit shall be allowed for an interruption of less than 30 minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or major fraction thereof that the interruption continues. (C) (C) (C)

The credits will apply no more than once per month and the total of all credits, including those provided in other sections of this Tariff, shall not exceed the monthly rate for the service. The monthly charges used to determine the credit shall be as follows:

(a) The monthly charge shall be the total of all the monthly rate element charges associated with the highest level inoperative channelized service:

- For BellSouth SWA Transport: BellSouth SWA Local Channel, Dedicated End Office Trunk Port Service and Dedicated Tandem Trunk Port Service, BellSouth SWA Dedicated Interoffice Channel, Channelization Equipment (if applicable) and any Optional Features and Functions.
- For Special (a.k.a. BellSouth SPA) two-point services: two Local Channels, Interoffice Channel and Optional Features and Functions.

(b) For multipoint services, the monthly charge shall be only the total of all the monthly rate element charges associated with the highest level channelized service for that portion of the service that is inoperative (i.e., a local channel per customer premises, interoffice channel and optional features and functions).

(c) For Special Access (a.k.a. BellSouth SPA) channelized services, the monthly charge shall be the total of all the monthly rate element charges associated with that portion of the highest level channelized service that is inoperative.

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(1) (Cont'd)

(c) (Cont'd)

When the facility which is channelized or the Basic Channelization System itself is inoperative, the monthly charge shall be the total of all the monthly rate element charges associated with the highest level channelized service (i.e., the local channel, interoffice channel, central office channel interface(s) and any optional features and functions, including the Basic Channelization System on the facility to the Hub. When the service which rides a channel of the channelized facility is inoperative (assuming the highest level channelized service is still operative) the monthly charge shall be the total of all the monthly rate element charges associated with that portion of the lower level inoperative service from the Hub to a customer premises (i.e., local channels, interoffice channel, central office channel interface(s), and optional features and functions). For channelized service ordered under the Shared Network Arrangement, certain record keeping complexities necessitate that the host subscriber as well as each service user notify BellSouth Telecommunications, Inc. of any service outage in order to receive a credit allowance.

(d) For BellSouth SWA channelized services, the monthly charge shall be the total of all monthly rate element charges associated with that portion of the highest level channelized service that is inoperative. When the facility which is channelized or the Basic Channelization System itself is inoperative, the monthly charge shall be the total of all the monthly rate element charges associated with the highest level channelized service (e.g., the Switched Local Channel, Switched Interoffice Channels, Channelization Equipment, including the Basic Channelization System on the facility to the Hub, if applicable).

(e) For SMARTPath services (a.k.a. BellSouth SPA Shared Ring) and SMARTPath DS3 Transport service (a.k.a. BellSouth SPA DS3 Shared Ring), the monthly charge shall be the total of all the monthly rate element charges associated with the highest level inoperative channelized service (e.g., SMARTPath Area Connection and SMARTPath Area Junction).

(f) For Intra-Office Collocation Cross Connect, Physical Access Cross Connect, and Virtual Access Cross Connect elements specified in Section 13 of this Tariff, the monthly charge shall be that associated with the specific cross connect that is inoperative. (C) (C) (C)

Certain material previously appearing on this page now appears on 3rd Revised Page 2-31.1

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(g) For SMARTGate service (a.k.a. BellSouth SPA Managed Shared Ring Network) and BellSouth Managed Shared Ring service, the monthly charge shall be the monthly charges associated with the service (e.g., On-Net or Off-Net). (M) (M) (M) (M)

(2) For Program Audio (a.k.a. BellSouth SPA Program Audio) and Broadcast Quality Video (a.k.a. BellSouth SPA Broadcast Quality Video) and DS3 Digital Video (a.k.a. BellSouth SPA DS3 Digital Video) Special Access services (a.k.a. BellSouth SPA), no credit shall be allowed for an interruption of less than 30 seconds. The customer shall be credited for an interruption of 30 seconds or more as follows:

(a) For two-point services, when monthly rates are applicable, the credit shall be at the rate of 1/8640 of the monthly charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues.

(b) For two-point services, when daily rates are applicable, the credit shall be at the rate of 1/288 of the daily charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues.

(c) For multipoint services, when monthly rates are applicable, the credit shall be at the rate of 1/8640 of the monthly charges for all channel terminations, channel mileages and optional features and functions that are inoperative for each period of 5 minutes or major fraction thereof that the interruption continues.

Certain material now appearing on this page previously appeared on 12th Revised Page 2-31

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.9 Service Installation Guarantee

(A) The Telephone Company assures that orders for services to which the Service Installation Guarantee applies will be installed and available for customer use no later than the Service Date as specified in 5.1.1 following. The Service Installation Guarantee is applicable only as specified in 2.4.9(E) following, Sections 6.7.1(D) and 7.4.1(C) of this Tariff and for the Cross Connect elements in Section 13 of this Tariff. (T) (T)

(B) The failure of the Telephone Company to meet this commitment will result in the credit of an amount equal to the nonrecurring charges associated with the individual service having the missed Service Date being applied to the customer's bill. The credit will include only nonrecurring charges associated with the services specified in Section 6.7.1.(D), Section 7.4.1.(C), the Connection rate element specified in 28.1.10(A), and Cross Connect elements in Sections 13.3.22, 13.3.23, and 13.3.24 of this Tariff, for which nonrecurring charges are applicable. The nonrecurring charges will be credited at the rate at which they were billed. The credit will not be provided if a credit of the same nonrecurring charge for the same service is provided under any other provisions of this Tariff. (T) (T)

(C) For Commercial Quality Video service (a.k.a. BellSouth SPA Commercial Quality Video) which is jointly provided by this Telephone Company and one or more other local exchange companies, the Service Installation Guarantee is applicable only for those portions of the Commercial Quality Video service (a.k.a. BellSouth SPA Commercial Quality Video) within this Telephone Company's serving territory and only if the failure to meet the commitment is the fault of this Telephone Company.

(D) For BellSouth Dedicated Ring and SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), the Service Installation Guarantee is applicable for all channel interface rate elements. BellSouth Dedicated Ring and SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) ring level rate elements are excluded from the Service Installation Guarantee. BellSouth Dedicated Ring and SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) ring level rate elements are defined as follows: Local Channel, Interoffice Channel, Internodal Channel, Alternate Central Office Channel, Customer Node and Central Office Node.

(E) The Service Installation Guarantee is applicable to DS1 Diverse service Local and Interoffice Channel rate elements for which nonrecurring charges are appropriate.

(F) For BellSouth Enterprise DSL service, the Service Installation Guarantee is applicable only for the Connection rate element, and only if the failure to meet the commitment is the fault of this Telephone Company. (M)

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BELLSOUTH TELECOMMUNICATIONS, INC.
BY: Operations Manager - Pricing
29G57, 675 W. Peachtree St., N.E.
Atlanta, Georgia 30375
ISSUED: JANUARY 8, 2004

TARIFF F.C.C. NO. 1
18TH REVISED PAGE 5-1
CANCELS 17TH REVISED PAGE 5-1

EFFECTIVE: JANUARY 9, 2004

ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service

5.1 General

This section sets forth the regulations and orders related to charges for Access Orders for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Services. These charges are in addition to other applicable charges as set forth in other sections of this tariff.

An Access Order is an order to provide the customer with BellSouth SWA service, Special Access (a.k.a. BellSouth SPA) Service, Fast Packet Access Services, Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service, and Virtual Access Cross Connect Service, or to provide changes to existing services. An order for BellSouth ADSL service, must be submitted in a manner designated by the Telephone Company, after receipt of an appropriate logon and password that is required to access the ordering system(s). Ordering, Maintenance, NSP logon and password information may be obtained by choosing "Get Started" at the following website: http://www.bellsouth.com/broadband/dsl_solutions/discover. (C) (C)

The Service Installation Guarantee, as set forth in 2.4.9 preceding, is applicable to specified services offered in this tariff. The Service Installation Guarantee is applied on a per service order basis for BellSouth SWA Services. The Service Installation Guarantee is applied on a per circuit basis for Special Access (a.k.a. BellSouth SPA) Services. The Service Installation Guarantee is applied on the Cross Connect elements only for Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service, and Virtual Access Cross Connect Service. (C) (C)

5.1.1 Ordering Conditions

Ordering Conditions for BellSouth ADSL service are as specified in 5.1.1(J).

(A) A customer may order any number of services of the same type and between the same premises on a single Access Order. All details for services for a particular order must be identical except for those for multipoint service.

(B) The customer shall provide all information necessary for the Telephone Company to provide and bill for the requested service. In addition to the order information required in 5.2.2, 5.2.4, 5.2.6, 5.2.7 and 5.2.14 following, the customer must also provide:

- Customer name and premises address(es).
- Billing name and address (when different from customer name and address).
- Customer contact name(s) and telephone number(s) for the following provisioning activities: order negotiation, order confirmation, interactive design, installation and billing.

(M)

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.9 Service Installation Guarantee

(A) The Telephone Company assures that orders for services to which the Service Installation Guarantee applies will be installed and available for customer use no later than the Service Date as specified in 5.1.1 following. The Service Installation Guarantee is applicable only as specified in 2.4.9(E) following, Sections 6.7.1(D) and 7.4.1(C) of this Tariff and for the Cross Connect elements in Section 13 of this Tariff. (T) (T)

(B) The failure of the Telephone Company to meet this commitment will result in the credit of an amount equal to the nonrecurring charges associated with the individual service having the missed Service Date being applied to the customer's bill. The credit will include only nonrecurring charges associated with the services specified in Section 6.7.1.(D), Section 7.4.1.(C), the Connection rate element specified in 28.1.10(A), and Cross Connect elements in Sections 13.3.22, 13.3.23, and 13.3.24 of this Tariff, for which nonrecurring charges are applicable. The nonrecurring charges will be credited at the rate at which they were billed. The credit will not be provided if a credit of the same nonrecurring charge for the same service is provided under any other provisions of this Tariff. (T) (T)

(C) For Commercial Quality Video service (a.k.a. BellSouth SPA Commercial Quality Video) which is jointly provided by this Telephone Company and one or more other local exchange companies, the Service Installation Guarantee is applicable only for those portions of the Commercial Quality Video service (a.k.a. BellSouth SPA Commercial Quality Video) within this Telephone Company's serving territory and only if the failure to meet the commitment is the fault of this Telephone Company.

(D) For BellSouth Dedicated Ring and SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), the Service Installation Guarantee is applicable for all channel interface rate elements. BellSouth Dedicated Ring and SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) ring level rate elements are excluded from the Service Installation Guarantee. BellSouth Dedicated Ring and SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) ring level rate elements are defined as follows: Local Channel, Interoffice Channel, Internodal Channel, Alternate Central Office Channel, Customer Node and Central Office Node.

(E) The Service Installation Guarantee is applicable to DS1 Diverse service Local and Interoffice Channel rate elements for which nonrecurring charges are appropriate.

(F) For BellSouth Enterprise DSL service, the Service Installation Guarantee is applicable only for the Connection rate element, and only if the failure to meet the commitment is the fault of this Telephone Company. (M)

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.9 Service Installation Guarantee (Cont'd)

(G) The Service Installation Guarantee applies for the following Fast Packet Access Services at DS0 and DS1 levels only: BellSouth Exchange Access Frame Relay Service, BellSouth Exchange Access Asynchronous Transfer Mode Service, Managed Shared Frame Relay Service, Managed Shared Asynchronous Transfer Mode Service. (M)

(H) Service Installation Guarantees do not apply:

(1) on Switched (a.k.a. BellSouth SWA) and Special Access (a.k.a. BellSouth SPA) services installations, moves and rearrangement of service with an agreed upon service date interval of four business days or less following the Application Date of the service order and on Digital Subscriber Line services installations, moves and rearrangement of service with an agreed upon service date interval of three business days or less following the Application Date of the service order. The Application Date for Switched (a.k.a. BellSouth SWA) and Special Access (a.k.a. BellSouth SPA) is as specified in 5.1.1(G) following. The Application Date for Digital Subscriber Line services is as specified in 28.1.4(A)(1) following.

(2) on Special Access (a.k.a. BellSouth SPA) and Fast Packet Access service orders for installations, moves and rearrangement of services with service dates that have been advanced from the standard or negotiated service interval as specified in 5.1.1(H) following, or for Digital Subscriber Line Service specified in 28.1 following, or

(3) when failure to meet the Service Date occurs because of:

(a) any act or omission, which shall include an accurate and complete service order, from this customer, any other customer or any third party, or of any other entity providing a portion of a service,

(b) labor difficulties, governmental orders, civil commotions, criminal actions against the Telephone Company, acts of God, war, or other circumstances beyond the Telephone Company's control,

(c) unavailability of the customer's facilities and/or equipment,

(4) to service requiring Special Construction as set forth in BellSouth Telecommunications, Inc.'s Tariff F.C.C. No. 2,

(M)

Certain material now appearing on this page previously appeared on 5th Revised Page 2-49.0.19

Certain material previously appearing on this page now appears on 9th Revised Page 2-49.2.

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ACCESS SERVICE

2 - General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd) (M)

2.4.9 Service Installation Guarantee (Cont'd) (M)

(H) Service Installation Guarantees do not apply: (Cont'd) (M)

(5) to Specialized Service or Arrangements or Individual Case Basis filings, (M) (M)

(6) to BellSouth Virtual Expanded Interconnection service arrangements, as set forth in Section 20 of this Tariff, or (M) (M)

(7) for jointly provisioned services except as stipulated in 2.4.9(C) preceding. (M) (M)

In addition, Service Installation Guarantees will not apply during a declared National Emergency. Priority installation of National Security Emergency Preparedness (NSEP) telecommunications services shall take precedence. (M) (M) (M) (M)

2.5 Connections

Equipment and Systems (i.e., terminal equipment, multiline terminating systems and communications systems) may be connected with BellSouth SWA and Special Access (a.k.a. BellSouth SPA) service furnished by the Telephone Company where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

2.6 Definitions

Certain terms used herein are defined as follows:

Access Code

The term "Access Code" denotes a uniform seven digit code assigned by the Telephone Company to an individual customer. The seven digit code has the form 101XXXX and 950-XXXX.

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service

5.1 General

This section sets forth the regulations and orders related to charges for Access Orders for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Services. These charges are in addition to other applicable charges as set forth in other sections of this tariff.

An Access Order is an order to provide the customer with BellSouth SWA service, Special Access (a.k.a. BellSouth SPA) Service, Fast Packet Access Services, Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service, and Virtual Access Cross Connect Service, or to provide changes to existing services. An order for BellSouth ADSL service, must be submitted in a manner designated by the Telephone Company, after receipt of an appropriate logon and password that is required to access the ordering system(s). Ordering, Maintenance, NSP logon and password information may be obtained by choosing "Get Started" at the following website: http://www.bellsouth.com/broadband/dsl_solutions/discover. (C) (C)

The Service Installation Guarantee, as set forth in 2.4.9 preceding, is applicable to specified services offered in this tariff. The Service Installation Guarantee is applied on a per service order basis for BellSouth SWA Services. The Service Installation Guarantee is applied on a per circuit basis for Special Access (a.k.a. BellSouth SPA) Services. The Service Installation Guarantee is applied on the Cross Connect elements only for Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service, and Virtual Access Cross Connect Service. (C) (C)

5.1.1 Ordering Conditions

Ordering Conditions for BellSouth ADSL service are as specified in 5.1.1(J).

(A) A customer may order any number of services of the same type and between the same premises on a single Access Order. All details for services for a particular order must be identical except for those for multipoint service.

(B) The customer shall provide all information necessary for the Telephone Company to provide and bill for the requested service. In addition to the order information required in 5.2.2, 5.2.4, 5.2.6, 5.2.7 and 5.2.14 following, the customer must also provide:

- Customer name and premises address(es).
- Billing name and address (when different from customer name and address).
- Customer contact name(s) and telephone number(s) for the following provisioning activities: order negotiation, order confirmation, interactive design, installation and billing.

(M)

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service

5.1 General (Cont'd)

5.1.1 Ordering Conditions (Cont'd)

(C) BellSouth SWA service orders for BellSouth SWA FGA and BellSouth SWA LSBSA shall be in lines. (M) (M)

(D) BellSouth SWA Service orders for BellSouth SWA FGB, BellSouth SWA FGD, BellSouth SWA TSBSA 1, BellSouth SWA TSBSA 3 and BellSouth IPTG Terminating service shall be in trunks. (M) (M) (M)

(E) The day upon which the customer has provided to the Telephone Company a firm commitment for the service and complete and accurate information to allow for the processing of the Access Order by three o'clock p.m. Eastern Standard Time* is the Application Date. The Telephone Company will release an optional initial Pending Order Confirmation, which will include the Telephone Company order number and circuit identification. At the customer's request, when the Telephone Company facility availability is verified, either a Firm Order Confirmation, which will include critical date information, or a Design and Ordering Confirmation, which will include design as well as critical date information, will be released. Critical date information will include the service date. The service date is the date service is to be made available to the customer and billing will commence.

(F) A Pending Order Confirmation is available for orders for Telephone Company-provided switched access dedicated transport services, where ordered separately from other switched access services, and for Telephone Company-provided special access services. A Design and Ordering Confirmation is not available for orders submitted by end users. A Pending Order Confirmation and a Design and Ordering Confirmation are not available for orders for services provided jointly with another Exchange Telephone Company.

(M)

*Access Orders received after three o'clock p.m. EST will be processed the next business day, which will be the Application Date.

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.3 Access Order Modifications (Cont'd)

(C) (Cont'd)

(1) Service Date Change Charge (Cont'd)

(d) A new service date may be established that is prior to the original service date if the Telephone Company determines it can accommodate the customer's request without delaying service dates for orders of other customers.

(e) A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The Service Date Change-Additional Dispatch Charge will apply for each occurrence of a technician dispatch to the customer's premises when the customer is not ready for service as specified in (1)(c), preceding. The applicable charges are:

Service Date Change Charge	USOC	Charge
Per Order, per Occurrence	OMC	$31.60

Service Date Change-Additional Dispatch Charge	USOC	Charge
Per Occurrence	OMCAD	$150.00

(f) For multiple orders with the same service date for the same customer premises, only one Service Date Change-Additional Dispatch charge will apply. However, a Service Date Change charge will apply for each order.

(g) Service Installation Guarantees, as set forth in 2.4.9 preceding, are not applicable for Service Date Change Charges.

(2) Partial Cancellation Charge

Any decrease in the number of ordered BellSouth SWA and Special Access (a.k.a. BellSouth SPA) service channels, Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service, Virtual Access Cross Connect Service, or BellSouth SWA or CCS7 Signaling Connections services will be treated as a partial cancellation and the charges as set forth in 5.4(B) following will apply. (C) (C) (C)

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.3 Access Order Modifications (Cont'd)

(C) (Cont'd)

(3) Design Change Charge

Except for BellSouth ADSL service, the customer may request a design change to the service ordered. A design change is any change to an Access Order which requires engineering review. An engineering review is a review by Telephone Company personnel of the service ordered and the requested changes to determine what changes in the design, if any, are necessary to meet the changes requested by the customer. Design changes include such things as the addition or deletion of optional features or functions or a change in the type of BellSouth SWA Transport Termination, type of channel interface, type of Interface Group or technical specification package. Design changes do not include a change of customer premises, end user premises, end office switch, Basic Serving Arrangement, Intra-Office Collocation Cross Connect Service, Physical Access Cross Connect Service, Virtual Access Cross Connect Service, or BellSouth SWA and Special Access (a.k.a. BellSouth SPA) service channel type. Changes of this nature will require the issuance of a new order and the cancellation of the original order with appropriate cancellation charges applied. BellSouth ADSL service Virtual Circuits are non-designed and the customer may not request a design change. (C) (C) (C)

Should a customer requested Design change be received on a pending access order that results in the establishment of a new service date that exceeds the original service date by more than 30 days, the customer shall not be required to cancel and reissue a new order, but shall be billed a design change charge and a service date change charge.

The Telephone Company will review the requested change, notify the customer whether the change is a design change, if it can be accommodated and if a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge will apply. The Design Change Charge will apply on a per order per occurrence basis, for each order requiring a design change. The applicable charge is:

Design Change Charge	USOC	Rate Per Order
ALL STATES	H28	$39.93

If a change of service date is required, the Service Date Change Charge as set forth in (1) preceding will also apply.

Service Installation Guarantees, as set forth in 2.4.9 preceding, are not applicable for Design Change Charges.

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.4 Cancellation of an Access Order

(A) A customer may cancel an Access Order for the installation of service at any time prior to notification by the Telephone Company that service is available for the customer's use. The cancellation date is the date the Telephone Company receives written or verbal notice from the customer that the order is to be canceled. The verbal notice must be followed by written confirmation within 10 days. If the customer or a customer's end user is unable to accept Access Service within 30 calendar days after the original service date, the customer has the choice of the following options:

- The Access Order shall be canceled and charges/provisions specified in (B) through (D) following will apply, or

- Billing for the service will commence.

In any event, the cancellation date or the date billing is to commence (depending on which option is selected by the customer) shall be the 31st day beyond the original service date of the Access Order.

(B) When a customer cancels an Access Order for the installation of service, a Cancellation Charge will apply as follows:

(1) Costs incurred in conjunction with the provision of BellSouth SWA service, Virtual Access Cross Connect Service, Physical Access Cross Connect Service, Intra-Office Collocation Cross Connect Service, or Special Access (a.k.a. BellSouth SPA) Service starts on the Application Date as defined in (4)(b) following. Provisions addressing the application of charges for other BellSouth Expanded Interconnection elements are contained in Section 20 of this Tariff. (C) (C)

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.4 Cancellation of an Access Order (Cont'd)

(B) (Cont'd)

(4) (Cont'd)

(b) (Cont'd)

- Wired and Office Tested Date (WOT): The date by which all intraoffice wiring is to be completed, all plug-ins optioned, aligned, and frame continuity established, and the interoffice facilities, if applicable, tested. In addition, switching equipment, including translation loading, is to be installed and tested.

- Plant Test Date (PTD): The date on which overall testing of the service is to be started.

- Engineering Information Report Date (EIRD): The date the engineering group in another ISS area provides information to the primary engineering group.

- Service Date (DD): The date on which service is to be made available to the customer. This is sometimes referred to as the Due Date.

- Designed, Verified, and Assigned Date (DVA): The date by which field implementation groups must report that all documents and materials have been received.

- Frame Continuity Date (FCD): Date on which frame-to-frame testing must be completed. This is sometimes referred to as the Facility Continuity Check Date. (M) (M) (M)

- Loop Assignment and Make-up Date (LAM): The date by which Local Loop Assignment and Make-up information must be available. (M) (M)

- Confirming Design Layout Report Date (CDLRD): The date the Design Layout Report (DLR) is to be confirmed by the customer. (M) (M)

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.4 Cancellation of an Access Order (Cont'd)

(B) (Cont'd)

(4) (Cont'd)

(c) The percentage of the total provisioning cost incurred by the Telephone Company at a particular critical date varies by the type of service as shown in (d) following.

(d) When a customer cancels an Access Order, or part of an Access Order, before the service date, the Telephone Company will apply cancellation charges to the order. Cancellation charges are calculated by multiplying all the nonrecurring charges associated with the order, or that part of the order being cancelled, by the percentage shown in (e) following for the critical date last completed on the order.*

(e) Cancellation Charge Percentages (M)

TYPE SERVICE/ CRITICAL DATES	AFTER: APP BEFORE: SID	SID LAM	LAM EIRD	EIRD DLRD	DLRD RID	RID DVA	DVA WOT	WOT FCD	FCD PTD	PTD DD	DD	(M)
SPECIAL ACCESS (a.k.a. BellSouth SPA)												
WATS 100.0 (a.k.a. BellSouth SPA WATS Line)	1.6	4.7	6.6	9.5	13.2	18.7	33.2	44.6	56.6	83.6		(M)
VOICE GRADE 100.0 (a.k.a. BellSouth DSO VG)	1.6	4.7	6.6	9.5	13.2	18.7	33.2	44.6	56.6	83.6		(M)
TELEGRAPH GRADE 100.0 (a.k.a. BellSouth SPA Telegraph)	1.6	4.8	8.9	13.6	17.0	22.2	34.7	43.9	56.9	84.6		(M)
METALLIC GRADE 100.0 (a.k.a. BellSouth SPA Metallic)	1.6	4.9	6.9	9.8	13.5	18.2	30.3	39.7	53.6	83.3		(M)

* As set forth in 5.4(B)(2), when a customer cancels an order prior to the Design Layout Report Date, no cancellation charges shall apply.

Certain material now appearing on this page previously appeared on 7th Revised Page 5-19.

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ACCESS SERVICE

Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.4 Cancellation of an Access Order (Cont'd)

(B) (Cont'd)

(4) (Cont'd)

(e) Cancellation Charge Percentages

SPECIAL ACCESS (a.k.a. BellSouth SPA)												
PROGRAM AUDIO (a.k.a. BellSouth Program Audio)	1.4	4.1	5.8	8.3	11.5	16.2	28.0	37.1	49.5	80.5	100.0	
HICAP (a.k.a BellSouth SPA High Capacity)	12.9	29.2	33.1	35.5	37.5	42.9	55.7	66.2	69.9	86.2	100.0	
DIGITAL DATA ACCESS (a.k.a. BellSouth SPA DSO Digital Data)	1.5	4.6	6.1	9.2	13.5	18.6	28.5	35.4	46.2	78.2	100.0	(T)
Intra-Office Collocation Cross Connect Service	12.9	29.2	33.1	35.5	37.5	42.9	55.7	66.2	69.9	86.2	100.0	(N) (N) (N)
Physical Access Cross Connect Service	12.9	29.2	33.1	35.5	37.5	42.9	55.7	66.2	69.9	86.2	100.0	(N) (N) (N)
Virtual Access Cross Connect Service	12.9	29.2	33.1	35.5	37.5	42.9	55.7	66.2	69.9	86.2	100.0	(T) (T) (T)

Certain material previously appearing on this page now appears on 1st Revised Page 5-18.

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.4 Cancellation of an Access Order (Cont'd)

(B) (Cont'd)

(4) (Cont'd)

(e) Cancellation Charge Percentages (Cont'd)

TYPE SERVICE/ CRITICAL DATES AFTER: / BEFORE:	APP SID	SID LAM	LAM EIRD	EIRD DLRD	DLRD RID	RID DVA	DVA WOT	WOT FCD	FCD PTD	PTD DD	DD —	
BellSouth SWA												
TRUNKS OR LINES	7.0	18.9	23.7	24.9	26.3	35.6	51.4	58.3	69.4	90.3	100.0	
HICAP (a.k.a. BellSouth High Capacity) FACILITIES	12.9	29.2	33.1	35.5	37.5	42.9	55.7	66.2	69.9	86.2	100.0	
Virtual Access Cross Connect Service	12.9	29.2	33.1	35.5	37.5	42.9	55.7	66.2	69.9	86.2	100.0	(T) (T) (T)

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ACCESS SERVICE

5 - Ordering Options for BellSouth SWA and Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

5.6.1 Minimum Period Charges

(F) Should billing for a service which is disconnected prior to the expiration of the Minimum Period cover multiple billing cycles, the bill reflecting the disconnect of service will be adjusted to account for that portion of the Minimum Period Charge previously billed to the customer. In no event shall the total recurring charge billed to the customer for such service exceed the applicable Minimum Period Charge.

All applicable nonrecurring charges associated with the provision of service will be billed in addition to the Minimum Period Charge. Such nonrecurring charges include the nonrecurring charge for the installation of service and/or optional features, Service Order Modification Charges, Additional Engineering and Labor Charges, if any, etc.

5.7 Shared Use Facilities

Shared use occurs when BellSouth SWA, Special (a.k.a. BellSouth SPA) and BellSouth Expanded Interconnection services are provided over the same high capacity (a.k.a. BellSouth SPA High Capacity) facility through a common interface. The facility may be ordered either as BellSouth SWA, Special Access (a.k.a. BellSouth SPA) or Virtual Access Cross Connect, Physical Access Cross Connect, or Intra-Office Collocation Cross Connect Service. (C) (C)

Billing will commence for the high capacity (a.k.a. BellSouth SPA High Capacity) facility as soon as the facility is turned over to the customer for use (i.e., on the service date). Such billing will include charges for the Virtual Access Cross Connect Service, Physical Access Cross Connect Service, Intra-Office Collocation Cross Connect Service, Special (a.k.a. BellSouth SPA) Local Channel or BellSouth SWA Local Channel, the Channelization Equipment (i.e., the multiplexer) and the interoffice transport, if any. Nonrecurring installation charges will also apply at this time. (C) (C)

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ACCESS SERVICE

6 - BellSouth SWA Service (Cont'd)

6.1 General (Cont'd)

6.1.7 Ordering Options and Conditions (Cont'd)

For purposes of Section 6, services requested on multiple Access Service Requests (ASRs) placed with the Telephone Company on a given day, for multiple lines to the same end office or multiple trunks on a common trunk group with the same premises interface code, will be treated as one request when the ASRs are related together by the customer.

6.1.8 CCSAC Testing Requirements

When BellSouth SWA FGD or BellSouth SWA TSBSA 3 with the BellSouth SWA CCSAC option is ordered, network compatibility and other operational tests will be Performed cooperatively by the Telephone Company and the customer. These tests are as specified in Technical Publication TR-TSV-000905, and the BellSouth Guidelines to Technical Publication TR-TSV-000905.

6.1.9 BellSouth Cross Connect Service (N)

Terms and conditions and rates for the following BellSouth Cross Connect Services are as set forth in Section 13 of this Tariff: (N) (N)

- Intra-Office Collocation Cross Connect Service (N)
- Physical Access Cross Connect Service (N)
- Virtual Access Cross Connect Service (N)

6.2 Provision and Description of Switched Access Service Arrangements

BellSouth SWA service is provided in ten service categories including four different BellSouth SWA FG arrangements, BellSouth SWA 500 service, BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service, BellSouth SWA 900 service, two SWA 8XX Basic Serving Arrangements and BellSouth IPTG Terminating service. The provision of each service category, excluding BellSouth IPTG Terminating service, requires the applicable switched transport component and the appropriate local switching functions. There are also various switched transport component and Local Switching optional features available with the feature groups and BSAs. The switched transport, common switching and switched transport termination optional features are available at all Telephone Company end office switches, unless stated otherwise. In addition, WATS Access Lines (a.k.a. BellSouth SWA WATS Lines), as described in 7.2.3.1 following may be provided at the option of the customer, for use with BellSouth SWA FGA, BellSouth SWA FGB, BellSouth SWA FGC, BellSouth SWA FGD, BellSouth SWA LSBSA, and BellSouth SWA TSBSA originating and terminating. WATS Access Line (a.k.a. BellSouth SWA WATS Line) optional features are available in end offices designated as WATS serving offices and are set forth in 6.3.4 following.

There are three specific transmission specifications (i.e., Types A, B and C) that have been identified for the provision of Switched Access Services. The specifications provided are dependent on the Interface Group ordered. The parameters for the transmission specifications are set forth in 6.4.1 following.

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ACCESS SERVICE

6 - BellSouth SWA Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Moves (Cont'd)

(B) Moves To a Different Building (Cont'd)

Moves to a Telephone Company-provided BellSouth Expanded Interconnection service interconnection arrangement, where the customer's and interconnector's existing wire center is the same, will be treated as a service move rather than a discontinuance and start of service. Cross Connect rates, nonrecurring charges, and optional feature and function charges as contained in Section 13 of this Tariff will apply. In addition, service reconfiguration charges are applicable per customer request and per circuit moved as contained in 6.8.8 following. Individual services will not be available simultaneously at both the original premises location and new wire center interconnection space. Additional cooperative end-to-end testing is available and will be conducted by the Telephone Company when requested at rates and charges contained in 13.3.5(B) following. New minimum period requirements may be established for the rearranged services in accordance with the regulations for a service. The customer will remain responsible for satisfying all outstanding minimum period charges for the original service locations. (T)

Moves to a different building (customer premises) in the customer's existing serving wire center serving area will be treated as a service move rather than a discontinuance and start of service. Nonrecurring charges for the new local channel will apply as well as any optional feature and function charges for that local channel. In addition, service reconfiguration charges are applicable per customer request and circuit moved as contained in 6.8.8 following. Service will not be available simultaneously at both the original and new customer locations. Additional cooperative end-to-end testing is available and will be conducted by the Telephone Company at a customer's request at rates and charges contained in Section 13.3.5(B) of this Tariff. New minimum period requirements may be established for the rearranged services in accordance with the regulations for a service. The customer will also remain responsible for satisfying all outstanding minimum period charges for the original service locations. When the move involves a multipoint service, the nonrecurring charge will apply per rate element affected. (T)

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ACCESS SERVICE

7 - Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

7.1General (Cont'd)

7.1.2 Rate Categories

The following rate categories apply to Special Access (a.k.a. BellSouth SPA) Service:

- Local Channels (described in 7.1.2(A) following)
- Interoffice Channels (described in 7.1.2(B) following)
- Optional Features and Functions (described in 7.1.2(C) following)
- SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) rate categories
- (described in 7.1.2(D) following)
- SMARTPath Area Connection (described in 7.1.2(E) following)
- SMARTPath Area Junction (described in 7.1.2(E) following)
- SMARTGate service (a.k.a. BellSouth SPA Managed Shared Ring Network) rate
- categories (described in 7.1.2(F) following)
- Fast Packet Access Services (as set forth in Section 21 of this Tariff)
- Digital Subscriber Line Access Services (as set forth in Section 28 of this Tariff)
- Optical Transport Access Services (as set forth in Section 29 of this Tariff

(D)
(D)

(A) Local Channel

In general, the Local Channel rate category provides for the communications path between a customer-designated premises and the serving wire center of that premises. Included as part of the Local Channel is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability, if any. The signaling capability itself is provided as an optional feature as set forth in (C) following. One Local Channel charge will apply per customer-designated premises at which the channel is terminated. This charge will also apply where the customer designated premises and the serving Wire Center are collocated in a Telephone Company building. This charge will also apply where both customer-designated premises are in the same building, or where the service is provided without physically traversing the serving wire center. The charge also applies where the designated premises is served from a wire center other than the one from which the customer would normally obtain dial tone, i.e., an alternate serving wire center, as described in 7.2.9(A) following.

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ACCESS SERVICE

7 - Special Access (a.k.a. Bellsouth SPA) Service (Cont'd) (N)

7.1 General (Cont'd) (N)

7.1.3 Service Configurations (Cont'd) (N)

(E) BellSouth Cross Connect Service (N)

Terms and conditions and rates for the following BellSouth Cross Connect Services are as set forth in Section 13 of this Tariff: (N) (N)

- Intra-Office Collocation Cross Connect Service (N)
- Physical Access Cross Connect Service (N)
- Virtual Access Cross Connect Service (N)

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ACCESS SERVICE

7 - Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.5 Moves (Cont'd)

(A) Moves Within the Same Building

When a service is moved to a new location within the same building, the charge for the move will be an amount equal to one-half of the first service installed nonrecurring charge for the service termination affected. When a group of like services is moved to the same location inside a customer premises at the same time, the appropriate charges will be: one-half the first service installed nonrecurring charge for the first service moved of the group; and one-half the additional service installed nonrecurring charge for additional like services of that group. There will be no change in the minimum period requirements.

(B) Moves To a Different Building

Moves to a different building (customer premises) in a wire center serving area different than the customer's existing serving wire center serving area will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. Service will not be available simultaneously at both the original and new customer locations. New minimum period requirements may be established for the rearranged services in accordance with the regulations for a service. The customer will also remain responsible for satisfying all outstanding minimum period charges for the original service locations. When the move involves a multipoint service, the nonrecurring charge will apply per rate element affected.

Moves to a Telephone Company-provided BellSouth Expanded Interconnection Service interconnection arrangement, where the customer's and interconnector's existing wire center is the same, will be treated as a service move rather than a discontinuance and start of service. Cross Connect rates, nonrecurring charges, and optional feature and function charges as contained in Section 13 of this Tariff will apply. In addition, service reconfiguration charges are applicable per customer request and per circuit moved as contained in 7.5.17 following. Individual services will not be available simultaneously at both the original premises location and new wire center interconnection space. Additional cooperative end-to-end testing is available and will be conducted by the Telephone Company when requested at rates and charges contained in Section 13.3.5(B) of this Tariff. New minimum period requirements may be established for the rearranged services in accordance with the regulations for a service. The customer will remain responsible for satisfying all outstanding minimum period charges for the original service locations. When the move involves a multipoint service, the nonrecurring charge will apply per rate element affected. (T) (T)

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ACCESS SERVICE

7 - Special Access (a.k.a. BellSouth SPA) Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.9 LightGate Service (a.k.a. BellSouth SPA Point to Point Network (Cont'd)

Customers may request a C-Bit Parity framing format for a DS3 level circuit. If the request is made at the time the circuit is installed, there is no additional charge. When a request for C-Bit Parity framing format is made for an existing circuit, a nonrecurring charge will be applicable for rearranging the framing format on the circuit. This charge will also be applicable if a customer requests that the C-Bit Parity framing format be removed from a circuit. This charge is specified in 7.5.17 following and is applied on a per circuit basis.

LightGate 3 (a.k.a. BellSouth SPA Point to Point Network 12 DS3 Capacity), LightGate 4 (a.k.a. BellSouth SPA Point to Point Network 24 DS3 Capacity), OC-12 (a.k.a. BellSouth SPA Point to Point Network OC-12 Capacity), OC-48 (a.k.a. BellSouth SPA Point to Point Network OC-48 Capacity), and OC-192 (a.k.a. BellSouth SPA Point to Point Network OC-192 Capacity) service local channel systems require both a 28 DS1, STS-1 or OC-3 channel system channel interface and DS1 channel interfaces to derive DS1 channels. When a collocator desires to derive DS1's from a Virtual Access Cross Connect Service, Physical Access Cross Connect Service, Intra-Office Collocation Cross Connect Service, a LightGate 1 service (a.k.a. BellSouth SPA Point to Point Network) local channel system is not required. However the customer is required to pay the charge for the 28 DS1 channel system channel interface in addition to the DS1 central office interfaces. In addition, OC-192 (a.k.a. BellSouth SPA Point to Point Network OC-192 Capacity) service local channel systems require both an OC-3, OC-12 or OC-48 Channel System and DS3 channel interfaces to derive DS3 channels. (C) (C) (C)

DS1, DS3, STS-1, OC-3, OC-12, or OC-48 channels provided by interoffice channel systems must be combined with corresponding channels in local channel systems or may be a stand-alone link when connected with FlexServ service (a.k.a. BellSouth SPA Customer Reconfiguration), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), or voice grade (a.k.a. BellSouth SPA DS0 VG) hubbing applications without associated local channels. Customers must designate, at the time service is ordered, the association of any DS3 or DS1 channels in a LightGate service (a.k.a. BellSouth SPA Point to Point Network) interoffice system with corresponding DS3 or DS1 channels in a LightGate service (a.k.a. BellSouth SPA Point to Point Network) local channel system to form required link configurations. DS1, DS3, STS-1, OC-3, OC-12 or OC-48 channel interfaces are required at each terminating central office location.

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ACCESS SERVICE (N)

13 - Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) (N) (N)

13.3 Miscellaneous Services (Cont'd) (N)

13.3.22 Intra-Office Collocation Cross Connect Service (N)

(A) General Description (N)

(1) Intra-Office Collocation Cross Connect Service provides for a collocator to interconnect its network with that of another collocator at the Telephone Company's premises and to connect its collocated equipment to equipment of another collocated carrier within the same Telephone Company premises pursuant to 47 U.S.C. Section 201 of the Communications Act of 1934, as amended. (N)

(B) Limitations (N)

(1) No representation is made as to the transmission capability of the fiber jumper other than it will consist of a single mode fiber capable of transmitting 1310 nm or 1550 nm wavelengths (N)

(C) Obligations of the Telephone Company (N)

(1) Intra-Office Collocation Cross Connects will be provisioned between a collocator's virtual or physical collocation arrangement and those of another collocated telecommunications carrier within the same central office. (N)

(2) Intra-Office Collocation Cross Connect Service shall be provisioned through facilities owned by the two collocators that are interconnecting their networks or equipment and the Telephone Company's distribution frames or panels. The Telephone Company will provide a jumper between two CFAs provided by the two collocators. (N)

(D) Obligations of the Ordering Collocator (N)

(1) The ordering collocator is responsible for all ordering, bill payment, disconnect orders and maintenance transactions and is the customer of record. (N)

(2) The ordering collocator must submit to the Telephone Company written certification that more than ten percent of the amount of traffic to be transmitted through the Intra-Office Collocation Cross Connect Service will be interstate. (N)

(3) The ordering collocator must submit to the Telephone Company a Letter of Authorization (LOA) from the other collocator that includes the appropriate CFA and Access Carrier Terminal Location (ACTL) that the Telephone Company is authorized to use for interconnecting the networks or equipment of the two collocators. (N)

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ACCESS SERVICE (N)

13 - Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) (N) (N)

13.3 Miscellaneous Services (Cont'd) (N)

13.3.22 Intra-Office Collocation Cross Connect Service (Cont'd) (N)

(E) Rate Regulations (N)

(1) Intra-Office Collocation Cross Connect is a flat rate, non-distance sensitive charge and will be applied on a per circuit basis. (N) (N)

(2) Intra-Office Collocation Cross Connect Service is available per circuit on a 2-wire, DS1, DS3, and 2-fiber basis. (N) (N)

(3) Nonrecurring charges are applicable for Intra-Office Collocation Cross Connect Service. (N) (N)

(F) Rates and Charges (N)

	USOC	Monthly Rates	Nonrecurring Charges	
(1) Intra-Office Collocation Cross Connect				(N) (N) (N)
- 2-Wire, per circuit	QCCW2	$0.42	$350.00	(N)
- DS1, per circuit	QCCD1	$8.59	$390.00	(N)
- DS3, per circuit	QCCD3	$90.90	$480.00	(N)
- 2-Fiber, per circuit	QCCF2	$35.70	$495.00	(N)

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ACCESS SERVICE (N)

13 - Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) (N) (N)

13.3 Miscellaneous Services (Cont'd) (N)

13.3.23 Physical Access Cross Connect Service (N)

(A) General Description (N)

(1) Physical Access Cross Connects provide a one to one dedicated transmission path between the customer's Special Access (a.k.a. BellSouth SPA) tariff service offerings or transport equipment located in the Telephone Company Central Office and another telecommunications carrier's (collocator's) physical collocation arrangement. (N) (N) (N) (N) (N)

(2) Standards for performance monitoring of services which interconnect to the collocation arrangement will be driven by the particular service type and service specific requirements. The Telephone Company's obligation for monitoring ends at the demarcation point. (N) (N) (N) (N)

(3) Physical Access Cross Connects are flat rate, non-distance sensitive charges and will be applied on a per cross connect ordered basis. (N) (N)

(4) Physical Access Cross Connects will be ordered on the same ASR as the service being cross-connected. All ASRs must be complete and accurate before the Company will initiate the provisioning process. (N) (N) (N)

(5) Nonrecurring charges are applicable for Physical Access Service Cross Connect Service. (N) (N)

(6) The collocator may cross connect at the DS0 level with the following Telephone Company access services: (N) (N)

- Local and Interoffice Channels (described in 7.1.2 of this Tariff) (N)
- Optional Features and Functions (described in 7.1.2(C) of this Tariff) (N)

(7) The collocator may cross connect at the DS1 level with the following Telephone Company access services: (N) (N)

- DS1 local channel or interoffice (N)
- DS1 Basic Channelization System (N)
- FlexServ (a.k.a. BellSouth SPA Customer Reconfiguration) Port in a Digital Cross-Connect System (N) (N)
- DS1 Central Office Channel Interface associated with LightGate (a.k.a. BellSouth SPA Point to Point Network) or SMARTRing services (a.k.a. BellSouth SPA Dedicated Ring) (N) (N) (N)
- BellSouth SWA Service (N)
- SMARTPath service (a.k.a. BellSouth SPA DS1 Shared Ring) (N)
- SMARTGate service (a.k.a. BellSouth SPA Managed Shared Ring Network) (N) (N)

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ACCESS SERVICE (N)

13 - Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) (N) (N)

13.3 Miscellaneous Services (Cont'd) (N)

13.3.23 Physical Access Cross Connect Service (Cont'd) (N)

(3) The collocator may cross connect at the DS3 level with the following Telephone Company access services: (N) (N)

- LightGate service (a.k.a. BellSouth SPA Point to Point Network) local channel or interoffice channel via a LightGate service (a.k.a. BellSouth SPA Point to Point Network) DS3 Central Office Channel Interface
- SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) via a SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) Central Office Node DS3 Channel Interface
- 28 DS1 Channelization System
- BellSouth SWA service
- SMARTPath DS3 Transport service (a.k.a. BellSouth SPA DS3 Shared Ring)
- SMARTGate service (a.k.a. BellSouth SPA Managed Shared Ring Network)
- FlexServ Port in a Digital Cross Connect System

(4) The collocator may cross connect at the fiber level with the following Telephone Company access services: (N) (N)

- Optical Transport Access Services (as set forth in Section 29 of this Tariff)
- SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) rate categories described in 7.1.2(D) of this Tariff
- SMARTGate service (a.k.a. BellSouth SPA Managed Shared Ring Network)
- LightGate service (a.k.a. BellSouth SPA Point to Point Network)

(B) Rates and Charges (N)

(1) Physical Access Cross Connect (N)

	USOC	Monthly Rates	Nonrecurring Charges	
2-Wire, per cross connect	PE1P2	$ 0.1566	$ 33.82	(N)
4-Wire, per cross connect	PE1P4	$ 0.3132	$ 67.64	(N)
DS1, per cross connect	PE1P1	$ 2.65	$155.00	(N)
DS3, per cross connect	PE1P3	$27.83	$155.00	(N)
2-Fiber, per cross connect	PE1F2	$10.25	$200.00	(N)
4-Fiber, per cross connect	PE1F4	$20.50	$400.00	(N)

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ACCESS SERVICE (N)

13 - Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) (N) (N)

13.3 Miscellaneous Services (Cont'd) (N)

13.3.24 Virtual Access Cross Connect Service (M)(T)

(A) A monthly recurring charge applies for the Virtual Access Cross Connect element that consists of the cross connect panel, cable racks, bay framework, jumpers and other supporting hardware. (M)(T) (M) (M)

(B) The Virtual Access Cross Connect element is designated as BellSouth SWA or Special Access (a.k.a. BellSouth SPA), depending on the type of service to which it cross connects. (M)(T) (M) (M)

(C) The BellSouth SWA Virtual Access Cross Connect element is subject to the jurisdictional report requirements as set forth in Section 2.3.10 of this Tariff. (M)(T) (M) (M)

(D) Virtual Access Cross Connect Service is flat rate, non-distance sensitive charges and will be applied on a per cross connect ordered basis. (M)(T) (M) (M)

(E) Standards for performance monitoring of services which interconnect to the collocation arrangement will be driven by the particular service type and service specific requirements. The Telephone Company's obligation for monitoring ends at the demarcation point. (M) (M) (M) (M)

(F) Virtual Access Cross Connects will be ordered on the same ASR as the service being cross-connected. All ASRs must be complete and accurate before the Company will initiate the provisioning process. (M)(T) (M) (M)

(G) Nonrecurring charges for the Virtual Access Cross Connect Service are assessed on a "First" and "Additional" basis. (M)(T) (M)

(H) Rates and Charges (M)

	USOC	Monthly Rates	Nonrecurring Charges First	Additional	
(A) Special Access (a.k.a. BellSouth SPA)					(M)
(1) DS1, per cross connect	CNC1X	$7.50	$155.00	$14.00	(M)
(2) DS3, per cross connect	CND3X	$56.25	$151.90	$11.83	(M)
(B) BellSouth SWA					(M)
(1) DS1, per cross connect	CNDS1	$7.50	$155.00	$14.00	(M)
(2) DS3, per cross connect	CNDS3	$56.25	$151.90	$11.83	(M)
(C) Fiber					(M)
(1) 2-Fiber, per cross connect	CNC2F	$ 6.71	$ 41.94	$30.50	(M)
(2) 4-Fiber, per cross connect	CNC4F	$ 6.71	$ 64.53	$39.80	(M)

Material now appearing on this page previously appeared on 5th Revised Page 20-13, 3rd Revised Page 20-14 and 4th Revised Page 20-17.

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ACCESS SERVICE

20 - BellSouth Expanded Interconnection Service (Cont'd)

20.1 BellSouth Virtual Expanded Interconnection

20.1.14 Rate Regulations (Cont'd)

20.1.14.1 BellSouth Virtual Expanded Interconnection Elements (Cont'd)

(C) Cable Support Structure

The Cable Support Structure monthly recurring charge applies for the use of conduit from the point of interconnection to the cable vault or other central office entrance, and for entrance and riser cable rack space.

(D) Cross-Connects

The Telephone Company's rate regulations associated with establishing and maintaining Cross Connects are as set forth in Section 13 of this Tariff. (T) (T)

(E) Floor Space

Floor Space consists of two monthly recurring rate elements that apply as follows:

Per Square Foot - The Per Square Foot element applies for the floor space required to provision the BellSouth Virtual Expanded Interconnection arrangement and includes heat, ventilation, and air conditioning (HVAC), lighting, and AC power.

Per Ampere - The Per Ampere element consists of two separate -48 volts direct current feeds (A&B) with battery back-up and applies per ampere for the equipment maximum power requirement.

(F) Security Escort

A security escort is provided to a collocator whenever the collocator, or approved agent, desires access to the entrance manhole or to inspect the collocator-provided/Telephone Company leased terminal transmission equipment.

Charges for a security escort are assessed in half-hour increments as either Basic, Overtime, or Premium Time charges. A request resulting in the dispatch of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of three hours.

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ACCESS SERVICE

20 - BellSouth Expanded Interconnection Service (Cont'd)

20.1 BellSouth Virtual Expanded Interconnection

20.1.14 Rate Regulations (Cont'd)

20.1.14.1 BellSouth Virtual Expanded Interconnection Elements (Cont'd)

(G) Training

When collocator-provided/Telephone Company leased equipment (hardware and/or software) is identical to that already in use in the Telephone Company location:

No Training Charges Are Applicable

When collocator-provided/Telephone Company leased equipment (hardware and/or software) is not identical to that already in use in the Telephone Company location:

Charges as set forth in 20.4.1(F) as applicable.

20.1.14.2 Access Service Elements

(A) The access service elements, as set forth in Section 3, Carrier Common Line Access Service; Section 6, BellSouth SWA service; Section 9, BellSouth Directory Assistance; Section 16, Telecommunications Relay Service Transport; Section 18, Operator Service; and Section 19, BellSouth Line Information Data Base service, ordered and/or working in association with Switched Cross-Connect Service will be billed to and paid by the customer of record for the service involved, unless the BellSouth Virtual Expanded Interconnection customer request and/or agrees to be responsible for all charges.

(B) For BellSouth SWA service line or trunk activation charges, see Section 6.8.1(E) of this Tariff.

20.2 Reserved For Future Use

20.3 Reserved For Future Use (T)

(M)

Certain material previously appearing on this page now appears on Original Page 13-76.18.

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ACCESS SERVICE

20 - BellSouth Expanded Interconnection Service (Cont'd)

(M)

Material previously appearing on this page now appears on Original Page 13-76.18.

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ACCESS SERVICE

20 - BellSouth Expanded Interconnection Service (Cont'd)

20.4 Rates and Charges (Cont'd)

20.4.1 BellSouth Virtual Expanded Interconnection Service (Cont'd)

	USOC	First Half Hour or Fraction Thereof	Each Additional Half Hour or Fraction Thereof
(F) Security Escort			
-Basic Time, normally scheduled work hours	SPTBX	$41.00	$25.00
-Overtime, outside of normally scheduled working hours on a scheduled work day	SPTOX	$48.00	$30.00
-Premium Time, outside of scheduled work day	SPTPX	$55.00	$35.00

(M)

Certain material previously appearing on this page now appears on Original Page 13-76.18.

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BST Line Sharing/Line Splitting Collaborative
Conference Call Notes – January 15, 2004

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ATTENDEES: Via Bridge

BellSouth	BellSouth	Covad	MCI	Webshoppe	Ernest Comm
Debbie Timmons	Gene Piatkowski	John Boshier	Amanda Hill	Craig Uptagrafft	Jay Morris
Tommy Williams	Lianne Griffin	Brian Foor	Sam Tenerelli		Steve Reynolds
Diann Hammond	Steve Vanderburg	Colette Davis			Suzanne Walters
Jimmy Patrick		Hugo Aviles			
Vivian Smith					

FROM: Debbie Timmons, Project Manager – BellSouth Telecommunications, Inc.

NOTES:

1. **Welcome and Opening Remarks**
   Debbie Timmons opened the meeting with roll call and agenda review.

2. **Loop Characteristics for Shared Loops**
   At the 12/11/03 Collaborative meeting, the CLECs agreed to review the revisions to the Loop Modification, particularly relative to bridged tap removal before they could agree to the Loop Characteristics for Shared Loops.

   Debbie Timmons noted that since the last meeting, two Loop Modification CLEC Information Packages had been posted:
   - BellSouth Unbundled Loop Modification for Copper Loops, Version 1, posted 12/15/03, is posted at: http://www.interconnection.bellsouth.com/guides/unedocs/ulm.pdf
   - High Frequency Spectrum Unbundled Loop Modification (HFS ULM), Version 4, posted 01/15/04, is posted at: http://www.interconnection.bellsouth.com/guides/unedocs/hi_freq_sp_ulm.pdf

   The CLECs requested more time to review the information and suggested this be an agenda item for next meeting.

   Refer to the attached Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters document

3. **Sharing to Splitting UNEL Discussion**
   Debbie Timmons opened the discussion by noting that during the 12/11/03 Collaborative meeting, the CLECs suggested the Line Splitting Scenario Matrix be updated with columns to identify the voice port provider as ILEC or CLEC, and Craig Uptagrafft also requested that Remote Site migrations be included; Debbie offered to lead a review of the matrix.

   Sam Tenerelli objected and initiated a discussion of Line Splitting with CLEC voice port. Sam referred to previous Collaborative discussions of this subject, noting the Collocation product manager had presented information on the ASR process, wherein he requested a status on the progress of the LSR process development. Sam further asked what needed to be done to establish a process in BellSouth to allow line splitting with UNEL using existing CFA. This would require BellSouth to make cross-connections connecting the CFA of two CLECs.

   Colette Davis referenced the ongoing Hot Cut Work Shops meeting in all BellSouth states, and noted this development needs to be approached with a sense of urgency.

   Tommy Williams advised that BellSouth needs the Collaborative to decide the priorities. Sam Tenerelli responded the #1 priority is to be able to add DSL to UNEL with CLEC voice.

   Tommy stated that the BellSouth position has not changed; that CLECs have the capability to take the UNEL to another collocation space today. Sam asked how the CLEC does that today. Tommy responded that CLECs have the option to direct connect with a cable if the two collocation spaces are adjacent. If the spaces are not adjacent, then a CLEC can request to use BellSouth's cable rack

PUBLIC SERVICE C
EXHIBIT NO

through the collocation process and place its cable connecting the two collocation spaces on BellSouth's cable rack. Then to connect at the DS0 level, the CLEC would order its UNEL into its collocation space with an LSR, as usual. The loop is terminated into the CLEC splitter via the CLEC collocation cable. The CLEC will use its cable in the collo to send the data coming out of the splitter/DSLAM to its data network. Similarly, another CLEC cable connects to the CFA to send the voice to the voice CLEC's collo space. The new Tariff offering that is effective January 31, 2004, is an Access service requested via ASR and is not meant to satisfy the local need. Sam asked if there is anything underway to make it available through a LSR process. Tommy said there is a meeting scheduled Friday, January 16, but that the answer so far is consistent with what he has been said. Colette Davis of Covad requested that the BellSouth position statement be documented in the minutes so that if no change, then the next steps can be taken. The position statement is that BellSouth is meeting the obligations of the TRO with the following arrangements:

- If the CLEC uses a UNE voice port BellSouth makes all of the connections
- If the CLEC has its own switch and DSLAM BellSouth terminates the loop to the collocation space and the CLEC has all it needs
- If the CLEC has its own DSLAM/splitter and wishes to use another carrier's voice switch in another collocation space, BellSouth terminates the loop to the 1st collocation space and the CLEC can make the connections to the 2nd collocation space themselves via co-carrier cross connections

The requirement for a CLEC priority list was reiterated, with Colette Davis noting that AT&T and MCI needed to be present for such a discussion. Colette asked Amanda Hill of MCI to obtain the list of SBC scenarios from Sam Tenerelli, for distribution to the BellSouth Collaborative distribution list in preparation for discussion and prioritization at the next Collaborative meeting.

Jay Morris of Ernest Communications (ECI), a UNEP provider since 1997, asked about providing Line Splitting via UNEP Coin lines using Flex ANI via an ILEC port. Tommy Williams responded there is no development underway. Jay noted a BFR was in progress and Tommy commented that is the appropriate path, as the requested service arrangement could not be a UNE as there is no retail equivalent. Debbie Timmons noted that Line Splitting is only available on Non-Complex business and residence.

Refer to the attached Line Splitting Scenario Matrix (BellSouth)
Refer to the attached SBC Scenario list provided by Amanda Hill of MCI

4. **Status Line Splitting Provisioning/Repair – LCSC/CO/CWINS Issues**

Debbie Timmons opened the discussion by reviewing the introduction of this item during the 12/11/03 Collaborative call. Brian Foor of Covad introduced new issues pertaining to Line Splitting provisioning and repairs. For provisioning, three items were noted: a) No response from LCSC and having to escalate too often, b) Due Dates being assigned incorrectly – getting due dates 1-5 days beyond the requested date, and c) the circuit ID is the telephone number. The issue with repair is that Covad is receiving push back from the Central Office and CWINS; there is a lack of knowledge of the process.

Brian Foor provided the update that the problems are in three major categories:

1. LCSC issues
2. Reversed wiring
3. Lack of knowledge in Central Office – trouble tickets getting closed to No Trouble Found

Debbie Timmons reported the internal product team began investigation of the lines Covad had reported to Diann Hammond as being reverse wiring. The team spent Tuesday, January 13,

researching information and creating tests. Early indications are that a software interface problem exists and that the solutions team was scheduled to continue testing on Friday, January 16. The team was able to confirm that in offices that use tie pairs, a third and unnecessary tie pair was being assigned, in addition to reversing the wiring output from SWITCH to FOMS. Debbie noted that should the software coding prove to be causing the problem, it is expected the solution can be easily corrected. Colette Davis asked for the timeframe. Debbie responded that a commitment could not be made until after the results of Friday's testing, but remained positive that the correction would have a quick turn around. Colette requested a status be provided on Friday. Debbie agreed to provide status. A Covad representative asked what could be done about existing troubles. Covad was advised to continue to follow the established trouble reporting process, escalating as required. Colette asked what information Covad personnel could provide to facilitate a positive result on the first report. Debbie stated that the Central Office Methods and Procedures are posted on an internal website that all BellSouth personnel can access. Covad asked to whom Central Office personnel should be referred for additional information or support. Debbie responded that the Central Office Field Work Group (COFWG) Staff Support SME for Line Sharing and Line Splitting was listed within the M&Ps and that the website contains contact information.

Since Diann Hammond was not available for the call, updates on specific items sent to Diann could not be addressed in detail. It was indicated that the list provided to Diann contained specific instances of multiple trouble tickets closed out without a call back.

Brian Foor of Covad reiterated the problems being encountered with Fleming Island. This issue was reported during the December 12, 2003 call. Brian confirmed that communication had taken place with Diann Hammond and Sandra Howard, but that problems were still being experienced. Brian expressed concern with the current arrangement for obtaining jeopardy status, clarification support and other order status information. Amanda Hill of MCI agreed with Brian's observations noting that MCI was experiencing the same problems. Brian and Amanda both stated that their understanding of the arrangement to call Fleming Island is specific to Line Splitting. Their concern is with the delay of receiving information and the lack of quality of the information received. Brian and Amanda explained that they are required to call Fleming Island to make the request for information, but that Fleming Island cannot answer the questions, so Fleming Island personnel are required to send the question to Birmingham via FAX, to which Birmingham responds with FAX. Brian and Amanda expressed concern that the personnel from the two centers cannot talk to each other and must communicate via FAX; their view is that Fleming Island is a wasted step in the process, that it would be much more beneficial to the CLEC to be able to communicate directly with the center personnel who have knowledge of the products and who are issuing the orders.

Colette Davis requested a master list of issues be maintained through the Collaborative, and that the BellSouth product team investigate chronic problems and issues. Debbie Timmons agreed to maintain the master list and to provide oversight of investigations of chronic problems. It was agreed that Covad would provide the initial master list. Regarding investigations of chronic problems, Debbie reminded the Covad team that normal trouble reporting process must be followed, that she is not the new trouble desk. Debbie also requested that current issues and troubles be provided and that telephone number information is included.

5. **New Business/New Agenda Items/Wrap-up**
The draft 2004 Shared Loop Collaborative Charter was presented. Debbie Timmons requested the collaborative members provide review and comment in advance of the next meeting so that any changes or comments could be included in the next distribution.

Refer to the attached DRAFT 2004 Shared Loop Collaborative Charter

Brian Foor re-introduced discussion of the Maintenance CFA change process. Brian noted that multiple levels had been contacted within Covad to obtain the Collocation Circuit ID (JA circuit), which is required to process a pair change through the published CWINS process. Debbie Timmons asked had the BellSouth Collocation Manager assigned to Covad been contacted. Colette Davis noted

Susan Turner is the representative and Brian noted that he had not spoken to her. Debbie Timmons suggested a conference call be arranged with Susan to be attended by Brian Foor and John Boshier. The action item to arrange the call was assigned to Diann Hammond.

- **Agenda Items:**
  - Loop Characteristics of Shared Loop
  - Line Sharing to Line Splitting UNEL Discussion
  - 2004 Charter
  - Status Covad's Issues on Line Splitting Provisioning & Maintenance
- **Attached Items:**
  1. Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters document
  2. Line Splitting Scenario Matrix
  3. SBC Scenario List
  4. DRAFT 2004 Shared Loop Collaborative Charter
- **Collaborative Website:**

  http://www.interconnection.bellsouth.com/markets/lec/line_sharing_collab/
- **Next Meetings: Bridge: 205-968-9300 Access: 643487 Password: 6714**

  Shared Loop Collaborative Conference Call – 1/29/2004, 12:30 EST

This document is for a CLEC line sharing collaborative and does not necessarily represent the official position of any participant of the collaborative
2/10/04 5:35 PM

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Implementation of requirements arising from Federal Communications Commission triennial UNE review: Local Circuit Switching for Mass Market Customers.	)))))	Docket No. 030851-TP

VERIZON FLORIDA INC.'S RESPONSES TO AT&T COMMUNICATIONS OF THE SOUTHERN STATES, LLC'S THIRD SET OF INTERROGATORIES (NOS. 114-116)

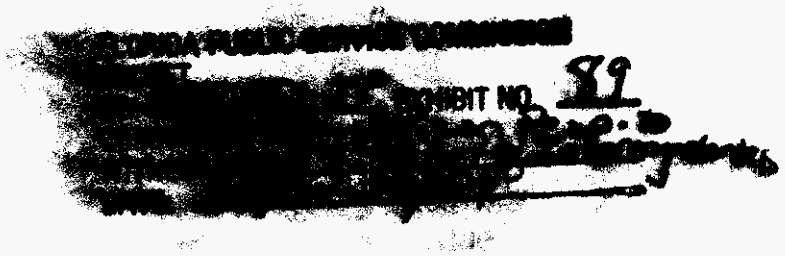
Verizon Florida Inc. ("Verizon"), pursuant to Rule 28-106.206, Florida Administrative Code, Rules 1.340, Florida Rules of Civil Procedure and Order No. PSC-03-1054-PCO-TP, issued in this docket on September 22, 2003, hereby files its Responses to the Third Set of Interrogatories (Nos. 114-116) of AT&T Communications of the Southern States, LLC ("AT&T").

Interrogatory	Prepared By	Title
114	Kevin Van Inwegen	Manager - Wholesale
115	Ross Riddles	Manager–Financial Planning & Analysis
116	Agustin Ros	NERA

INTERROGATORIES

114. Provide the names of all CLECs in any state who have supported or otherwise agreed to use Verizon's proposed batch process.

RESPONSE:
Verizon does not have in its possession, custody, or control information about which CLECs "support" or "plan to use" Verizon's proposed batch cut process in Florida.



115. Provide the most currently available total number of UNE-P lines and the total number of analog loop lines that Verizon provides in Florida. For each, specify the date of the information.

RESPONSE:
Please see confidential Attachment INT 115 (Bates No. VZ 1195) for data as of June 30, 2003 in Voice Grade Equivalents.

116. Referring to page 2 of Exhibit WET-VII of William Taylor's Direct Testimony, describe in detail how column (e) was derived.

RESPONSE:
Column (e) represents the growth in incremental UNE-L adds during the 27-month period. Incremental UNE-L adds represent UNE-L lines that CLECs order that would have been UNE-P lines had switching not been eliminated as a UNE. The term incremental is used to distinguish from the UNE-Ls that CLECs order in the current regulatory environment (i.e., prior to elimination of switching UNE).

"Incremental UNE-L adds" is defined as the change in the volume of UNE-Ps during the 27-month period. The term "volumes of UNE-P" represents what the volumes of UNE-P would have been during the 27-month period had switching not been eliminated as a UNE, rather than the forecast of the embedded base that is being converted during the 27-month period. The volumes of UNE-P, as defined above, is calculated as the previous months volumes of UNE-P plus UNE-P migrations minus UNE-P winbacks minus UNE-P disconnects.



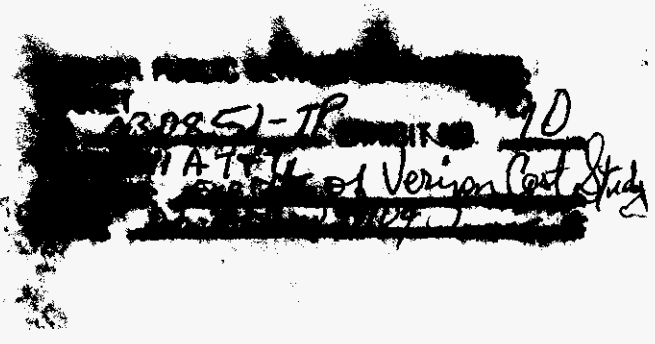
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verizon

Service Costs

Florida

Wholesale Non-recurring Study
HotCuts
February, 2004



Verizon - Florida
Wholesale Non-recurring Study
Miscellaneous Wholesale Elements
Rate Summary

Description	Ordering	Ordering	Service Connection	
	Manual	Semi-Mechanized	Initial Unit	Add'l Unit
HotCuts				
2-Wire WPTS Coordination HotCut Initial ("Basic")	$76.23	$73.18	n/a	n/a
2-Wire WPTS Coordination HotCut Add'l ("Basic")	$54.31	$54.31	n/a	n/a
4-Wire WPTS Coordination HotCut Initial ("Basic")	$108.75	$105.69	n/a	n/a
4-Wire WPTS Coordination HotCut Add'l ("Basic")	$84.91	$84.91	n/a	n/a
Large Job ("Project") HotCut Initial	$84.94	$72.38	n/a	n/a
Large Job ("Project") HotCut Additional	$78.90	$78.90	n/a	n/a
Batch HotCut Initial	$60.33	$57.28	n/a	n/a
Batch HotCut Additional	$24.83	$24.83	n/a	n/a
WPTS Coordination Expedite	$18.19	$18.19	n/a	n/a
IDLC Surcharge	$136.81	$136.81	n/a	n/a

Note: WPTS = Wholesale Provisioning Tracking System

Ex 91

TRIENNIAL REVIEW ORDER: PROVISIONS RELEVANT TO SWITCHING TRIGGER ANALYSIS

[redacted]
D. D3065I-IR EXHIBIT NO. 91
COMPANY/ F.CCA
WITNESS. Excerpts of TRO
DATE: 02/14-20/04

§ 51.319 Specific unbundling requirements

(d)(2)(iii)(A)(i)

Local Switching self-provisioning trigger. To satisfy this trigger, a state commission must find that three or more competing providers not affiliated with each other or the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each are serving mass market customers in the particular market with the use of their own local switches.

TRO ¶ 830

XI. ORDERING CLAUSES

830. Accordingly, IT IS ORDERED that pursuant to Sections 1, 3, 4, 201-205, 251, 256, 271, 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt, **the *Report and Order on Remand and Further Notice of Proposed Rulemaking* in CC Docket No. 01-338 IS ADOPTED, and that Part 51 of the Commission's Rules, 47 C.F.R. Part 51, is amended as set forth in Appendix B. The requirements of this Order shall become effective 30 days after publication in the Federal Register, pending Office of Management and Budget (OMB) approval.**[2447] The Commission will publish a document in the Federal Register announcing the effective date of these rules.

[2447] In light of the importance of these rules, the Commission is seeking emergency approval from OMB.

TRO ¶ 499

The triggers we set forth rely on the number of carriers that self-provision switches or the number of competitive wholesalers offering independent switching capacity in a given market.[1549] In both cases, the competitive switch providers that the state commission relies upon in finding either trigger to be satisfied must be unaffiliated with the incumbent LEC and with each other.[1550] In addition, they should be using or offering their own separate switches.[1551] This requirement avoids counting as a true alternative a provider that uses the switching facilities of the incumbent LEC or *another* alternative provider that has already been counted. **Moreover, the identified competitive switch providers should be actively providing voice service to mass market customers in the market.** Identified carriers providing *wholesale* service should be actively providing voice service used to serve the mass market and be operationally ready and willing to provide wholesale service to all competitive providers in the designated market.[1552]

[1549] **As in the impairment triggers for high-capacity loops and dedicated transport, states also shall consider carriers that provide intermodal voice service using their own switch facilities (including packet and soft switches) that meet the requirements of these triggers and Part V above. *See supra* Part V.B.1.d.(ii) (describing intermodal alternatives generally, and factors affecting differences in the extent to which various intermodal alternatives are considered); *see also supra* . . . and notes. In deciding whether to include intermodal alternatives for purposes of these triggers, states should consider to what extent services provided over these intermodal alternatives are comparable in cost, quality, and maturity to incumbent LEC services. *See supra* . . . For example, we note that CMRS does not yet equal traditional incumbent LEC services in its quality, its ability to handle data traffic, its ubiquity, and its ability to provide broadband services to the mass market. *See supra* . . . Thus, just as CMRS deployment does not persuade us to reject our nationwide finding of impairment, *see supra* . . . at this time, we do not expect state commissions to consider CMRS providers in their application of the triggers. In applying the triggers, states must consider packet switches to the extent they are used to provide local voice service to the mass market.**

[1550] Affiliated companies will be counted together, in order to prevent gaming. We use the term affiliated and affiliate as the Act defines "affiliate." Section 3 of the Act defines the term "affiliate" as "a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. For purposes of this paragraph, the term 'own' means to own an equity interest (or the equivalent thereof) of more than 10 percent." 47 U.S.C. § 153(1).

[1551] While the record indicates that competitors do not currently purchase wholesale switching from non-incumbent-LEC providers, we find, for the limited purposes described herein, that if a carrier were to acquire the long term right to the use of a non-incumbent-LEC switch sufficient to serve a substantial portion of the mass market, that carrier should be counted as a separate, unaffiliated self-provider of switching.

[1552] In circumstances where switch providers (or the resellers that rely on them) are identified as currently serving, or capable of serving, only part of the market, the state commission may choose to consider defining that portion of the market as a separate market for purposes of its analysis.

However, the competing carriers' wholesale offerings need not include the full panoply of services offered by incumbent LECs.[1553]

As we stated above, a party aggrieved by a state commission determination, including a decision on the appropriate market definition, may seek a declaratory ruling from this Commission. *See supra* . . . (discussing declaratory ruling determinations). Accordingly, this Commission will exercise its authority as necessary to ensure that state market determinations are reasonable and comport with the guidance set forth herein.

[1553] We expect, however, that providers of switching will have an incentive to offer competitive terms with those of the incumbent LEC.

TRO Part V.B.1.d(ii)

(i) Evidence of Impairment

92. Parties have submitted an enormous amount of evidence for our consideration in this proceeding. We will address the merits of this evidence in the Parts below regarding the application of the unbundling analysis to specific UNEs. As guidance for our analysis, however, we explain here what kinds of evidence we will find most persuasive in those discussions. We do not adopt a "burden of proof" approach that places the onus on either incumbent LECs or competitors to prove or disprove the need for unbundling.[307] Rather, in the application of our standard, we examine the record evidence in light of the Act's goals to make the best determination regarding the need for unbundling.

93. As we anticipated in the *Triennial Review NPRM*, we agree with commenters that argue that actual marketplace evidence is the most persuasive and useful kind of evidence submitted.[308] In particular, we are most interested in granular evidence that new entrants are providing retail services in the relevant market using non-incumbent LEC facilities, for two main reasons. First, it is faithful to the Supreme Court's admonition that we consider "the availability of elements outside the incumbent's network" as we apply the "impair" standard.[309] Second, this kind of evidence demonstrates better than any other kind what business decisions actual market participants have made regarding whether it is feasible to provide service without relying on the incumbent LEC. Specifically, this evidence shows us whether *new entrants*, as a practical matter, have surmounted barriers to entry in the relevant market.[310]

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[307] *See, e.g.*, ALTS *et al.* Comments at 123-24; BellSouth Comments at 18-21; NuVox Reply at 24-25; Letter from Michael E. Glover, Senior Vice President and Deputy General Counsel, Verizon, and Susanne Guyer, Senior Vice President – Federal Regulatory Affairs, Verizon, to William F. Maher, Chief, Wireline Competition Bureau, FCC, at 3, *in* Letter from William P. Barr, Executive Vice President and General Counsel, Verizon, to Michael K. Powell, Chairman, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Dec. 17, 2002) (Verizon Dec. 17, 2002 *Ex Parte* Letter). Because we decline to adopt a "burden of proof" approach, we dismiss as moot that portion of the CompTel Nov. 26, 2001 Joint Conference Petition in which CompTel asks the Commission to impose a burden of proof on parties requesting that a UNE no longer be unbundled. *See* CompTel Nov. 26, 2001 Joint Conference Petition at 13.

[308] *See Triennial Review NPRM*, 16 FCC Rcd at 22789, para. 17; *see also* Qwest Comments at 5, 11-12; SBC Comments at 27; Qwest Farrell Reply Decl. at para. 17. *But see* Competitive Enterprise Institute Comments at 2 (urging the Commission not to rely on marketplace evidence in a way that freezes its rules to today's conditions).

[309] *Iowa Utils. Bd.*, 525 U.S. at 389; *see also* Letter from Karen Brinkmann, Counsel for ITTA, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 1 (filed Jan. 29, 2003) (ITTA Jan. 29, 2003 *Ex Parte* Letter) (noting that question is whether elements are available from sources other than incumbent LEC).

[310] *Cf., e.g.*, BOC Shelanski Reply Decl. at paras. 8-12 (arguing that, as facilities-based entry increases, unbundling makes less sense because it punishes earlier facilities-based entrants, fails to recognize that the market can only absorb a limited number of firms, and confuses impairment with lack of an attractive

94. As we examine the evidence of facilities deployment by competitive LECs in the specific UNE discussions, we will give it substantial weight,[311] but we do not agree that we must find it conclusive or presumptive of a particular outcome without additional information or analysis.[312] **For example, if the marketplace evidence shows that new entrants have deployed a certain type of facility, we will consider the facts as evidence that the barriers to entry in that market for that element are surmountable.[313] In deciding what weight to give this evidence, we will consider how extensively carriers have been able to deploy such alternatives, to serve what extent of the market, and how mature and stable that market is.[314]** Thus, while we agree that such evidence may indicate a lack of impairment, we disagree with commenters that argue that such evidence is dispositive or creates a rebuttable presumption of no impairment.[315] We likewise disagree that evidence of deployment of alternative facilities or availability of non-UNE alternatives from the incumbent LEC means that a market is "contestable" (as some parties use that term) and therefore *necessarily* shows a lack of impairment.[316] Rather, as just stated, evidence of alternative deployment is probative but

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business case). We recognize the credibility of econometric analytical techniques, such as regression analysis, when properly specified and conducted.

311 *See, e.g.*, BOC Shelanski Decl. at para. 17; Qwest Reply at 7-8; BOC Shelanski Reply Decl. at para. 17; Verizon Jan. 10, 2003 *Ex Parte* Letter, Attach. at 2 (arguing that the Commission should presume that alternative facilities can be deployed anywhere); Verizon Dec. 17, 2002 *Ex Parte* Letter, Attach. at 2 (arguing that no carriers are impaired in markets where competitive entry has occurred), 3 (arguing for presumption of no impairment when facilities at issue have been significantly deployed on a competitive basis). Similarly, we do not presume that if one carrier can enter the market without UNEs, there is no impairment.

312 *See, e.g.*, CompTel Comments at 62 (urging the Commission not to rely on a "simple count" of alternative facilities); GCI Comments at 19; Z-Tel Comments at 23; AT&T Reply at 41-43; NuVox Reply at 23; SBC Reply at 10 ("If competitive facilities already have been deployed, then *ipso facto* they can be deployed. That does not mean that the mere presence of a single competitive facilities in a particular market necessarily precludes a finding of impairment in that market."); Talk America Reply at 18; WorldCom Reply at 29.

313 *Cf.* Qwest Comments at 11-12.

314 *See* CompTel Comments at 72-73 (noting that many carriers that have self-deployed are now bankrupt or have left the market); Covad Comments at 16-18; *see also* Talk America Comments at 22 (noting that industry must mature before facilities-based competition will emerge).

315 *See* BellSouth Comments at 17, 23; Qwest Comments at 11 ("The fact of widespread CLEC entry without reliance on a particular UNE from the incumbent should be deemed to – and clearly does – establish that lack of access to that UNE under section 251 does not impair the ability of a CLEC to provide service."); SBC Comments at 27 ("That some CLECs are in fact providing service over their own facilities is *dispositive* evidence that carriers are not impaired without access to ILEC facilities.") (emphasis in original); Verizon Comments at 43-46 ("Thus, if some CLECs use non-ILEC facilities to serve particular types of customers or geographic locations, then no CLEC should be considered impaired without access to the relevant UNEs – not just with respect to the specific customers or locations served by the original CLECs, but with respect to all similar customers or locations [as well as where] circumstances are not strictly similar."); Verizon Reply at 38.

316 *See, e.g.*, Verizon Dec. 17, 2002 *Ex Parte* Letter, Attach. at 2; Letter from Brian J. Benison, Associate Director – Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-

not necessarily dispositive of a lack of impairment. And as we explain in detail below, the availability of non-UNE alternatives from incumbent LECs (such as tariffed services or resold retail services) has little bearing on our impairment analysis.[317]

95. Likewise, we disagree that evidence of alternative deployment is irrelevant unless access to those facilities is available to requesting carriers on a wholesale basis.[318] We examine whether wholesale suppliers exist, but our standard is not based solely on whether there is a wholesale market. Instead, we also consider the possibility of self-provisioning. We also disagree that deployment of alternative facilities is necessarily irrelevant unless carriers have been able to serve customers profitably over those facilities.[319] We may consider the extent to which carriers have been able to serve customers profitably, but we recognize that profitability can be affected by many factors other than those we examine for the "impair" analysis, such as whether there is overcapacity in the market,[320] whether facilities-based carriers are still in the process of deploying capacity,[321] and the scope economies involved in providing multiple services.[322]

96. On the other hand, if the marketplace evidence shows that new entrants have not widely deployed a particular kind of facility, we will consider the facts as some evidence that barriers to entry in that market for that element are preventing the deployment. We will not generally presume from lack of entry or lack of deployment,

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98, 98-147, Attach. at 2 (filed Jan. 29, 2003) (SBC Jan. 29, 2003 *Ex Parte* Letter). *But see* Letter from C. Frederick Beckner III, Counsel for AT&T, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Jan. 31, 2003) (AT&T Jan. 31, 2003 *Ex Parte* Letter) (arguing that a so-called "contestability" analysis that focuses on the presence of a single alternative on a specific route is insufficient to judge impairment).

317 *See infra* para. 0.

318 *See, e.g.*, Covad Reply at 13; *see also* NuVox Reply at 23, 28; Sprint Reply at 19; Talk America Reply at 18-20; Letter from Frederick W. Hitz, III, Director, Rates and Tariffs, General Communication, Inc., to William Maher, Chief, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147, 01-318, 98-56, 98-141 at 4, *in* Letter from John T. Nakahata, Counsel for GCI, to Marlene Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, 01-318, 96-56, 98-141 (filed Jan. 27, 2003) (GCI Jan. 27, 2003 *Ex Parte* Letter) (arguing that the wholesale market for inputs is the relevant market to consider in the impairment analysis).

319 *See, e.g.*, AT&T Reply at 42-43.

320 If more facilities-based carriers have entered the market than can be supported by market demand, creating overcapacity and generating low prices, none of the carriers may be profitable. However, self-provisioning has been demonstrated to be achievable, and with exit of one or more carriers, the remaining carriers may achieve profitability.

321 There may be clear evidence that carriers are profitably serving customers in a particular area, but have not achieved overall profitability because they are still in the process of expanding their business.

322 It can be difficult to determine the profitability of an individual product for a multiproduct firm. While the revenues obtained from a particular product may not completely cover the stand-alone costs of providing just that product, they may be sufficient to cover the incremental costs, such that selling the product adds to the firm's profitability. *See* WILLIAM J. BAUMOL, JOHN C. PANZAR & ROBERT D. WILLIG, CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE 351-56 (1988).

however, that there are barriers to entry in the relevant market,[323] or that any barriers cannot be overcome through means other than unbundling without further analysis. For example, the market may be nascent and therefore not mature enough to determine whether the lack of entry demonstrates impairment. We also consider the possibility that past unbundling policies may have discouraged the build-out of facilities. We further recognize that many factors contribute to a new entrant's decision where to place its facilities, and that new entrants may in some cases simply choose not to enter a particular market. We will not necessarily presume from that lack of entry that unbundling is warranted.[324]

97. **We also examine evidence that intermodal alternatives[325] can be used to provide telecommunications service. In appropriate instances, evidence of the deployment of intermodal alternatives informs our judgment on the "impair" factors described above, and in those circumstances we will give weight to deployment of intermodal alternatives in our analysis. Specifically, we consider whether these intermodal alternatives permit a requesting carrier to serve the market, either through self-provisioning or by obtaining capacity on a wholesale basis.**[326] We take these alternatives into account for several reasons. First, the Act expresses no preference for the technology that carriers should use to compete with the incumbent LECs. Second, we do not want to prejudice market participants' business decisions about whether to deploy alternative facilities by basing our unbundling rules on the presence or absence of any certain technology. Third, in some instances, the presence of intermodal alternatives can be just as probative of a lack of impairment as the presence of traditional wireline "telephone" deployment. The fact that an entrant has deployed its own facilities – regardless of the technology chosen – may provide evidence that any barriers to entry can be overcome. This approach is consistent with *USTA*'s admonition

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[323] *See* Verizon Comments at 45, 60-61; SBC Reply at 47 ("To the extent competitive facilities have not been deployed in a particular market, therefore, the Commission must attempt to determine why, and it must differentiate between true impairment and factors that have nothing to do with impairment.").

[324] *See* Qwest Comments at 13; BOC Shelanski Decl. at paras. 4, 42; BOC Shelanski Reply Decl. at para. 25.

[325] By "intermodal," we refer generally to facilities or technologies other than those found in traditional telephone networks. These include, for example, traditional or new cable plant, wireless technologies (satellite, mobile, and fixed), power line (electric grid) technologies, or other technologies not rooted in traditional telephone networks.

[326] Many commenters have urged us to take services provided over intermodal alternatives into account. *See* Verizon Oct. 16, 2002 *Ex Parte* Letter at 4 ("In determining whether an element meets the standard for unbundling, the Commission must consider the full range of technologies by which that element's *function* could be performed.") (emphasis in original); *see also* Alcatel Comments at 17-18; Qwest Comments at 6-8, 15; USTA Comments at 4-5; Verizon Comments at 46-51; BOC Shelanski Decl. at para. 43; AT&T Reply at 57 ("[T]he Commission must consider whether substitute services that are offered outside the ILECs' networks have led to the profitable provision of service by multiple providers . . . ."); Qwest Reply at 16-17; BOC Shelanski Reply Decl. at para. 23; Qwest Farrell Reply Decl. at para. 18. *But see* Moline and CCG Comments at 8-11 (urging Commission not to give too much weight to intermodal competition); Sprint Comments at 12-13 (arguing that even where intermodal alternatives are available, unbundling may be necessary to promote robust competition); Nu Vox Reply at 21-22.

that we should consider intermodal competitors as relevant to our analysis.[327] Just as with regard to the deployment of new traditional facilities, however, we do not find the presence of intermodal alternatives dispositive in our impairment analysis,[328] as some commenters suggest.[329] We also disagree with commenters that suggest that deployment of intermodal alternatives is irrelevant if the facilities are not available to requesting carriers on a wholesale basis,[330] for reasons discussed in the preceding paragraphs. As we evaluate evidence of intermodal deployment, we will consider to what extent services provided over these intermodal alternatives are comparable in cost, quality, and maturity to incumbent LEC services.[331]

98. **In some cases, the differences between intermodal alternatives and traditional wireline deployments may reduce the weight we give to the deployment of alternatives. For example, some carriers relying on intermodal alternatives have not needed to overcome the same kinds of barriers as new entrants that start without any facilities at all. Cable telephony and cable modem service, for example, have developed because cable operators have been able to overlay additional capabilities onto networks that they built for other purposes, often under government franchise, and therefore have first-mover advantages and scope economies not available to other new entrants, which lower their incremental costs of providing the additional services.[332] Similarly, we recognize that some intermodal technologies will only be available to one or a few firms due to legal restrictions, such as spectrum licensing requirements, that may limit the number of firms that can use a given technology in one geographic area. When an intermodal technology is limited in availability to only one or a few telecommunications carriers – either because of the historical economic characteristics of their providers or legal restrictions – we will consider whether that technology contributes to a wholesale market in accessing the customer. We may give less weight to intermodal alternatives that do not contribute to the creation of a wholesale market in accessing**

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[327] *See USTA*, 290 F.3d at 429.

[328] *See supra* . . . 5.

[329] *See, e.g.*, Qwest Comments at 6-9; Verizon Comments at 46-48.

[330] *See* ALTS *et al.* Comments at 39-40; ASCENT Comments at 26; UNE-P Coalition Comments at 19; *see also* Allegiance Reply at 21; ASCENT Reply at 13; Covad Reply at 13. *But see* Qwest Reply at 16-17. We also address this argument in more detail *infra* . . . We also disagree that intermodal alternatives should not be considered because "CLECs desire to offer wireline service, not wireless service or cable telephony." *See, e.g.*, ASCENT Reply at 13. As explained above and as the *USTA* decision explained, we look at alternatives for whether they provide comparable service, not the same technology. *See USTA*, 290 F.3d at 429.

[331] *See* Allegiance Reply at 24-25. Our analysis is necessarily based on the current technical capabilities, economic characteristics, and patterns of use of intermodal alternatives. These facts are likely to change going forward as these and other technologies develop. The changes may affect future impairment determinations.

[332] *Cf.* AT&T Reply at 34 (arguing that the presence of a cable competitor has *no* relevance to the impairment analysis).

the customer or do not provide evidence that self-deployment of such access is possible to other entrants. In addition, if the record evidence shows that there are limitations on the number or types of customers that can be served by a particular technology, we will consider whether an entrant could use this technology profitably to target only those customers that can be served by the alternative technology.

99. We will also give consideration to cost studies, business case analyses, and modeling if they provide evidence at a granular level concerning the ability of competitors economically to serve the market without the UNE in question. While these are useful tools for analysis, we may give this evidence less weight than actual marketplace evidence for several reasons. First, as stated above, actual marketplace evidence shows whether new entrants, as a practical matter, have surmounted barriers to entry in the relevant market. Second, these studies are generally based on estimates of costs and revenues that can be difficult to verify, and thus are more easily manipulated by the advocates in this proceeding. Third, there may be issues and factors that affect a competitor's ability to enter that are difficult to foresee (such as unexpected costs, delays, revenue streams, or new niche products). Thus, there will be uncertainty concerning the existence of such factors when examining these studies, while examination of actual marketplace evidence will reveal whether such factors exist and are significant.

100. In conducting our impairment analysis, we recognize that decisions on whether to enter are based not just on the cost of entry but also on the revenues to be gained.[333] Thus, we will consider, where provided, evidence of the revenue opportunities available to those carriers that provide services over the relevant facilities, keeping in mind that competitors are able to choose which markets to enter and to avoid unattractive markets.[334] We consider *all* the revenue opportunities that a competitor can reasonably expect to gain over the facilities, from providing all possible services that an entrant could reasonably expect to sell,[335] taking into account limitations on entrants' ability to provide multiple services, such as diseconomies of scope in production, management, and advertising.[336]

101. In our impairment analysis, we examine both whether new entrants can provide retail services over non-incumbent facilities and whether new entrants can

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[333] *See, e.g.*, AT&T Comments at 36; CompTel Comments at 71 (urging the Commission to take profitability into account in the analysis of self-provisioning); Talk America Comments at 15 (noting that financial viability depends on the difference between retail rates and the cost of providing service).

[334] *See USTA*, 290 F.3d at 423 (urging the Commission to consider high retail rates as they relate to revenue opportunities); Verizon Comments at 42.

[335] *See* Verizon Comments at 57.

[336] Diseconomies of scope are the opposite of economies of scope. Diseconomies of scope occur when the cost of producing a good rises when a firm attempts to produce a second good. *See* John C. Panzar, *Technological Determinations of Firm and Industry Structure*, *in* 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 16 (Richard Schmalensee and Robert Willig, eds., 1989).

provide wholesale services over non-incumbent facilities.[337] Rather than providing the retail services itself,[338] a wholesaling carrier will be providing service to other carriers that will provide, individually or as a group, the range of services that customers want, at market-based prices. Thus, the wholesale carrier's sales and revenues are dependent on the services the retail carriers will demand and the prices they are willing to pay, which in turn depend on the revenues they gain from the retail services provided.[339] Wholesale carriers may not be limited by the same factors that limit the likely market share of carriers providing retail service, since they will be able to serve multiple carriers' needs. Thus, if advertising or diseconomies of scale or scope limit individual carriers' market shares and product lines, which could make self-deployment of facilities uneconomic, a wholesale carrier may be able to serve multiple carriers and overcome these limits in the aggregate.

102. We reaffirm our prior conclusion in the *UNE Remand Order* to afford little weight to evidence that requesting carriers are using incumbent LEC tariffed services as relevant to our unbundling determination.[340] Specifically, many commenters have urged us to find that requesting carriers are not necessarily impaired if they can use incumbent LEC resold or retail tariffed services, such as special access, to provide their retail service.[341] We decline to adopt this position. We conclude that it would be inconsistent with the Act if we permitted the incumbent LEC to avoid all unbundling merely by providing resold or tariffed services as an alternative.[342] Such an approach would give the incumbent LECs unilateral power to avoid unbundling at TELRIC rates simply by voluntarily making elements available at some higher price. Because the Act contains three modes of entry, we cannot find an approach that would so easily remove one mode from the Act to be a reasonable reading of Congress's intent.[343] Indeed, such an approach would also be contrary to the Act's requirement that unbundled facilities – facilities without which serving the market becomes uneconomic – should be priced at cost-based

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[337] The wholesale provision of services would not be limited to exchange access services, but would include all access services. *See infra* Part V.B.2.c.

[338] This implies the carrier is vertically integrated, providing both wholesale and retail service itself. The product it provides from its upstream wholesale service is then combined with other inputs to provide downstream retail service.

[339] The demand for the wholesale carrier services is therefore a derived demand from retail sales.

[340] *See UNE Remand Order*, 15 FCC Rcd at 3732-34, paras. 67-70; *see also* AT&T Comments at 38-39; ATTWS Comments at 14-16; CompTel Comments at 64-65; Allegiance Reply at 30-31; AT&T Reply at 56.

[341] *See* SBC Comments at 27-29; Verizon Comments at 51-55; BOC Shelanski Reply Decl. at para. 21; Verizon Dec. 17, 2002 *Ex Parte* Letter, Attach. at 8-10.

[342] *UNE Remand Order*, 15 FCC Rcd at 3732-33, para. 67.

[343] *See also Iowa Utils. Bd.*, 120 F.3d at 809-10 (rejecting a similar interpretation urged by incumbent LECs that would have given them the freedom to circumvent the unbundling obligations of section 251(c)(3) by choosing to offer network elements as services).

rates[344] and our determination that TELRIC is the appropriate methodology for determining those rates – an approach to rates that the Supreme Court has affirmed.[345] In addition, resold and retail tariffed offerings present different opportunities and risks for the requesting carrier than the use of UNEs or non-incumbent LEC alternatives.[346] Also, forcing requesting carriers to rely on tariffed offerings would place too much control in the hands of the incumbent LECs, which could subsequently alter their tariffs and thereby engage in a vertical price squeeze.[347]

103. Likewise, we disagree with commenters that argue that the presence of a tariffed offering that is subject to substantial competition in the retail market should preclude an impairment finding with respect to the UNEs used to provide the relevant service.[348] As explained in greater detail in Parts V.B.1.d(iii) and V.B.2.c below, our unbundling analysis considers service, but does not examine whether the relevant market is competitive as part of the unbundling analysis.

104. Similarly, as we found in the *UNE Remand Order*,[349] we do not find that wherever incumbent LECs have received pricing flexibility, we should not unbundle the relevant network elements.[350] Our pricing flexibility rules go to protecting consumers from anticompetitive pricing, which is not the same as our unbundling rules, which go to asking whether entry into a market is economic and to serving a host of statutory goals beyond protecting consumers from anticompetitive pricing. Thus, the "impair" test and the test for pricing flexibility are different, reflecting these different aims. Moreover, our unbundling analysis is far more granular, in many cases, than our pricing flexibility analysis. This is because competition in some parts of a market may be sufficient to constrain prices, but insufficient to demonstrate a lack of impairment. In the discussions of particular elements below, we consider evidence that competitors have collocated or deployed alternative facilities as highly relevant to our impairment analysis, but we will not presume that a grant of pricing flexibility necessitates a finding of lack of impairment.

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[344] *See* 47 U.S.C. § 252(d)(1)(A)(i).

[345] *See Verizon*, 535 U.S. at 497-528.

[346] *UNE Remand Order*, 15 FCC Rcd at 3733, para. 68.

[347] *UNE Remand Order*, 15 FCC Rcd at 3733, para. 69. SBC, for one, points out that the Commission could evaluate tariffed services and refuse to consider as alternatives those that it finds to be in place merely to avoid the unbundling rules, but this misses the points described in the text. *See* SBC Comments at 28-29.

[348] *See, e.g.*, Verizon Comments at 53.

[349] *See UNE Remand Order*, 15 FCC Rcd at 3756-57, paras. 131-32, 3849, para. 341 n.673.

[350] *See* Verizon Comments at 53-54; Verizon Dec. 17, 2002 *Ex Parte* Letter, Attach. at 6-8.

§ 51.5 Terms and Definitions.

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Intermodal. The term intermodal refers to facilities or technologies other than those found in traditional telephone networks, but that are utilized to provide competing services. Intermodal facilities or technologies include, but are not limited to, traditional or new cable plant, wireless technologies, and power line technologies.

TRO ¶ 97, footnote 325.

By "intermodal," we refer generally to facilities or technologies other than those found in traditional telephone networks. These include, for example, traditional or new cable plant, wireless technologies (satellite, mobile, and fixed), power line (electric grid) technologies, or other technologies not rooted in traditional telephone networks.

TRO ¶ 447, footnote 1365

We found significantly more probative the evidence that in areas where competitors have their own switches for other purposes (*e.g.*, enterprise switches), they are not converting them to serve mass market customers and are instead relying on unbundled loops combined with unbundled local circuit switching. Given the fixed costs already invested in these switches, competitors have every incentive to spread the costs over a broader base. Their failure to do so bolsters our findings that significant barriers caused by hot cuts and other factors make entry uneconomic.

TRO ¶ 500

For the purposes of these triggers, we find that states shall not evaluate any other factors, such as the financial stability or well-being of the competitive switching providers.[1554] Competing carriers in Chapter 11 bankruptcy protection are often still providing service. Regardless of their financial status, the physical assets remain viable and may be bought by someone else and remain in service.[1555] We note that requiring states to determine the financial ability of competitive wholesale providers to provide service in the future could hamper economic recovery efforts of companies in financial distress. **The key consideration to be examined by state commissions is whether the providers are currently offering and able to provide service, and are likely to continue to do so.**[1556]

[1554] For the potential deployment analysis, however, the state commission may consider financial evidence relating to the difficulty in serving the mass market by existing competitive switch providers.

[1555] BOC UNE Fact Rebuttal Report at 20-24, 41-43.

[1556] For instance, states should review whether the competitive switching provider has filed a notice to terminate service in that market.

TRO ¶ 501

We determine that – subject only to the limited exception set forth below – a state must find "no impairment" when three or more unaffiliated competing carriers each is serving mass market customers in a particular market with the use of their own switches.[1557] We set the number of competitive facilities at three for several reasons. **First, we choose three self-provisioners as the appropriate threshold in order to be assured that the market can support "multiple, competitive" local exchange service providers using their own switches.**[1558] Second, setting the trigger at three competitive facilities takes into consideration the likelihood that self-providers will not offer their service for wholesale, based on the evidence that local exchange service providers have generally not shown an interest in providing wholesale services, in contrast to the wholesale trigger, described below, which is met if there are two actual wholesalers.[1559] Finally, we believe that the existence of three self-provisioners of switching demonstrates adequately the technical and economic feasibility of an entrant serving the mass market with its own switch, and indicates that existing barriers to entry are not insurmountable.[1560]

[1557] Competitors with their own switch that are providing service only on a wholesale basis should be counted for this test. Thus, for example, this test will be satisfied if there are three carriers providing service to mass market voice customers using their own switch, with two of the carriers providing only retail service, and one providing only wholesale service.

[1558] We therefore deny Bell Atlantic's petition seeking the elimination of unbundled switching in all geographic markets for all customer classes where a single competitive switch has been deployed. Verizon Feb. 17, 2000 Petition for Reconsideration at 9-11.

[1559] *See* Talk America Reply at 19; SWCTA Comments at 8-9; SWCTA Reply at 7; Supra Comments at 36; Navigator Comments at 6; Eschelon Comments at 28-29.

[1560] **We recognize that when one or more of the three competitive providers is also self-deploying its own local loops, this evidence may bear less heavily on the ability to use a self-deployed switch as a means of accessing the incumbent's loops.** Nevertheless, the presence of three competitors in a market using self-provisioned switching and loops, shows the feasibility of an entrant serving the mass market with its own facilities.

TRO ¶ 508 (excerpt)

States should first examine whether competitors are already using their own switches to serve voice customers in the relevant market. We determine that to the extent that there are two wholesale providers or three self-provisioners of switching serving the voice *enterprise* market, and the state commission determines that these providers are operationally and economically capable of serving the *mass* market, this evidence must be given substantial weight by the state commissions in evaluating impairment in the mass market. We find the existence of switching serving customers in the *enterprise* market to be a significant indicator of the possibility of serving the mass market because of the demonstrated scale and scope economies of serving numerous customers in a wire center using a single switch. **Although switches serving the enterprise market do not qualify for the triggers described above**, we believe that, after implementation of a batch cut process, switches being used to serve the enterprise market are likely to be employed to serve the mass market as well, and that the state commission should investigate the feasibility of this. . . . .

TRO ¶ 441

Additionally, the BOCs' suggestion that our analysis should treat switches deployed to serve large enterprise customers exactly the same as those deployed to serve mass market customers ignores the substantial modifications, and attendant costs, necessary to serve mass market customers with an enterprise switch. For example, in order to enable a switch serving large enterprise customers to serve mass market customers, competitive LECs may need to purchase additional analog equipment, acquire additional collocation space, and purchase additional cabling and power.[1353] **Thus, while we agree that deployment of an enterprise switch is one piece of evidence relevant to the possibility of serving mass market customers – and, indeed, our impairment analysis takes such deployment into account, as discussed below – the fact remains that competitors using their own switches are currently serving extremely few mass market customers, through enterprise switches or otherwise.**[1354]

[1353] *See, e.g.*, WorldCom Nov. 18, 2002 Transition to UNE-L *Ex Parte* Letter at 7. WorldCom states that in order to modify one of its switches in Manhattan serving enterprise customers to serve the mass market, WorldCom would be required to: purchase and install analog-capable equipment; increase the existing collocation cage space by 200 square feet; and pay Verizon for additional cabling and power. *Id.*

[1354] **The dissents' assertion that enterprise switches should be considered in our mass market triggers ignores these substantial differences between the switches serving the different markets.** *Chairman Powell Statement* at 6; *Commissioner Abernathy Statement* at 4-5. Most importantly, as explained above, unlike mass market loops, facilities used to serve enterprise customers are typically not pre-wired to incumbent LEC switches, allowing competing carriers to avoid the costs and service disruptions associated with hot cuts. The dissents also ignore the substantial differences in the mass market and the enterprise market – such as the fact that enterprise customers generally offer increased revenue opportunities and are more willing to enter long-term contracts than are mass market customers. These differences elsewhere led them to agree to "conduct separate . . . impairment analyses based on [among other things] two relevant customer classes – the mass market and the enterprise market." *See supra* . . . Our loops discussion, for example, conducts an entirely separate analysis and arrives at different conclusions for loops used to serve mass market customers than it does for loops used to serve enterprise customers. *See supra* Part VI.A. While we do not make the same distinction for transport, that is only because transport is used to aggregate

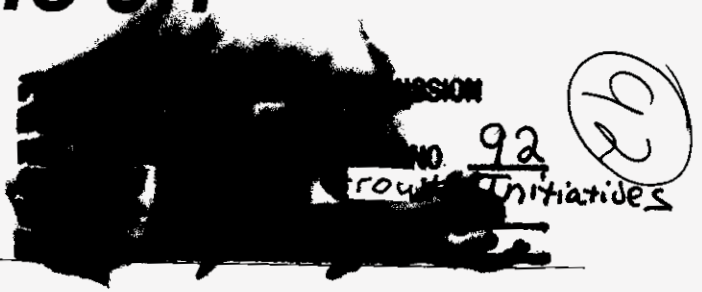
significant volumes of traffic, and neither the economics nor the operations significantly differ for mass market and enterprise customers. As we indicate, however, that is an exception to the practice adopted by the Commission and explicitly approved by both the dissenters.

verizon

Telecom

Lawrence T. Babbio Jr.

January 29, 2004

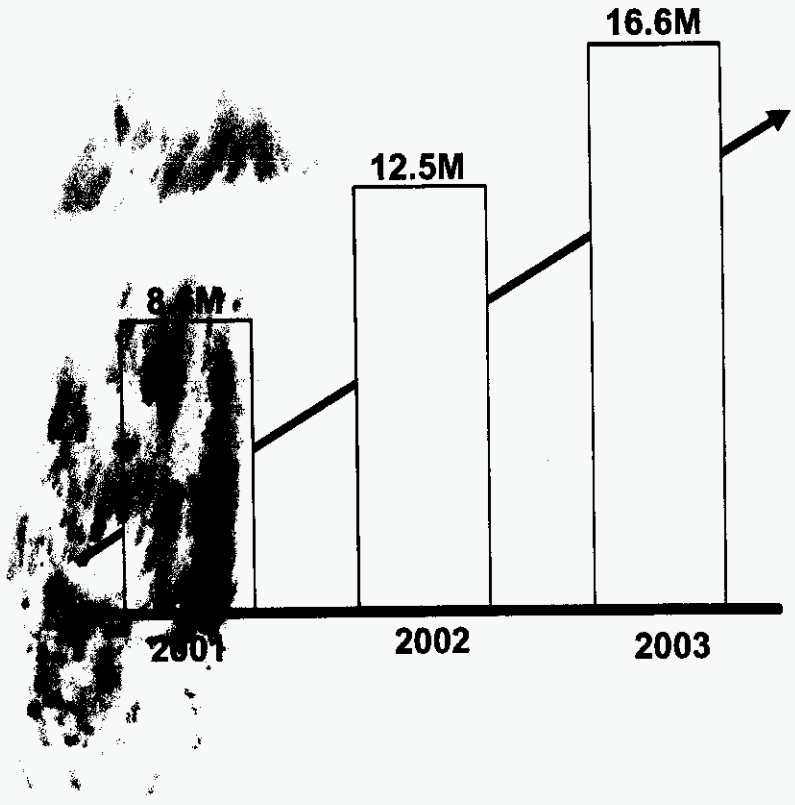


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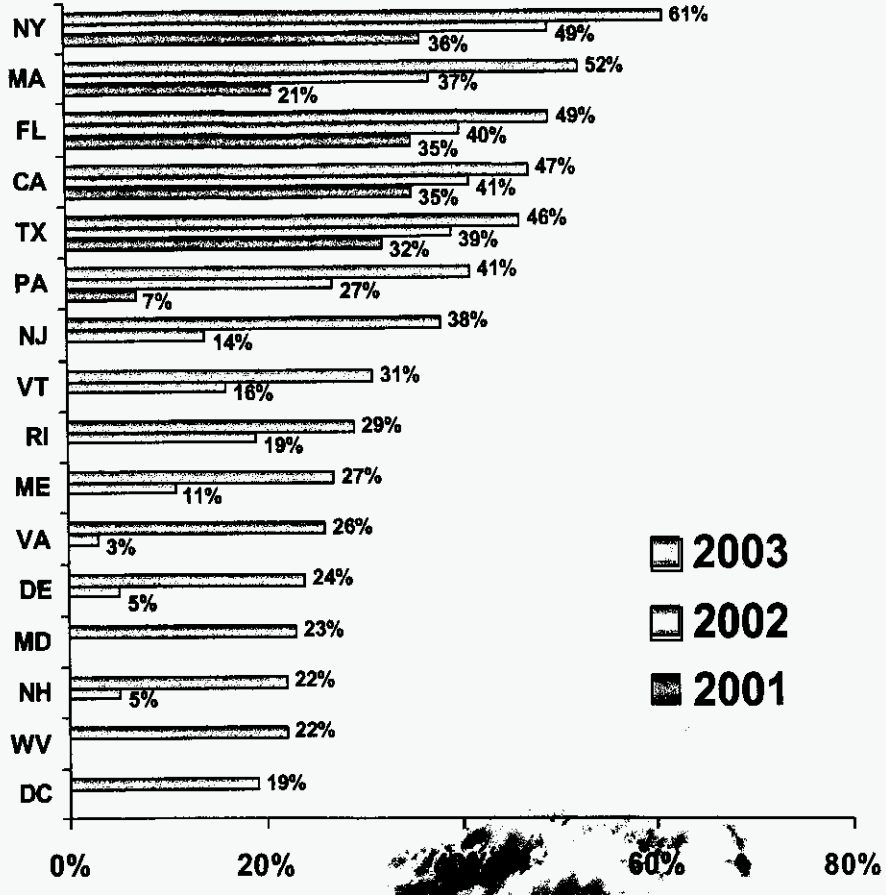
Long Distance

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Lines in Service



Consumer LD Line Penetration of VZ Switched Access Lines



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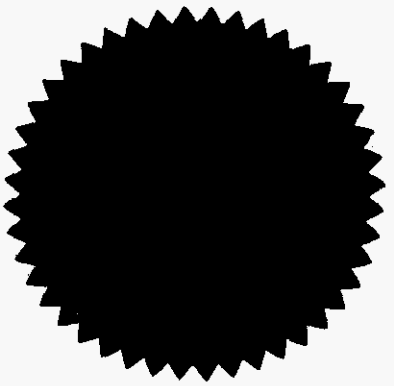
BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO.030851-TP

In the Matter of

IMPLEMENTATION OF REQUIREMENTS ARISING FROM FEDERAL COMMUNICATIONS COMMISSION'S TRIENNIAL UNE REVIEW: LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS.

_____/



DEPOSITION OF:	PAMELA TIPTON
TAKEN AT THE INSTANCE OF:	FCCA
DATE:	February 24, 2004
TIME:	Commenced at 6:35 p.m. Concluded at 8:00 p.m.
LOCATION:	Gerald L. Gunter Building Room 362 2540 Shumard Oak Boulevard Tallahassee, Florida
REPORTED BY:	NANCY P. VETTERICK, RPR Notary Public, State of Florida at Large

ACCURATE STENOTYPE REPORTERS, INC.
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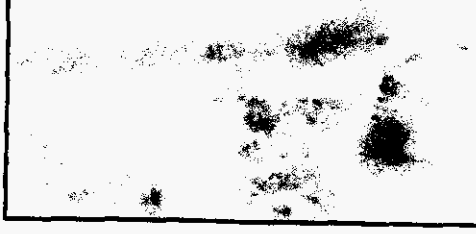
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S T I P U L A T I O N S

IT IS STIPULATED that this deposition was taken pursuant to notice in accordance with the applicable Florida Rules of Civil Procedure; that objections, except as to the form of the question, are reserved until hearing in this case; and that reading and signing was not waived.

IT IS ALSO STIPULATED that any off-the-record conversations are with the consent of the deponent.



P R O C E E D I N G S

MR. MAGNESS: Now, I'm going to represent that the normal stipulations are in effect --

MS. WHITE: Yes.

MR. MAGNESS: -- for this deposition.

MS. WHITE: I would, also, like to represent that the deposition is limited to the response, supplemental response, to the staff's fourth request for production and the AT&T/MCI subpoena.

THE WITNESS: Item Number 4 on the subpoena and POD Numbers 29 and 30 in the staff's fourth requests.

MR. MAGNESS: Okay. And just to get clear, for the record on what those documents are that we're talking about, one is entitled attachment to subpoena, Item Number 4, proprietary, and we'll admonish the witness to not reveal what's proprietary if we can avoid it.

If we do, we'll close the deposition or whatever we need to do, and that would be Bates numbered AT&T/MCI subpoena 00380 and 003081.

Thereupon,

PAMELA TIPTON

was called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MAGNESS:

Q Ms. Tipton, were you the responsible witness for the filing of this attachment to subpoena Item Number 4.

A Yes, I was.

Q It was filed on February 23rd, 2004; is that right?

A That's correct.

Q And then the second item we've referenced is BellSouth's response to staff's fourth request for production. This is supplemental response Item Number 29, attachment 29-1, and if you could affirm for me, if I'm correct, that it is Bates Number BST000280 through BST000285, and I have it here if you want to look at it.

A That's correct.

Q Okay. Then the third item is, again, the same staff's fourth request for production, supplemental response Item Number 30, attachment 30-1, and it is numbered BST000286 through BST000295.

A Yes. It's easier for me to look at this one. That's correct.

Q Finally, we have supplemental response, again, to the staff's fourth request for production. This one

is attachment 30 -- it's rather a response to Item Number 30. It's attachment 30-2, and it is numbered BST000296 through BST00412.

A Correct.

Q And I think I'll try to just talk about each one of these in order unless that doesn't make sense in how they were put together, or there's some reason not to. Okay?

A Okay.

Q So let's address first the attachment to the AT&T/MCI subpoena. This response, I take it by the numbering on the bottom, should be added to the 3079 pages of BellSouth's responses to the subpoena that have already been filed, correct?

A That's correct. I just do want to point out this was responsive specifically to subpart A of the subpoena request.

Q Okay. To Item 4, subpart A?

A Part A.

Q Could you read the question you meant to be answering?

A Yes.

Q Great.

A It may take me just a second to find it.

Q Sure.

A I'm going to read the whole question, and then I will read subpart A.

Q I would appreciate it. Thank you.

A Refer to the direct testimony of Pamela A. Tipton at page 16, line 20, through page 17, line 6, and Exhibits PAT-6 and PAT-7. Please provide all information, quote, related to the actual deployment that exists in seven of the ten markets, end quote, including, at a minimum, subpart A, the identity of the switches claimed to be providing service to mass market customers, by owner, location and CLLI code.

Q And just to describe it, this exhibit consists of a column that says, state, and it's all Florida, correct?

A Correct. Well, I say correct. Let me double-check just to make sure. I don't have my copy open.

Q I'm looking at page 3081.

A That is correct.

Q And then switch CLLI with a list of numbers; is that right?

A That's correct.

Q And then CLECs are listed, and it is the identity of the CLEC that's claimed confidential, correct?

A Correct.

Q From the way you describe what you've been answering, are all of the switches and CLECs, who operate them, named here the subject of your potential deployment arguments as opposed to your mass market self-provisioning trigger arguments?

A Pursuant to the question, what we did in putting the exhibit together is using the CLECs that we had identified in our potential deployment analysis, we then identified each of the switches they had provided in response to our discovery as providing qualifying service in Florida because --

Q Let me just ask you one thing. When you say our discovery, could you be a little more specific which discovery?

A The discovery BellSouth issued to the CLECs.

Q Thank you.

A Because we did not ask CLECs to identify, by specific customer location, which of their switches provided that particular service; so this lists all the switches that they asserted were providing qualifying service.

Q Are you asserting through this data, I'll call it, that these CLECs are or are not satisfying the self-provisioning trigger?

A In this particular response, we were addressing the potential markets, and so the question that we were asked in the subpoena -- and I believe, also, is a part of AT&T's discovery issue to BellSouth -- was specifically focusing on that portion of the testimony, my testimony, addressing the potential markets.

So this response here was only referencing those CLECs which had identified switches they had deployed, and so we listed those switches. These are the CLECs that we identify in our potential deployment.

Q Is there anything on the document, itself, that would indicate it concerns only potential deployment versus triggers?

A Not on the document. We were just responding to the question we were asked.

Q Okay. Is there anything in the document that indicates what question you were answering besides Item Number 4?

A Yes. In the written supplemental response, it says, second supplemental response A, the information in response to this request is attached. It goes on to say additional things about proprietary information.

Q Okay. So it's your testimony that this data and this response concerns potential deployment

arguments as opposed to self-provisioning trigger arguments?

A Correct.

Q And I want to read you something from your deposition the other day, and just to be sure of the answer. Well, I shouldn't say be sure. I should ask you if the answer is the same or different based on this addition to the record of the response to Item Number 4.

I am looking at page -- I believe it's at page 135.

MS. WHITE: Page 135 on the bottom or the actual page 135?

MR. MAGNESS: I believe I was counting by --

MS. WHITE: That one? Okay. Thank you.

THE WITNESS: Okay.

BY MR. MAGNESS:

Q Ms. Tipton, your counsel has provided you a copy of the deposition.

A Correct.

Q You have better counsel than I do since I don't seem to have that in front of me.

Please correct me if I have the page numbering off, but I believe at 135 and 136, I'm just going to read you a quick series of questions and answers that we engaged in the other day.

"QUESTION: Okay."

I noted that I begin most all my questions with okay, but that's the beauty of a transcript. This is at line 23.

"QUESTION: Okay. Well is it your claim that that's a misrepresentation, or is it having to do with what he looked at in the data?"

Do you see where I am?

A Yes.

Q "I'm trying to understand what the error you're alleging is and how he could correct it."

"ANSWER: He did not use the totality of the data that was available to him in presenting facts about the triggers."

"QUESTION: And did you?

"ANSWER: Did I use the totality of the data?"

Counsel articulately responded "uh-huh".

"ANSWER: Yes, I did. To the best of my knowledge, I used all of the data that was available to me in conducting our trigger analysis."

"QUESTION: And just to summarize, the totality of the data would include the responses to the subpoena, Number 1, and, Number 2, which are reflected in the 3079 pages we've been talking about this

afternoon, and Number 2, the CLEC provided information that you got in discovery served by BellSouth?"

"ANSWER: That's correct."

Okay. Have I read that accurately?

A Yes, you have.

Q Is there anything that would cause you to change your testimony based on this filing of the response to attachment -- to subpoena Item Number 4?

A No.

Q Now, let's talk about attachment to the staff request. Call it attachment to interrogatory, Number 29. Just to review, that's the pages 280 through 285, and let me know when you've got it there to look at?

A Okay.

Q Now, is this particular attachment, that is, attachment 29-1, claim to be confidential or proprietary?

A No. It is not.

Q And could you describe for me what this -- well, what question you were answering when you provided this data?

A Yes. The question is, please provide BellSouth serving area geographic markets with UNE Zones 1 through 3, divided by CEA, subdivided with wire

centers.

Q Okay. What you have here is a listing of CEA/zone, and then you have a listing of wire centers by the CLLI code?

A That's correct.

Q Is this information that was not provided prior to the filing of this attachment?

A The information was previously filed with the original response which I do not recall when the original response was filed. This was a supplemental response which, just administratively, we thought had already been made and discovered we had not. It was originally filed on January 8th.

Q I'm sorry. If I could ask you --

A Sure.

Q -- was your response filed January 8th, or was it filed January 23rd?

A The original? I don't know.

Q My understanding, from looking at the documents, is January 8th is the date of the request.

A Oh, of the request. Okay. I'm sorry.

Q Okay.

MS. WHITE: She was smiling at her lawyer, and that was my mistake.

THE WITNESS: I will take your word that it

was it was filed on the 23rd. I don't have anything to tell me that, but what I will tell you is that we did file a response originally, and the -- BellSouth had identified -- I can't recall the actual time frame -- that there had been four wire centers that had never been allocated to a CEA in UNE zone.

We quite frankly thought this particular response had already gotten revised because we filed revised testimony in Mr. Stegman's and several others and refiled some exhibits of mine, as a result, and so we just had to supplement our response to include those four wire centers into this particular POD response.

BY MR. MAGNESS:

Q Okay.

A At the same time, we amended the response to the actual question, our written response, because the initial allocation of these four wire centers, one of them got misplaced which erroneously created this magical 24th market or something -- I mean, 32nd market, excuse me, which was not correct.

We discovered it the very day that I had the testimony -- I mean, the response had been filed, and it was too late. It had already been filed, so we

corrected that when we filed our supplemental. There's 31 markets. There always has been. It was just my mistake.

Q Can you identify for us the four wire centers that changed?

A Yes. I sure can.

Q Okay.

A If you will first go to Ft. Lauderdale, Florida, Zone 1 on the list, it's on page 1 of 5 of the attachment or Bates Number 281, the first one, the actual first CLLI code listed is one of the ones added, and that's FTLDFLAP.

Q I'm sorry. Is that in Zone 1 or Zone 2?

A Zone 1. The second one is the next to the last wire center in the same Ft. Lauderdale, Zone 1. That's PMBHFLNP.

Q That one was added?

A Yes.

Q Okay.

A The next one that was added is in Miami, Zone 1. That's on Bates Number page 283. It's the third wire center, MIAMFLAG, and then the fourth one was in Miami Zone 3. It's the second CLLI code HMSTFLAF.

Q And is it my understanding that you filed an errata to your testimony today?

A Yes, I did. Yesterday? I think it was yesterday.

Q Within the last couple of days?

A Yes.

Q You had previously filed an errata before, right?

A Yes.

Q Let me ask you this about this one, but I guess about all of them. Is there anything that was reflected in your recent errata that was due to any changes that were made in these documents?

A No.

Q Then let's look at attachment to interrogatory Item Number 30, attachment 30-1. The documents get progressively longer as we go. This one is 286. That is Bates Number page 286 through 295, and this document is -- is this document claimed proprietary?

A No. It is not because the Commission asked us to respond to this request using the CLEC Number from my Exhibit PAT-5, so it doesn't actually have CLEC names on it.

Q Could you tell us what question here you were responding to?

A Sure. For the purpose of the following request, please refer to the direct testimony of

BellSouth Witness Tipton, page 10, line 1, through page 11, line 21. Please provide the database or spreadsheet sorted by BellSouth wire center, CLEC number (as indicated on PAT-5), and customer location, indicating quantity of DSO lines per location.

Q Is there anything in this document that you relied upon in creating PAT-5?

A No.

Q Or any of the revisions to PAT-5 that have occurred since your original testimony?

A No.

Q And how do you interpret the request the Commission made as well as tell me what you mean by your answer when you say number of locations at wire center?

A This indicates that, for example, using the first line of data for wire centers --

Q Just to be clear for the record --

A Sure.

Q I'm sorry to interrupt. -- let's say that's page 287. The market is Daytona Beach, Florida, Zone 2. The wire center is DELDFLMA, right?

A That's correct.

Q Okay.

A And CLEC Number from Exhibit PAT-5 is 2. The number of locations at wire center is indicated as 26.

That would be the number of mass market locations using BellSouth's mass market threshold definition.

Q Now, I believe when we talked about some of the data in the first 3000-some pages in response to the subpoena at your deposition, we talked about if you wanted to add up the number of mass market lines using the BellSouth definition at a particular wire center, you would multiply, in this case, the two times the 26; is that right?

A Actually you're referring to a different set of data that was provided in this case. It's just a reference.

Q I'm sorry. The number of the CLEC --

A Yes.

Q I guess you wouldn't do that, would you?

MS. WHITE: You could, but it would not be very helpful.

MR. MAGNESS: How far can we back up?

MS. WHITE: Too late.

BY MR. MAGNESS:

Q So it's your claim that we shouldn't multiply these numbers, is it?

A That is correct.

Q All right. All right then. We're not going to. So when you say number of locations at a wire

center, what you're communicating here is if I was to go look up on PAT-5 who CLEC Number 2 is in the Daytona Beach, Florida, Zone 2 wire center in that wire center name we've read before it, would show that CLEC 2 has 26 "what" at the wire center?

A Twenty-six locations that are considered mass market locations served from that wire center, and let me clarify, too.

Q Okay.

A Exhibit PAT-5 only lists the market and the CLECs that are providing service in that market. It doesn't actually list locations, 'cause you had started your question with if we go to Exhibit 5 and we look at, et cetera, et cetera, et cetera, we would find this CLEC with this wire center with this number.

PAT-5 does not go into that detail.

Q So what we find in PAT-5 is the key to what the CLEC number is?

A Yes, exactly.

Q Okay. Understood. So when you say a CLEC has locations at a wire center, does that equate to -- well, does that equate to a DS-0 UNE loop at the wire center?

A A location could be -- well, a location equates to an individual physical address; so 101 Smith Street, 225 Maryland Avenue has 26 separate locations

that it is serving from that wire center. Now, those locations could have one line each.

They could all have two lines each. They could have three lines each. They could have some combination of one, two, or three lines.

Q So we don't know, from the number of locations, whether the location is being served by a DS-0 or a DS-1.

A No. Not from this data set, you do not.

Q So location refers to the customer end user location.

A Yes.

Q Was data, in this format, provided in a prior response to staff's request?

A Yes, it was.

Q Was that, also, filed, to the best of your recollection, January 23rd?

A To the best of my recollection. Yes.

Q Tell me why you filed a supplemental.

A For the same reason as the previous exhibit. We needed to add the four wire centers into the loop to be reflected in the trigger analysis. In addition, in a previous discovery request, the staff had asked us if we had, in our initial trigger analysis, compared the residential and the business locations to ensure that

the combination of those did not result in an individual location having both residential and business exceeding our three-line threshold.

It did cause a few select number of locations to drop out, and so we supplemented the response to reflect that.

Q Well, first thing, if you could show me what's different between this and the prior response.

A I don't have that available. What I can tell you is I went through and looked at the first page, and actually I looked at -- let me find my original response. Actually I looked at several pages. For example, in Daytona Beach, Zone 2, it appears that we deleted a CLEC from the trigger analysis.

Q It appears where?

A My original filing with the State Commission. We had reflected, in the original PAT-5, that there was a fourth CLEC. There's only three in the current version of Exhibit PAT-5, so if you're looking at the current filed version, Daytona Beach, Zone 2, CLEC number from Exhibit 5 only reflects CLEC Number 2, and CLEC Number 1, and CLEC Number 3.

I'm going down the list.

Q So in the prior version, there would have been an additional CLEC besides a one, two, and three

reflected?

A That's correct.

Q Now, if we looked at the prior version, do you expect the listing of wire centers would be the same?

A This file incorporates the four wire centers that had been omitted from all of BellSouth's original filings.

Q So just to review, that would be in Ft. Lauderdale, Zone 1, FTLDFLAP?

A Yes.

Q And could you direct me where that appears on page 287?

A Well, this -- remember, that this list would only reflect those wire centers that actually have actual deployment, so they may not appear on the list, but they had to be incorporated into the trigger analysis.

Let me look and see if it's on here. It doesn't appear that there's actual deployment in that wire center.

Q So at FTLDFLAP, there is no actual deployment for the purposes of the trigger analysis?

A It doesn't appear based on the data I'm looking at.

Q And you believe that data is accurate?

A Yes.

Q Now, the other one in Zone 1 of Fort Lauderdale was PMBHFLNP?

A That's correct.

Q Does it appear?

A No.

Q So again, I would ask for that wire center known as PMBHFLNP. There is no actual deployment for purposes of the trigger analysis, correct?

A Correct.

Q The third of the four was in Miami, Zone 1, and that one is MIAMFLAG, and I believe Miami, Zone 1, begins on page 290.

A That's correct, and I don't see it there either.

Q Okay.

A I'm looking at this tiny print, so I'm going kind of going cross-eyed.

Q Do you want to look at this bigger one?

A I may reflect on it before we move on just to make sure.

Q Don't your people give you decent size copies of these things?

A Oh, I actually requested the four-page print. I was trying, you know, to keep my binder able to shut.

Q So that's MIAMFLAG. So the data shows there's no actual deployment at that wire center?

A Correct.

Q The final one is?

A Miami, Zone 3 office, which won't be on this attachment because it was not a trigger market.

Q Okay. So Miami, Zone 3, isn't reflected for that reason?

A Correct.

Q As to any other changes that were made, you would suggest we just compare this against the prior filing to see where they show up?

A Yes.

Q Are there any other changes to the column that's entitled CLEC number, from Exhibit PAT-5, besides the one you mentioned at Daytona Beach, Florida, Zone 2?

A I'm sure there may be. As I mentioned, I have not gone through the entire filing itself.

Q Did you not go through it before you had it filed?

A I did, but I did not do a side-by-side comparison. The format that the data is produced is with the CLEC name, and the number is inserted to create a non-proprietary document, so I didn't go through to make sure I did. I did audit the list that had the

actual names on it.

Q If we want to check that out, we need to get PAT-5 that identifies the CLECs and lay it next to this and then lay that next to your prior response?

A Actually, I think all you need to do is look at the prior response, and if you want to see what changed on the actual response to the POD. I mean, if you want to know the CLEC name, you can certainly compare it to PAT-5.

Q Right. But if I want to see the changes, don't I need to look at them together to see where the change showed up in the new one?

A If you want to see what changed on what we filed with the Commission in response to their discovery, then all you need is the original filing with what we filed in response to the discovery laid next to what we filed yesterday.

Q And the only thing I was adding was I would need PAT-5 to know what the number of the CLEC is if I want to relate it to a particular CLEC --

A Oh.

Q -- right?

A Yes.

Q So that is 287.

MR. MAGNESS: Off the record.

(Off-the-record discussion.)

BY MR. MAGNESS:

Q Moving onto the final document attachment to interrogatory Item Number 30, BST296 through 412. This one is marked proprietary, correct?

A That's correct.

Q And could you tell us, for purposes of the record, what in it is proprietary that we should not be saying?

A The individual customer address locations and the fact that they're receiving telecommunication service by the fact that they're on this list.

Q So we'll refrain from identifying addresses.

A Yes.

Q Could you describe for me -- I guess I'll just ask you to tell me, not describe, what question you were answering with these hundred-some pages?

A Yes. It's the same question that I read -- I believe I read before, but I'm happy to reread it. Do I need to reread it for the record?

Q Just tell me which question. You can shorthand it.

A It's in response to POD30, and it's to provide -- it references my testimony at page 10, line 1, through page 11, line 21 -- to provide the database

or spreadsheet sorted by wire center, CLEC number, and customer location, indicating quantity of DS-0 lines per location.

Q Could you just describe what you produced here and how it's organized?

A Sure. It is organized by market which includes the CEA and zone; then by wire center CLLI code; then by the CLEC number that appears on PAT-5; then by street address; then by the number of lines served at that street address.

Q And of the columns that are labeled market, wire centers, CLLI, CLEC number, address, number of lines, could you tell me which one it's primarily organized by? Like what I mean is it appears that it goes sequentially by CLEC number, but then it, also, looks like it goes by market, so I just wasn't sure how it's put together.

A Right. It was first by market, so you can look down the list, and you see it goes all the way to Daytona Beach for CLEC Number 1.

Q Then are you looking at page 304?

A Yes.

Q There Daytona Beach ends as a market?

A Right.

Q And then it switches to Fort Lauderdale, and

it switches to CLEC Number 4, right?

A That's correct. Quite frankly, the way that I had requested the data to be organized was by market first, so that all of the data for one market would appear in the same place, and it appears that's not the way it actually got filed.

Q So did you review this before it was filed?

A Yes. I reviewed it last week.

Q And you didn't file it till yesterday?

A It did not get filed until yesterday. It was my understanding it was ready to be filed last week.

Q Could you tell me then how I should read it because I'm just still not clear on how you make sense of it.

A Well, you can identify the -- for example, in Daytona Beach, Zone 1 --

Q Tell me what page you're on, please.

A I'm on page 297, Bates Number 297.

Q Okay.

A In Daytona Beach -- excuse me. I said Zone 1 earlier. It's Daytona Beach,Zone 2, CLEC 1 is providing service out of the identified wire centers to all of the addresses listed.

Q To all of the addresses listed until when?

A Until you no longer see the appearance of

Daytona Beach.

Q Okay.

A Then at the break, where the market changes --

Q Tell me where that is.

A On Bates Number 304.

Q Okay.

A It begins providing data for Ft. Lauderdale, Zone 1, for CLEC -- are you there?

Q I'm at 304, yes.

A -- for CLEC Number 4, and that data continues.

Q Okay. That goes to page?

A Goes to page 312.

Q Okay.

A Then it is that, also, still in Ft. Lauderdale, Zone 1, for CLEC Number 3.

Q Okay. So the market stays the same, but the CLEC switches?

A Yes.

Q That goes on until when?

A It goes into page 322 at which time it changes to Number 7.

Q That's CLEC 7?

A Yes.

Q But we're still in the same market?

A Yes.

Q Okay.

A And then it, also, on the same page, switches to CLEC Number 8. Let me clarify something here that I had forgotten to state previously.

Q Okay.

A In providing this response to staff, we had indicated, in our written response, I believe, that they had requested the data by location, and the only data that we have by physical location is for those CLECs for whom BellSouth used its own data.

We did not ask CLECs to identify the actual addresses of all of their end user customers; so the data that's provided, in this document here, is only for those CLECs that are included in Exhibit PAT-5 for which BellSouth used its internal data.

Q Okay. And when you say internal data, do you mean --

A The data that we --

Q I'm sorry. Let me just finish. Do you mean loop inventory data?

A The loop inventory data and the residential ported telephone numbers.

Q So this would include -- well, let me understand that. I'm not done trying to figure how to read it. Let's go back to that, but the loop inventory

data that you're talking about -- and we discussed this in your deposition the other day -- was BellSouth's loop inventory database that shows that a CLEC is purchasing a UNE loop from BellSouth, correct?

A Correct.

Q And then the ported numbers were -- and please correct me if I'm misstating it. The ported numbers were numbers that had been ported to a CLEC, and then you had compared that against the BellSouth residential directory listings database; is that right?

A Just the listings database. It contains all of BellSouth's list.

Q So it's not limited to just residential?

A No. It has a class of service indicator which enables us to determine which ones are residential versus business.

Q When you did your search for data in the ported numbers database, didn't you limit your research to residential listings?

A When we did the research in the ported number database, we got all ported numbers, and then were able to limit that by comparing it to the directory listings database. I believe that's spelled out in my testimony.

Q So how do you make sure that a company that's buying a UNE loop that, also, has a ported number

doesn't get counted twice?

MS. WHITE: I'm going to object to that because I think it's outside the scope of this deposition. I don't think it has to do with the document you're looking at.

MR. MAGNESS: I think it goes directly to whether this document is accurate or not because I'm trying to understand if this data came from BellSouth internal data sources. She said it comes from both data sources.

How do I know there's not some repeat within this 100-some pages we got yesterday that's reflective of a problem with the data, so we can take it to the Judge if you want me to.

MS. WHITE: No. If that's your question, how do you know there's not some duplication --

MR. MAGNESS: Well, no, my question is when you incorporate data from the ported number database here, how do you make sure that it's not duplicative of data that you import into this document from the loop database?

THE WITNESS: By comparing the physical addresses.

BY MR. MAGNESS:

Q So did you do that?

A Yes.

Q How was that done?

A Manually. Actually -- excuse me. It was done originally via a computer program which can compare the addresses, and then for any of those that didn't exactly match, the rest were done manually. That's actually, as I've explained earlier, one of the reasons why we provided a supplement to the staff's request because they specifically asked us if we had made that comparison.

We originally had not, and then we did, and it reduced the number of locations by a few. There weren't a whole lot in the whole state. I mean, there were some, but we then refiled my Exhibit PAT-5 as a result of that.

Q How does this document differ from what you filed originally?

A This document was not filed originally. We instructed the staff, when we originally responded to their request that we were still putting together the data because we did not know, at the time, if we would be able to include any CLEC data.

We had had some conversations with some of

the CLECs about providing specific end user information, and we didn't know if we would be receiving it; so when it was determined we would not, then we created this information to be responsive to the staff's POD.

Q Now, is this, pages 297 through 412 -- I haven't counted the pages, but over 100. Is this data rolled up or summarized in any other data that you've provided before yesterday?

A Well, yes. It's summarized in my Exhibit PAT-5 and --

Q That's where you named the triggers, right?

A Right.

Q How was it summarized there?

A Because it provides the CLECs who are providing mass market service, and this information here tells you the actual locations where the CLECs are providing mass market service.

Q Okay.

A I believe it's, also, provided in the subpoena response to AT&T/MCI.

Q Do you know where? I'm not sure if I brought my disk today.

A I didn't bring my computer.

Q Let me make a suggestion. We talked in your

deposition about pages 1986 to 2012.

A I have it.

Q You have it?

A I printed it because I anticipated the question.

MS. WHITE: She's good.

BY MR. MAGNESS:

Q So you have before you BellSouth's earlier response to the AT&T/MCI subpoena right?

A That's correct.

Q You're looking at the section that's on pages 1986 through 2012?

A If you're correct, you've got an amazing memory.

Q You should check.

A Because my memory is not that good. You are correct.

Q So the data that is in this new response, you would testify is summarized in that portion of the subpoena response?

A Yes. I would, also, like to say that the summary that's provided in the subpoena response, also, contains CLEC provided data.

Q If I could ask you to look at your deposition transcript again.

A Okay.

Q I believe its on page 106. I'm sorry. It's probably page 98. It's line 18 wherever it is.

MS. WHITE: That wasn't very scintillating.

MR. MAGNESS: Well, then maybe it's on page 106.

MS. WHITE: Now, in responding to this request?

MR. MAGNESS: That's it. Yes.

BY MR. MAGNESS:

Q So page 106, line 18. Do you have it there before you?

MS. WHITE: Page 98, line 18.

MR. MAGNESS: Page 98, line 18.

MS. WHITE: Yes.

BY MR. MAGNESS:

Q We're on page 98, line 18. You have page 98, line 18 before you, right?

A Yes.

Q I'm just going to read the question and answer. This is the question.

"Now, in responding to this request for the ported residential number data for your direct testimony, you provided the information that's at pages 1 through 2012 of the PDF file we just looked at;

is that correct?"

The answer is, "That's correct."

"QUESTION: Now, does this file -- and I'm talking now about the data between 1986 and 2012. Does it purport to summarize anything about business lines?

MS. WHITE: I think we've got a problem because that's not what our next question says.

MR. MAGNESS: Could we go off the record.

(Off-the-record discussion.)

BY MR. MAGNESS:

Q Let me back up a moment. We had a problem with the numbering of the deposition pages. We're now on page 106 at line 18. Let me just read the question again.

"Now, in responding to this request for the ported residential number data for your direct testimony, you provided the information that's at pages 1 through 2012 of the PDF file we just looked at; is that correct?"

The answer was, "That's correct."

MS. WHITE: Let me just confirm. That question is on page 98.

BY MR. MAGNESS:

Q My apologies. Let's go to page 106 and 107. Let me just ask you this --

A Okay.

Q -- is that a correct reading of that question and answer?

A No. That's the problem, because we've got -- the question you read was on one page, and the answer you read was on another page.

Q Let's start again.

"Now, in responding to this request for the ported residential number data for your direct testimony, you provided the information that's at pages 1 through 2012 of the PDF file we just looked at; is that correct?"

What's your answer?

A That's correct.

Q Now, let's move to page 106. Here's the question.

"Now, does this file -- and I'm talking now about the data between 1986 and 2012. Does it purport to summarize anything about business lines or only residential lines?"

And the answer is: "Based on my understanding of the formatting of the CD, and again, I would certainly -- you know, my understanding based on how it has been provided is that this is responsive to Question Number 1, and therefore, is BellSouth's

internal data regarding residential ported telephone numbers."

Is that a correct reading of your answer?

A Yes, it is.

Q So is what's in 1986 through 2012 only residential related?

A No. It is not. Let me explain. When -- as witnesses, we provide responses to be filed. I am submitting electronic copies of several different attachments in -- attached to an E-mail, and they end up being produced by another organization of BellSouth.

Unfortunately, in this case, I was not supplied with the actual CD to know how it was formatted until the night before my deposition; so what I had provided was based upon what I had been instructed by the legal counsel at BellSouth based on their discussions.

As you recall, from our deposition, there was a lot of discussions about all this data and the request and the subpoena.

Q I remember you saying that.

A And the attorneys had agreed to certain sets of data being provided.

Q I don't know that we agreed that that was the case, but you did make those --

A I did make --

Q -- representations.

A Yes, I did.

Q I do recall that.

A As a result of that, one of the things we agreed to provide was the summary information. I don't know why it was represented in the CD as being responsive to subpart 1 only. It should have been its own separate file.

Q Now, in your deposition, though, didn't we pull up the disks and both look at them together and walk through every section of that 3079 pages?

A Yes.

Q Okay.

A But you recall we just read my answer, based on my understanding of the formatting of the CD. Again, I was looking at the CD based upon -- and I did not have my actual E-mail that I had sent to regulatory with all of the individual files attached to it to bring this to mind.

Q Well, let me ask you this. Go to page -- I believe it's 116 of your deposition transcript. I am on line 16, hopefully on the right page this time, and the question begins, okay.

"Okay. And we'll talk about the AT&T

response in a minute."

Do you see that?

A Yes.

Q Then it continues:

"Now, aside from, let me ask one question before that. Did you prepare any document where you summarized this raw data that's in pages 2013 through page 3079 for purposes of your conclusions about business UNE loops."

The answer is, "Yes --

"QUESTION: Okay. And what is that summary?"

"ANSWER: The summary shows by market, by wire center, and by CLEC. The customers using BellSouth's definition that are -- I mean, the location, excuse me, using BellSouth's definition that are mass market locations."

"QUESTION: And did you provide that summary in discovery?"

"ANSWER: I believe we did."

"QUESTION: Did you provide it in response to the subpoena?"

"ANSWER: I don't know. I don't know if it's part of the response on this particular data set, but I do know that we provided it."

Then you looked for it some, and we talked

about that. Then down at line 17:

"It's okay. So the summary wasn't provided in response to this discovery request?"

"No."

Is this related to this business-line summary that you thought you provided?

A No. The summary I actually thought I provided is what was actually provided on the CD which is the format I described. Just in the going through those files quickly -- we were running through them -- I didn't take the appropriate amount of time to look at it because that's the format that we've done our summary roll-up.

Q Okay. So a week ago when we did the deposition, you told me that pages 1986 through 2002 were all about residential ported numbers, right?

A 1986 through 2012?

Q 2012, yes.

A I believe I did. Yes.

Q So if I went about trying to correct this alleged deliberate misrepresentation by Mr. Gaillan by assessing whether residential lines, which were in that summary, were accurately reported, I would have been on a fool's errand, right?

A No. Because, as we just read from my

deposition -- and I may be misquoting -- it's my understanding based upon the formatting of this CD.

Q But you thought there was a whole separate business line summary, right?

A No.

Q Well, you told me that there's a business line summary. You contrasted it with the residential ported line summary that you had produced, and you said you thought you'd produced it somewhere else.

Now, tonight are you telling me that it's actually all one thing?

MS. WHITE: I'm sorry. I'd like you to point out to me what these questions have to do with that document response?

MR. MAGNESS: Because she told me that 1986 through 2012 is a roll-up of this data and other data, and she told me, in the deposition last week, that she thought she produced a business line summary which apparently doesn't exist.

What I'm trying to understand is what you produced today for the first time. Business line data, business line internal data BellSouth? Is this the alleged business line summary you talked about last week?

THE WITNESS: The summary we have, which

includes business line summary, also, includes residential summary. It's one summary.

BY MR. MAGNESS:

Q Okay.

A We didn't include -- and I didn't represent that I had a standalone business line summary. We have a summary. It includes business data, and it includes residential data.

Q But a week ago you thought that 1996 through 2012 didn't include business lines, right?

A Well, what I answered was I believe, or my understanding, based upon the formatting of the CD. The reason I recall that we had produced the overall summary of the data is I remembered producing this overall summary of the data.

Unfortunately, I did not take the appropriate amount of time, when reviewing the actual response on the CD, itself, to look very carefully at it and simply recognize that it is the standard format that we provide our summary report.

I provided, as the response to the subpoena based upon the agreement between the attorneys for the parties, the same summary that we used. I just didn't realize that somehow regulatory folks, who put it on a PDF format, stuck it in there with response to Item

Number 1.

Q Now, the data that you produced yesterday, over 100 pages, this is all internal BellSouth data?

A Yes.

Q Is it limited to residential?

A No.

Q Is it limited to business?

A No.

Q Does it include residential and business?

A Yes.

Q Was it used in preparing the summary roll-up which now we understand, also, includes residential and business?

A BellSouth has a database of data from which it extracts information to produce reports. That is a report from the raw data that we have. The summary data is a report from the raw data that we have. Our trigger analysis is based on the raw data.

Q So the trigger analysis is based on the raw data. The raw data included the data that's in pages 2013 through 3079 of the prior response to the subpoena, right?

A I'm sorry. Could you repeat that?

Q Sure. Well, I'm not going to repeat it. I'm going to try to put it in a way that may make it easier

to understand. Now, you got all of this in front of you, so you might want to look at it.

A Well, I don't have all of the data from the subpoena.

Q You don't have the subpoena response?

A No. I only printed the summary because I anticipated you might ask about it today. I didn't print out the entire subpoena response.

Q Do you remember talking about anything in our deposition besides the summary?

A We talked about the data, itself, in response to Item 1 and Item 2.

Q And there was data that was from pages 2013 through 3079? That was basically from the summary you're talking about now to the end of the disk.

MS. WHITE: Do you want to point to a page in her deposition?

THE WITNESS: I have it. I have my notes from the deposition.

MR. MAGNESS: If you want to give me the deposition, I will. I mean, it's her data responses.

Can we go off the record?

(Off-the-record discussion.)

BY MR. MAGNESS:

Q Now, you have before you the references to the page and line numbers on that CD that we talked about in your deposition, right?

A Yes, I do.

Q So if you start after the summary ends, if you start at page 2013 and you go to the end of that file, at page 3079, do you consider that raw data?

A Yes.

Q What is the source of that raw data?

A The BellSouth's loop inventory database.

Q That's LFACS?

A Yes.

Q Does that data include business and residential loops?

A Does the loop inventory data base contain residential and business loops, or does our data for the purpose of the trigger analysis contain residential and business loops?

Q Does the data that's contained at pages 2013 through pages 3079 include both loops that serve residential and that serve business?

A No.

Q Which one is it?

A Business.

Q No residential?

A No.

Q Now, let's go back to the front of the CD. I think we have pages 2 through 991. Is that raw data?

A Yes.

Q What is in that raw data?

A Residential ported number data.

Q Is there any business data in those 900-some pages?

A No.

Q Where does that data come from?

A From BellSouth's loop -- I mean, excuse me. Number portability database in combination with information from BellSouth's directory listings database.

Q And to be clearer, you took ported numbers, and then you matched them against the directory listing database; is that right?

A Correct.

Q And then the pages from 992 up to 1985?

A Well, let me make a correction.

Q Okay.

A From page 2 up through 1981 is the ported number database. Beginning on page 1982 is the wire centers by market.

Q Right. That's the single spreadsheet that's divided page 2 through 1992. Then it's 1993 through 1981, correct?

A Say that again.

Q Never mind.

A Yeah.

Q I withdraw the question. That chunk of data is raw data from the number portability database, is that right?

A Correct.

Q It's all internal BellSouth data?

A Number portability and directory listings. Yes.

Q Now we have this data which is on Bates Numbers 296 through 412. You know what I'm talking about?

A Yes.

Q That's the supplemental response to staff?

A Yes.

Q Does it include -- and I'm sorry if you've answered this. Does this include just business lines?

A No.

Q Does it include just residential lines?

A No.

Q It includes business and residential?

A Yes, it does.

Q And the source of the data is the LFACS database?

A That data there is a combination of the ported number data and the loop data. It is the actual data we relied upon in producing PAT-5 for those CLECs for whom BellSouth used its own data.

Q Which ones are the ones that you just relied on your own data?

A It's the ones that are contained here; so, for example, in Daytona Beach, it's CLEC Number 1.

Q I'm sorry. We don't need to go through all of them. Just to summarize, if I wanted to know, did BellSouth rely on CLEC provided data or on BellSouth internal data to name a particular trigger candidate, I could look at this 297 through 412 produced yesterday, and I could determine, by the CLEC number, that every CLEC that has a number listed here, you relied on only your internal databases?

A Yes.

Q And I asked you earlier about the first subpoena response, whether you still had the same answer that you answered the other day about what the entire universe of data you reviewed was --

A Yes.

Q -- in coming to your trigger analysis.

A Yes.

Q Is the answer still the same, or did you, also, review this data?

A The answer is still the same.

Q This data had nothing to do with your trigger analysis?

A Well, as I explained a minute ago, all of the raw data is contained in the database that we built; so I can extract this report by running a query against the data. I can extract a trigger analysis report by running that particular query. I can run different queries; so in producing this response to POD, I just did a query to our database.

Q When you talk about the database in that answer, there's a database that's separate from LFACS and separate from number portability and separate from directory listings?

A Yes.

Q Okay.

A We took that data, the data that we had already applied the filters to. We had already pulled only the UNE business class loops. We, also, pulled only the residential ported numbers. We, also, used the CLEC data where CLECs had provided usable data.

All of that is in one source. Well, so to speak. It's not really a source. It's in one place, so that we can execute a query against the data to produce the triggers.

Q And what's that database called?

A We didn't name it.

Q Where does it live?

A On a computer. It's just a big spreadsheet.

Q Is it just about Florida?

A No. It's all the data we receive. We just put it all in one place.

Q And it was that database that you accessed in order to produce these responses, 297 through 412; is that right?

A Right.

Q Now, the data that is here on 297 through 412 is, also, part of what is rolled up or summarized in pages 1986 through 2012 of the BellSouth's subpoena response?

A Correct.

Q So if this data was incorporated into the summary that you provided in answering the subpoena, why didn't you provide this as an answer or a supplemental answer to the subpoena?

A Because that's not -- that is a specific

answer to a specific question, and the specific question was referring to the lines in my testimony which talked about the use of BellSouth's internal data in producing its trigger analysis outcome; to provide by customer location, indicate in the quantity of DSO lines, and that was the question that was asked.

I was responding to the staff's request.

Q So this is an input to the summary, but in your mind, it's not relevant to the summary?

MS. WHITE: That's not what she said. I object to that. You're mischaracterizing her testimony.

BY MR. MAGNESS:

Q Well, let me ask you. I mean, I believe you said that this data is part of what was rolled up or summarized in the 1986 through 2012 summary, right?

A Well, let me restate then. As I mentioned three or four times now, our data from the L&P database, from the BellSouth loop database, and from CLECs is in one data source, one database; so to provide the summary of data, as produced on the CD, we executed a query.

We said provide wire center, whatever else the other contents of that summary are. I don't recall off the top of my head. We can ask the query to roll it up so that it only provides data at the market. We

can ask it to break it out by wire center.

We can ask it to provide just a report on one CLEC; so the summary that was provided was -- the query was written specifically based on whatever the questions that our attorneys committed to AT&T's attorney that we would provide. It's in the same format that we've done summaries internally for BellSouth.

Q Are you saying there was any commitments to any attorneys to produce what you produced yesterday?

A That was in response to the staff, the Florida staff.

Q So that doesn't have anything to do with the subpoena response?

A No. It has nothing to do with the subpoena response.

Q Okay.

A But the data that we produced for staff, you could actually use the data that was produced in the subpoena to arrive at this.

Q Now, if I wanted to review what I think you called in your deposition a totality of data that's available, in this case now, that has anything to do with trigger analysis, that you reviewed, on the list that we had before, we had the 3079 pages in the

subpoena response, Number 1.

Number 2, CLEC provided information, you got in discovery served by BellSouth. Should I add Number 3? We ought to take a look at this document?

A That document was produced from the data that's contained in the subpoena response. The data that's contained in the subpoena response is the loop database data and the ported number database data.

Q From what I think I've learned this evening is if I wanted to, I could identify which CLECs you named as triggers only based on BellSouth's internal data using this attachment 30-2, pages 296 through 412, right?

A Yes.

Q How would I go about figuring that out in the summary that's at page 1986 through 2012? How could I figure out which one of those CLECs that you named in that summary you relied on BellSouth's data versus other data like CLEC discovery?

A I don't know.

MR. MAGNESS: That's all I have.

MR. WATKINS: I've got maybe one or two clarification questions.

MR. MAGNESS: Okay.

CROSS-EXAMINATION

BY MR. WATKINS:

Q My name is Gene Watkins. I'm with Covad Communications.

A Okay.

Q When Mr. Magness was asking you about -- Number 287 was the number. I believe it's the one that has customer location. It says number of locations at wire center. He asked you a question, and I just want to make sure because it sounded like an answer that I wasn't expecting.

I think he asked you, we don't know whether they're served by a DS-1, and you said no. That didn't sound right to me. On the customer number of locations at wire center, those are DSOs, right?

A Yes. I think what I had said is that those locations are mass market locations by BellSouth's definition, so all of those locations have three or fewer lines.

Q Right. If he had asked you what I think he did ask you -- and that's why I'm just trying to clarify -- we don't know whether they're served by a DS-1, your answer would be, they're not served by a DS-1?

A They're not served by a DS-1, so if he actually asked that question, I didn't hear that

question.

Q I just want to make sure. I thought the answer didn't comport with what I thought you would say.

A Thank you for clarifying.

Q Now, I just want to make sure, though. If one of these customers ordered a T1 for data purposes, you wouldn't know that by the data that you reviewed to create this sheet, or would you?

A Yes. We would. The extract that we pulled, initially pulled all data from the looped database. We then excluded any location that was served by DS-1, so we never kept those locations.

Q A DS-1 that had a number ported to it?

A No. Just DS-1, period. Any DS-1 --

Q All right.

A -- or above actually.

Q For Attachment Number 30 BST296 to 412, when you went through this, this was the data, as it existed in BellSouth's computer systems, when? Is it the current data?

A It's the most current data that we have used in our trigger analysis, and I believe the data date is October 30th.

Q Of last year?

A Of 2003.

Q Did you do any exclusionary type of screening with customer names -- not just address, but customer names -- when creating this set of data?

A No. We screened by physical location, address location.

Q And during Dr. Banerjee's deposition, there was an expression of some concern that he did some screening for that a building might have two addresses. Did you do any type of screen to confirm that that possibility didn't exist in this data?

A No. We did not because typically, at least my understanding, buildings that might have two physical addresses are commercial buildings and would not typically be mass market. Those, you know, like a large Federal Express distribution center, for example, might be one that takes up a whole city block.

It might have an entrance on one corner and an entrance on another, and therefore, it might have two actual addresses.

Q I think I only have two more questions. For BellSouth's analysis, if a franchisee ordered phone lines for 15 different franchise at 15 different locations, but he only had three at each one of those, he would still be considered a mass market customer?

A Yes. Because we didn't actually look at

customer names because it really wasn't relevant. We were looking at the actual location. Was the location an actual mass market location?

Q Similarly if an apartment owner ordered phone service from BellSouth for two different apartments and ordered less than three for each, that person would, also, fall into the mass market customer?

A If BellSouth was supplying unbundled loops to those locations, yes. It would be based upon the number of loops terminated at each apartment because each one represents a separate residence.

Q Are those billing addresses, or are those just addresses that are identified with the loop itself?

A Addresses identified with the loop, itself, because the way the FCC characterizes providing service to mass market customers and billing arrangements doesn't necessarily represent anything about the service to the customer location.

Q My last question is, in your ported number data base, if a number is canceled by -- if somebody cancels service with say, AT&T, and there's a number ported to that person, does that number come back into the database?

A Let me see if I understand your question. I'm currently a BellSouth customer, and I change my local

service provider to be AT&T, and I port my telephone number to AT&T. What's the next step?

Q If I cancel with AT&T.

A If I cancel my service with AT&T?

Q Yes.

A And do what?

Q Go to say, MCI, does that number come out back into the number database and then to MCI?

A It depends on if I want to keep my telephone number, then it still resides within BellSouth's ported number database. So long as that number is ported somewhere, BellSouth's maintains it in its ported number database because it still has to route the call.

You know, friends and families and business associates are going to continue to dial that number, and all the routing tables throughout the U.S. think that's a BellSouth's telephone number. BellSouth then has to route it to whoever is the winning carrier for the customer.

Q To continue that line, if I move to Seattle and leave my phone number at my residence, does BellSouth take that number and put it in a general hopper, or does that number remain associated with that residence for whomever may come in next?

A The number goes back into the number pool.

MR. WATKINS: That's all I have.

REDIRECT EXAMINATION

BY MR. MAGNESS:

Q Since there was some debate about what I meant in a question, I think all I was trying to get at with the question I asked was by number of locations a wire center, can you tell just from that data point whether a particular location is served by DS-1 or DS-0?

A By the fact that it's on the document?

Q Yes.

A It means all of those locations identified or the fact that there are locations, they are all mass market, and none of them would have been served by DS-1.

Q So just to be crystal clear, did you apply a screen before you included the data that if it was a DS-1 loop, it was out?

A If the address had a DS-1 serving the premises, and it, also, had a DSO, the address was out.

Q And that applied to all of this data?

A Yes.

Q So a screen was applied, as to DS-1, prior to anything getting on any of the stuff we've talked about, the 3079 pages, all that?

A Correct.

Q How did you manage that for the data you got

from the number portability database?

A Number portability database, if you recall, was only for residential class service, and we, also, applied -- we compared the residential ported number information, which, also, had an address attached to it, to the addresses in the loop data, and the screen was applied to all of the data; so if there was an address that, also, had a DS-1, it was knocked out.

Q So DS-1 loop identity trumped everything?

A Exactly. Actually it was DS-1 or above. I need to clarify. When I say DS-1, I mean DS-1 or above level of service.

MR. MAGNESS: Thank you.

(The deposition concluded at 7:55 p.m.)

CERTIFICATE OF OATH

STATE OF FLORIDA)

COUNTY OF ALACHUA)

I, the undersigned authority, certify that PAMELA TIPTON personally appeared before me and was duly sworn.

WITNESS my hand and official seal this 24th day of February, 2004.

Nancy P. Vetterick

NANCY P. VETTERICK, RPR, CCR
1-800-934-9090
850-878-2221

NANCY P. VETTERICK
Notary Public - State of Florida
My Commission Expires Jun 23, 2008
Commission # DD121035
Bonded By National Notary Assn.

CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF ALACHUA)

I, NANCY P. VETTERICK, Registered Professional Reporter, certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages numbered 1 through 64 are a true and correct record of the aforesaid proceedings.

I further certify that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 24th day of February, 2004.

Nancy P. Vetterick

NANCY P. VETTERICK, RPR, CCR
Notary Public
1-800-934-9090
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ERRATA SHEET

PAGE	LINE	CORRECTION

Date of deposition

Reporter

Ex 94

TIPTON "TRIGGER" DATA

Tipton Data Sources Include:

BellSouth internal data

1. Ported numbers/directory listings (residential data) ("Ported/DL")[1]

2. Loop inventory database ("LFACS") (business data)[2]

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[1] Tipton Direct, p. 10, ln. 9 to p. 11, ln. 3.

[2] Tipton Direct, p. 11, ln. 9-21; LFACS referenced at Deposition of Pamela Tipton, February 24, 2004 ("Deposition II"), p. 48, ln. 6-13 ("Q: So if you start after the summary ends, if you start at page 2013 and you go to the end of that file, at page 3079, do you consider that raw data? A: *Yes.* Q: What is the source of that raw data? A: *The BellSouth's loop inventory database.* Q: That's LFACS? A: *Yes.*)



3. CLEC responses to BellSouth discovery ("CLEC BellSouth discovery")[3]

"[W]e used CLEC data when they provided data that was actually responsive and usable, and for those that did not, that we used BellSouth's internal data. And if my recollection is correct, I believe that CLEC data actually accounts for about 85% of the totality that we used in our trigger analysis, 85% of the mass market locations. It's actually more than 85%."[4]

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[3] Tipton Direct, p. 9, ln. 19 (noting FDN and Alltel responses); Tipton Surrebuttal, p. 20, ln. 18 (use of "CLEC provided data"); Deposition of Pamela Tipton, February 17, 2004 ("Deposition I") (p. 128-29: *"[W]e felt better about using the CLEC data where CLECs provided us data.... We just felt the data has more -- while we believe BellSouth's data is very accurate, it certainly has more, for lack of a better choice of words, credibility that the CLECs actually affirmed that these are the numbers of mass market customers that we are providing service to."*)

[4] Deposition I, p. 146, ln. 1-8.



The "totality" of the data relied upon by Tipton for developing PAT-5 trigger CLEC listing includes:

1. BellSouth internal data (Ported/DL & LFACS)

2. BellSouth CLEC discovery

-- Where BellSouth CLEC discovery available, BellSouth relied on that data -- and not BellSouth internal data -- for its trigger analysis.

This data is summarized on pp. 1986-2012 of BellSouth's Response to AT&T Subpoena ("Tipton Summary")[5]

Tipton Deposition I, p. 136, ln. 8-16:

A. *Yes, I did. To the best of my knowledge, I used all of the data that was available to me in conducting our trigger analysis.*

Q. And just to summarize, the totality of the data would include the responses to the subpoena, number 1 and 2, which are reflected in the 3,079 pages we've been talking about this afternoon, and number two, the CLEC-provided information that you got in discovery served by BellSouth?

A. *That's correct.*

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[5] In her first deposition on February 17, Tipton testified that the data summarized at pp. 1986-2012 was a summary of **only** the Ported Number/DL data (Tipton Deposition I, p. 106, ln. 17 to 107, ln. 1: "*Based on my understanding of the formatting of the CD -- and again, I would certainly -- you know, my understanding based on how it has been provided is that this is responsive to [subpoena] question number 1, and therefore is BellSouth's internal data regarding residential ported telephone numbers.*"). At her second deposition on February 24, Tipton testified that she had not recollected correctly before, and that that the data summarized at pp. 1986-2012 includes **both** business and residential BellSouth internal data. Tipton Deposition II, p. 44, ln. 25 to 45, ln. 2 ("*The summary we have, which includes business line summary, also includes residential summary. It's one summary.*")

The data relied upon by Tipton does not include:

1. BellSouth internal data showing DS0/DS1 "unbundled loops by type" material (provided in response to AT&T subpoena and AT&T Interrogatory 125) ("UNE Loop Data").[6]

2. CLEC data provided in response to FPSC Staff discovery requests.

3. CLEC sworn affidavits submitted by FCCA (for ITC^Deltacom, KMC, Network Telephone, Nuvox, US LEC, Xspedius).

[6] Tipton Deposition I, p. 124, ln 15: "Q: Now, you did not use in your production of PAT-5 and your analysis of the trigger companies, you did not use this document that we are looking at that was provided in response to the subpoena and the interrogatory [BellSouth UNE "loop by type" data in response to AT&T Interrogatory No. 125]; is that correct? A: *We did not use the data that was responsive to item number 125. We used the data that was responsive to subpoena items 1 and 2.*"

The data produced on February 23, 2004 in Response to Staff 4th Request for Production provides new information

1. 117 pages (Bates numbered BST 296-412), compiled from BellSouth "trigger database"[7] that includes Ported Number/DL and LFACS internal BellSouth data.[8]

2. The CLECs designated in the 117 pages of data filed February 23, 2004 are CLECs about whom BellSouth relied exclusively on BellSouth internal data for its trigger analysis.[9] The "Tipton Summary" (pp. 1986-2012) includes more, *i.e.,* both BellSouth internal data and BellSouth CLEC discovery, for the CLECs named there.

---

[7] Tipton Deposition II, p. 52, ln. 21 to 53, ln. 11: A: *We took that data, the data that we had already applied the filters to. We had already pulled only the UNE business class loops. We also, pulled only the residential ported numbers. We, also, used the CLEC data where CLECs had provided usable data. All of that is in one source. Well, so to speak. It's not really a source. It's in one place, so that we can execute a query against the data to produce the triggers.* Q: And what's that database called? A: *We didn't name it.* Q: Where does it live? A: *On a computer. It's just a big spreadsheet.* Q: Is it just about Florida? A: *No. It's all the data we receive. We just put it all in one place.*

[8] Tipton Deposition II, p. 51, ln. 4-7: "Q: And the source of the data is the LFACS database? A: *That data there is a combination of the ported number data and the loop data. It is the actual data we relied upon in producing PAT-5 for those CLECs for whom BellSouth used its own data."*

[9] Tipton Deposition II, p. 51, ln. 12-21: Q: Just to summarize, if I wanted to know, did BellSouth rely on CLEC provided data or on BellSouth internal data to name a particular trigger candidate, I could look at this [pages] 297 through 412 produced yesterday, and I could determine, by the CLEC [PAT-5] number, that every CLEC that has a number listed here, you relied on only your internal databases? A: *Yes.*

3. The Tipton Summary data **cannot be** used to identify which CLEC triggers were based on BellSouth data and which on CLEC data. That **can be** determined from the February 23 data.[10]

The data produced on February 23 allows analysis of which trigger CLECs designated by Tipton in PAT-5 are designated based on BellSouth internal data only.[11] Based on a review of the February 23 data, those CLECs are (omitting market designations):

KMC
AT&T
SBC Telecom
XO
Xspedius
Supra
Nuvox
Sprint
Orlando Tel
Network Tel

---

[10] Tipton Deposition II, p. 56, ln. 15-20: Q: How would I go about figuring out in the summary that's at page 1986 through 2012? How could I figure out which one of those CLECs you named in that summary you relied on BellSouth's data versus other data like CLEC discovery? A: *I don't know.*

[11] In her February 24 deposition, Tipton described how the document should be read, in conjunction with CLEC numbers in PAT-5, to identify information related to particular alleged trigger CLECs. Tipton Deposition II, p. 28, ln. 4 to 32, ln. 5.

Alleged Trigger Companies: BellSouth Relies on Internal BellSouth and BellSouth CLEC Discovery Data

FDN
PaeTec
Comcast
Allegiance
MCI
Alltel
ITC^Deltacom
Florida Multimedia

CONFIDENTIAL

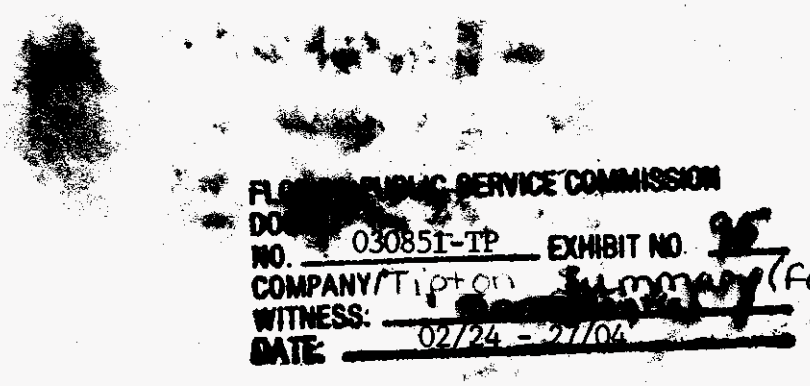


EXHIBIT NO. 95

DOCKET NO.: 030851-TP

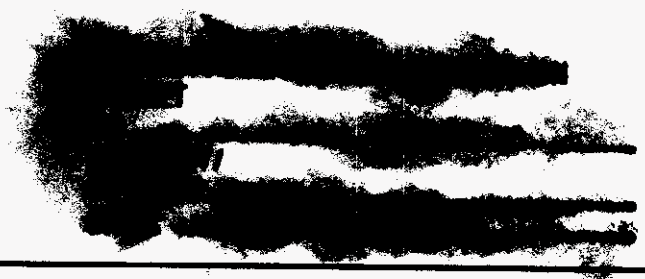
WITNESS: Tipton

PARTY: BellSouth

DESCRIPTION:

Confidential Tipton Summary

Confidential copy is not included in this package.



CONFIDENTIAL

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 050851-TP EXHIBIT NO.
COMPANY/ AT&T
WITNESS:
DATE: 02/24 - 27/06

EXHIBIT NO. 96

DOCKET NO.: 030851-TP

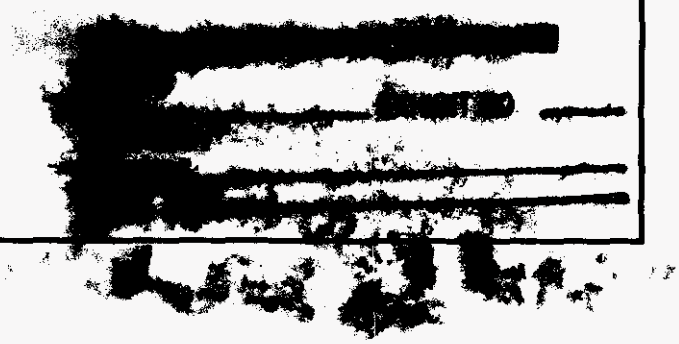
WITNESS: Tipton

PARTY: BellSouth

DESCRIPTION:

Confidential Attachment to Interrogatory 30

Confidential copy is not included in this package.



97

U.S. LEC OF FLORIDA, INC.



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Implementation of requirements arising from Federal Communications Commission triennial UNE review: Local Circuit Switching for Mass Market Customers.	)	Docket No. 030851-TP Filed: November 12, 2003

US LEC OF FLORIDA INC.'S OBJECTIONS TO BELLSOUTH TELECOMMUNICATIONS, INC.'S FIRST SET OF INTERROGATORIES

US LEC of Florida Inc. ("US LEC"), pursuant to Order No. PSC-03-1054-PCO-TP, objects to BellSouth Telecommunications, Inc.'s ("BellSouth") First Set of Interrogatories served on US LEC on November 5, 2003, and says:

INTRODUCTION

This is a generic docket intended to ascertain whether impairment exists within the state and local markets pursuant to the Federal Communications Commission's ("FCC") Triennial Review Order ("TRO") released August 21, 2003. In the TRO, the FCC adopted new rules and reevaluated old rules regarding incumbent local exchange companies ("ILECs") obligations to unbundle certain network elements, so that these elements are made available to the requesting competitive local exchange telecommunications companies ("CLECs") at a price based on the ILEC's total element long-run incremental costs ("TELRIC"). The vast majority of BellSouth's discovery requests inappropriately seek significant amounts of US LEC's company specific information which are well outside the scope of this generic docket.

GENERAL OBJECTIONS

1. US LEC objects to the Interrogatories to the extent that they are intended to apply to matters oth[redacted] in the state and local market within the jurisdiction of the Florida Public Service Com[redacted] LEC objections to such Interrogatories as being

irrelevant, overbroad, unduly burdensome, and oppressive.

2. US LEC objects to each and every interrogatory insofar as the interrogatories are not reasonably calculated to lead to the discovery of admissible evidence.

3. US LEC objects to every interrogatory to the extent that such interrogatory calls for information that is exempt from discovery by virtue of the attorney-client privilege, work product privilege, or other applicable privilege.

4. US LEC objects to each and every interrogatory insofar as any of them are overly broad, unduly burdensome, oppressive, or excessively time consuming as written.

5. US LEC objects to each and every interrogatory to the extent that the information requested enjoys statutory "trade secrets" privilege pursuant to Section 90.506, Florida Statutes.

6. US LEC objects to each and every interrogatory that would require the disclosure of customer specific information, the disclosure of which is prohibited by Section 364.24, Florida Statutes. Without waiving any general objections or specific objections stated herein, US LEC will fully respond to requests for "proprietary confidential business information" as defined by Section 364.183(3), Florida Statutes, that are requested in the interrogatories that are not subject to Section 364.24, Florida Statutes, in the event US LEC's general objections and/or specific obligations concerning the specific request are denied by the Prehearing Officer or the Commission.

7. US LEC objects to every interrogatory insofar as the interrogatories are vague, ambiguous, overly broad, imprecise or utilize terms that are subject to multiple interpretations and not properly defined. Any answer provided by US LEC in response to these interrogatories will be provided subject to, and without wavier, of the foregoing objections.

8. US LEC objects to providing information to the extent that such information is already in the public domain or in the public record before the Commission.

SPECIFIC OBJECTIONS

Interrogatory No. 1: Please provide the 11-digit COMMON LANGUAGE Location Identifier (CLLI) of each switch used to provide qualifying service anywhere in the state of Florida that is owned by your company. If you lease, rent or otherwise obtain switching capacity on a switch that you do not own (other than from an incumbent Local Exchange Carrier), provide the same information regarding all such switches.

Objection:

US LEC objects to this Interrogatory on the grounds that it would require US LEC to provide information regarding "CLLI" codes and switched location information that is publicly available and already in BellSouth's possession. US LEC further objects to the term "qualifying service" as US LEC does not use such terms in its ordinary course of business and answering in these terms would require US LEC to provide a legal interpretation of the FCC's terms. With the exception of the specific services the FCC has designated as *qualifying or non-qualifying*, the term is not clearly defined by the FCC or by BellSouth. For example, as the FCC states in Footnote 466 of the TRO, "Our list is intended to identify general categories of service that would qualify as eligible services. It is not intended to be an exhaustive list or to identify sources in a more particular manner." Thus, BellSouth's request is overly broad and it would be unduly burdensome for US LEC to respond to such ambiguous discovery.

Interrogatory No. 2: For every switch identified in response to Question 1, provide the number of DS-0/voice grade equivalent access lines that switch is equipped to provide. If you lease, rent or otherwise obtain capacity on someone else's switch, provide the DS0/voice grade equivalent access lines associated with the capacity you have obtained.



Objection:

US LEC incorporates herein its objection to BellSouth's Interrogatory No. 1. Additionally, US LEC objects to the term "voice grade equivalent lines" as vague and ambiguous and subject to differing interpretations. Further, the term "equipped to provide" is vague and it is unclear whether this term includes lines capable of carrying voice traffic but which are, in fact, used for data traffic.

Interrogatory No. 3: For every switch identified in response to Question 1, provide the number of DS-0/voice grade equivalent access lines current in use and state the date for which such information is provided.

Objection:

US LEC incorporates herein its objections to Interrogatories No. 1 and No. 2 above.

Interrogatory No. 4: State whether each switch identified in response to Question 1 serves residential customers.

Objection:

US LEC incorporates herein its objection to Interrogatory No. 1.

Interrogatory No. 5: Does this switch serve customer locations with:

a. 1 line only?
b. 2 or fewer lines?
c. 3 or fewer lines?
d. 4 or fewer lines?
e. 5 or fewer lines?
f. 6 or fewer lines?
g. 7 or fewer lines?
h. 8 or fewer lines?
i. 9 or fewer lines?
j. 10 or fewer lines?

Objection:

US LEC incorporates herein its objection to Interrogatory No. 1. Additionally, the term "customer locations" is unclear. US LEC requests clarification of the item. (Subject to and without

waiving these objections, US LEC will provide the total number of voice-grade equivalent lines, as it defines the term, US LEC is providing to end user customers in the wire center areas from the switches identified in response to Interrogatory No. 1.)

Interrogatory No. 6: For each group of customer locations identified in Question 5 (locations with 1 line, locations with 2 or fewer lines, etc.), provide:

a. The individual customer locations. Initially, it will be sufficient to provide these locations by wire center service area. If that information is not readily available, then the information should be provided by actual customer address. To explain further, this question asks you to provide, initially by wire center service area, the number of customer locations you serve that have one line, two lines or fewer, three lines or fewer, etc. If you cannot provide the information by wire center service area, then provide this information by actual customer location, i.e., Customer A is located at 1234 Broadway, Miami, Florida, and has one line, and so forth.

b. The number of lines at each location that are used to provide voice service, and the number of lines that are used to provide data service, identified separately. If each line is used to provide both voice and data, so indicate.

c. If you know that the specific customer location is served by lines provided by another CLEC, or by an ILEC, provide the number of DS0/voice grade equivalent lines provided at each customer location by other CLECs or ILECs.

Objection:

US LEC objects to this interrogatory as it is irrelevant, onerous, unduly burdensome and asks for confidential proprietary information that BellSouth does not require for its legitimate discovery purposes and it is not entitled to. The information sought includes business and/or commercial information and production of this information would lead to disclosure of information regarding US LEC's confidential, internal operations which could seriously damage its business. Such confidential, proprietary information is of such a highly sensitive nature that it cannot be protected or maintained even under a proprietary or confidential agreement. In essence, these responses would give BellSouth, US LEC's primary competitor, a road map to every single customer location with

an indication (through the number of lines the customer uses) of the relative profitability of each customer. US LEC also objects to this interrogatory because US LEC has not tracked the customer data in accordance with the wire center designations of the legacy network operated by the ILECs. Further, the information requested is totally irrelevant to the questions under consideration by the PSC in its implementation of the TRO. Additionally, since US LEC purchases the majority of its customer loops from BellSouth, BellSouth can utilize its internal systems to determine the answers to these questions in accordance with its own internal wire center designations. Finally, US LEC objects on the grounds that US LEC does not purchase EELs and/or UNEs to provision service to its customers. US LEC utilizes special access facilities which are outside the scope of this proceeding.

Interrogatory No. 7: Provide the street address (e.g., 123 Main Street), the city (e.g., Miami), and the state (e.g., FL) where every switch identified in response to Question 1 is located.

Objection:

US LEC incorporates its objections to Interrogatories Nos. 1 and 6 above.

Interrogatory No. 9: State whether you have any plans to terminate your service in any area in Florida that is currently served by the switches identified in response to Question 1. If you do, identify the areas where you intend to terminate service (and by areas we mean geographic areas, not individual customers).

Objection:

US LEC objects to the interrogatory as being vague. In the TRO, the FCC specifically stated that the key consideration to be examined by state commissions is whether the providers are currently offering and able to provide service, and are likely to continue to do so. The FCC recommended that states should review whether the competitive switching provider has filed a notice to terminate service in that market. (TRO, fn. 1556). US LEC will answer whether it has filed a

notice to terminate service in any market pursuant to the TRO.

Respectfully submitted,

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Attorneys for US LEC of Florida Inc.

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By: Martin P. McDonnell
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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Implementation of requirements arising from Federal Communications Commission triennial UNE review: Local Circuit Switching for Mass Market Customers.	)))))	Docket No. 030851-TP

US LEC OF FLORIDA INC.'S RESPONSES TO BELLSOUTH TELECOMMUNICATIONS, INC.'S FIRST SET OF INTERROGATORIES

Subject to its previously filed Objections, US LEC of Florida Inc. hereby submits its Responses to BellSouth's First Set of Interrogatories.

Interrogatory No. 8: Do you offer to provide or do you provide switching to other carriers for their use in serving customers? If so, state:

(a) the carriers to whom you provide switching;

(b) the types of service, if known, that are provided by the carriers to whom you provide switching;

(c) whether you will provide switching to any requesting carrier;

(d) identify each wire center district (by eight digit CLLI code) in which wholesale switching is available.

Response:

US LEC does not provide switching to other carriers for their use in serving customers.

Interrogatory No. 9: State whether you have any plans to terminate your service in any area in Florida that is currently served by the switches identified in response to Question 1. If you do, identify the areas where you intend to terminate service (and by areas we mean geographic areas not individual customers).

Response:

US LEC has not filed a notice of termination in any market in Florida.

US:BC\troobjections.nov14

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was furnished by Hand Delivery(*), U. S. Mail to the following this 14th day of November, 2003:

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USLBCnotice.nov14

'THE PASSION': ★★ 1/2
Soergel: Gibson's graphic gospel LIFESTYLE • C-1 Woods: I'm curious but reluctant GEORGIA • B-1

The Florida Times-Union

Wednesday, February 25, 2004 JACKSONVILLE www.jacksonville.com

Alltel Corp. disconnects local telephone service

11 workers laid off as a result of high costs incurred by the company.

By CHRISTOPHER CALNAN
The Times-Union

Alltel Corp. said Tuesday it's pulling the plug on local telephone service in Jacksonville and it plans to lay off 11 workers in the process.

Company spokeswoman Ellie Babb said local service, which it has provided to Jacksonville since 2000, will end on July 3. Babb declined to say how many customers Alltel has in Jacksonville but said the company decided it was no longer worth offering the service here.

"This was simply a business consideration based on the costs Alltel incurs by providing local service in Jacksonville," she said.

Alltel's local service was used predominately by business customers. Babb declined to say what portion of its customers were residential.

"Providing local service was a small part of our business," she said.

The layoffs will not affect the company's sponsorship of Jacksonville's football stadium, Babb said.

Alltel initially installed local phone service in its Riverside Avenue building in 1998. In 2000, the company offered the service to the public, but targeted small- and medium-sized business customers, Babb said.

christopher.calnan@jacksonville.com, (904) 359-4404

HITTING HOME

Local service

Jacksonville is the only U.S. city where Alltel is terminating local service, company spokeswoman Ellie Babb said. The company will continue to offer wireless service, long distance, paging and Internet service here.

CONFIDENTIAL

99 (Confidential) BellSouth's public subpoena documents and various parties' confidential discovery responses

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 99
COMPANY/ Bell South STAFF
WITNESS:
DATE: 02/24 - 27/04

EXHIBIT NO. 99

DOCKET NO.: 030851-TP

WITNESS: MISC.-CONFIDENTIAL-3

PARTY: MISC.

DESCRIPTION:

1. BellSouth – Documents produced pursuant to subpoenas - **CONFIDENTIAL** (Documents No. 1733-04)
   a. Adelphia Business Solutions Investment LLC d/b/a TELCOVE, and Adelphia Business Solutions of Jacksonville, Inc. d/b/a TELCOVE
   b. AllTel Communications, Inc.
   c. Comcast Phone of Florida, LLC d/b/a Comcast Digital Phone
   d. Florida Digital Network, Inc.
   e. Florida Multi-Media Services, Inc.
   f. Grande Communications Networks, Inc.
   g. IDS Telcom, LLC
   h. Level 3 Communications, LLC
   i. NuVox Communications, Inc.
   j. Orlando Telephone Company, Inc.
   k. PaeTec Communications, Inc.
   l. SBC Telecom, Inc.
   m. Time Warner Telecom of Florida, Inc.
   n. XO Florida, Inc.
2. Allegiance's Confidential responses to Staff's 3rd Set of Interrogatories – Document No. 02683-04.
3. Sprint's Confidential Responses to Staff's 3rd Set of Interrogatories Nos. 22 & 28i-j, and Staff's 4th Request for PODs, Item No. 13, Attachment to Interrogatory Nos. 15, 18, and 23 (CD only), and Attachment to POD No. 14 – Document No. 02366-04.
4. Comcast's Public Responses to BellSouth's Request for Admissions.

PROFFERING PARTY: STAFF



I.D. # - MISC-CONF–3

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Implementation of Requirements Arising From Federal Communications Commission Triennial UNE Review: Local Circuit Switching For Mass Market Customers.	)))))	Docket No. 030851-TP Filed: February 18, 2004

COMCAST PHONE OF FLORIDA, LLC'S RESPONES TO REQUESTS FOR ADMISSION

Comcast Phone of Florida, LLC (hereinafter "Comcast Phone") respectfully responds to the following requests for admission:

1. Please admit that Comcast Phone is currently offering and able to provide circuit switched-based digital phone service in certain markets in Florida.

Response: Comcast Phone admits that it is currently offering and able to provide circuit switched-based phone service in portions of the greater Miami, Florida area and portions of the greater Jacksonville, Florida area.

2. Please admit that Comcast Phone is likely to continue to provide phone service in Florida.

Response: Admit. Comcast Phone currently has no plans to discontinue providing in Florida the phone services described in response to Request for Admission No. 1.

3. Please admit that the circuit switched-based digital phone service provided by Comcast Phone in Florida is comparable in quality to the local exchange service offered by BellSouth.

Response: Comcast Phone objects to this Request on the grounds that it is vague and ambiguous and calls for speculation as to the meaning of the phrase "comparable in quality." Subject to this objection, and without waiving any objection, Comcast Phone responds by admitting its belief that its circuit switched-based local phone service is generally comparable in quality to the local exchange service offered by BellSouth in those markets in Florida in which Comcast Phone offers the service. Comcast Phone endeavors to provide service that is equal to or better than BellSouth in Florida.

4. Please admit that the circuit switched-based digital phone service provided by Comcast Phone in Florida is comparable in cost to the customer (price) and maturity to the local exchange service offered by BellSouth.

Response: Comcast Phone objects to this Request on the grounds that it is vague and ambiguous and calls for speculation as to the meaning of the phrase "comparable in maturity," although Comcast has been offering circuit-based digital phone service in Florida only for a few years. Subject to this objection, and without waiving any objection, Comcast Phone responds by admitting that Comcast Phone's circuit switched-based voice-grade digital phone service is comparable in customer price to the local exchange service offered by BellSouth in those markets in Florida that Comcast Phone offers such service.

Comcast Phone endeavors to provide phone service in Florida at a price that is equal to or lower than BellSouth's prices. Comcast Phone's price list, containing company rate plans offered to local exchange customers in Florida, is posted at www.comcast.com/tariffs. Comcast Phone, however, neither admits nor denies that its circuit switched-based voice-grade digital phone service is comparable in maturity to the local exchange service offered by BellSouth in Florida, since Comcast Phone is unclear how this term is defined in the context of this request.

Respectfully submitted, this 18 day of February, 2004.

William B. Graham, Esq.
Fla Bar No. 0359068
McFARLAIN & CASSEDY, P.A.
305 South Gadsden Street
Tallahassee, FL 32301

COUNSEL FOR COMCAST PHONE
OF FLORIDA, LLC

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Implementation of Requirements Arising From Federal Communications Commission Triennial UNE Review: Local Circuit Switching For Mass Market Customers.	)))))	Docket No. 030851-TP

AFFIDAVIT

BEFORE ME, the undersigned authority, personally appeared David Sered, who deposed and stated that he provided the responses to these Requests for Admission and that the responses are true and correct to the best of his/her personal knowledge, information, and belief.

FURTHER AFFIANT SAYETH NOT.

SIGNATURE OF AFFIANT

DATED, this 16th day of February 2004.

Sworn to and subscribed before me this 16th day of February 2004.

Rachel Jones
NOTARY PUBLIC

My Commission Expires:
5/15/2005

Rachel Jones, Notary Public
Cobb County, Georgia
My Commission Expires May 15, 2005

(Redacted)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Implementation of requirements arising From Federal Communications Commission Triennial UNE review: Local Circuit Switching For Mass Market Customers	Docket No. 030851-TP Filed: March 19, 2004

/

XO FLORIDA, INC.'S REQUEST FOR SPECIFIED CONFIDENTIAL CLASSIFICATION AND MOTION FOR PROTECTIVE ORDER FOR CONFIDENTIAL HEARING EXHIBIT NOS. 11 AND 99

XO Florida, Inc. (XO), pursuant to Rule 25-22.006, Florida Administrative Code, files this Request for Specified Confidential Classification and Motion for Protective Order for Confidential Hearing Exhibit Nos. 11 and 99.

1. On February 24 - 27, 2004, the Commission conducted its hearing in this docket. During the hearing, confidential information of XO's was entered into the record as part of confidential hearing Exhibit Nos. 11 and 99.

2. The pertinent portions of Exhibit No. 11 relate to confidential portions of XO's response to Staff's TRO Data Request and XO's Supplemental Response to Staff's TRO Data Request previously filed with Staff under cover of confidentiality on December 3, 2003 and December 9, 2003, respectively. The confidential information provided in XO's response to Staff's TRO Data Request, filed December 3rd, contains information regarding XO's transport facilities. XO's Supplemental Response to Staff's TRO Data Request, filed December 9th, contains information regarding the number, type and location of XO's switches, the number of access lines per switch, and the areas where XO provides service. XO considers the above information to be confidential proprietary business information. Disclosure of this information could severely harm XO's competitive interests in the marketplace. The information has not been made public. A more specific description of this information is contained in Attachment A.

3. Exhibit No. 99 contains XO documents subpoenaed by BellSouth and

DOCUMENT NUMBER-DATE
03712 MAR 19 04
FPSC-COMMISSION CLERK

subsequently provided to Staff on February 4, 2004. On February 25, 2004, XO filed a request for confidential classification for these documents, which are identical to XO's Supplemental Response to Staff's TRO Data Request. The documents contain information regarding the number, type and location of XO's switches, the number of access lines per switch, and the areas where XO provides service. XO considers the above information to be confidential proprietary business information. Disclosure of this information could severely harm XO's competitive interests in the marketplace. The information has not been made public. A more specific description of this information is contained in Attachment A.

4. Section 364.183, Florida Statutes, provides an exemption from the disclosure requirements of section 119.07, Florida Statutes, when disclosure of confidential business information would "impair the competitive business of the provider of the information." Disclosure of the XO confidential information would harm its business operations by placing details of its operations and capabilities in the public domain. Accordingly, the information should be exempt from the public disclosure requirements of section 119.07, Florida Statutes.

5. XO treats the information for which confidential classification is sought as private and confidential.

6. Appended hereto as Attachment B are two copies of the requested documents with the confidential information redacted.

7. Appended hereto as Attachment C is a sealed envelope containing one copy of the documents including the material which is confidential and proprietary.

WHEREFORE, based on the foregoing, XO moves the Commission to enter an order declaring the information described above to be confidential, proprietary business information that is not subject to public disclosure.

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Vice President, Legal and Regulatory Affairs
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Nashville, TN 37201-2315
(615)777-7700 (telephone)
(615) 345-1564 (fax)
dshaffer@xo.com

Vicki Gordon Kaufman
Timothy J. Perry
McWhirter, Reeves, McGlothlin, Davidson,
Kaufman & Arnold, P.A.
117 South Gadsden Street
Tallahassee, Florida 32301
(850) 222-2525 (telephone)
(850) 222-5606 (fax)
vkaufman@mac-law.com

Attorneys for XO Florida, Inc.

ATTACHMENT A

DOCKET NO. 030851-TP

XO FLORIDA, INC.'S REQUEST FOR SPECIFIED CONFIDENTIAL CLASSIFICATION AND MOTION FOR PROTECTIVE ORDER FOR CONFIDENTIAL HEARING EXHIBIT NOS. 11 AND 99

Explanation of Proprietary Information

1. The copies contain **CONFIDENTIAL** XO information regarding XO's transport facilities, including location of XO's facilities, the arrangement type, transport type and the number of transport circuits. This information is related to XO's ongoing business affairs and can be used by XO's competitors to harm its competitive interests. Section 364.183, Florida Statutes, allows for an exemption from the disclosure requirements of section 119.07, Florida Statutes, when disclosure would "impair the competitive business of the provider of the information." Therefore, the information should be shielded from disclosure pursuant to section 119.07, Florida Statutes and section 24(a), Art. 1 of the State Constitution.

2. The copies contain **CONFIDENTIAL** XO information regarding the number, type and location of XO's switches, the number of access lines per switch, and the areas where XO provides service. This information is related to XO's ongoing business affairs and can be used by XO's competitors to harm its competitive interests. Section 364.183, Florida Statutes, allows for an exemption from the disclosure requirements of section 119.07, Florida Statutes, when disclosure would "impair the competitive business of the provider of the information." Therefore, the information should be shielded from disclosure pursuant to section 119.07, Florida Statutes and section 24(a), Art. 1 of the State Constitution.

XO's Response to Staff's TRO Data Request included in Exhibit No. 11
Confidential Chart Labeled "transport_ XO Florida Inc_FL – Confidential – 12-3-03"

Page Number	Line(s)	Reason
1 of 1	5-33	1

XO's Supplemental Response to Staff's TRO Data Request included in Exhibit Nos. 11 and 99

Page Number	Line(s)	Reason
1	1-23	2
2	1-7	2
3	1-3	2
4	1-4	2
5	1-4	2
6	1-4	2
7	1-2	2
8	1-2	2
9	1-2	2
10	1-2	2
11	1	2
12	1	2

ATTACHMENT B

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
1	FROM ILEC										TO ILEC										TRANSPORT ROUTE																					
2																					Self-Providers															Wholesalers						
3	Central Office Address							Arrange-ment Type			Central Office Address							Arrange-ment Type			Transport Type			Number of transport circuits								Transport Type			Number of transport circuits						
4	CLLI	Street Address	City	State	Zip	Vert-ical Coord-inates	Horiz-ontal Coord-inates	Caged? (Y/N)	Caageless? (Y/N)	Virtual? (Y/N)	CLLI	Street Address	City	State	Zip	Vert-ical Coord-inates	Horiz-ontal Coord-inates	Caged? (Y/N)	Caageless? (Y/N)	Virtual? (Y/N)	(Y/N)	Dark Fiber? (DF) Switch (SW) Blank) or blank)			transport circuits provisioned	transport circuits provisioned	transport circuits provisioned	# Dark Fiber working circuits	# DS1 level working circuits	# DS3 level working circuits	(Y/N)	Carrier?	Dark Fiber? (DF) Switch (SW) Blank) or blank)			transport circuits provisioned	transport circuits provisioned	transport circuits provisioned	# Dark Fiber working circuits	# DS1 level working circuits	# DS3 level working circuits	Supplier?
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Florida Switch Questions CONFIDENTIAL INFORMATION /SUBJECT TO PROTECTIVE AGREEMENT

1. Please provide the 11-digit COMMON LANGUAGE® Location Identifier (CLLI™) of each switch used to provide qualifying service[1] anywhere in the state of Florida that is owned by your company. If you lease, rent or otherwise obtain switching capacity on a switch that you do not own (other than from an incumbent Local Exchange Carrier), provide the same information regarding all such switches.

1 [redacted]
2
3
4

2. For every switch identified in response to Question 1, provide the number of DS-0/voice grade equivalent access lines that switch is equipped to provide. If you lease, rent or otherwise obtain capacity on someone else's switch, provide the DS0/voice grade equivalent access lines associated with the capacity you have obtained.

5 [redacted]
6
7
8
9

3. For every switch identified in response to Question 1, provide the number of DS-0/voice grade equivalent access lines current in use and state the date for which such information is provided.

10 [redacted]
11
12
13
14
15

4. State whether each switch identified in response to Question 1 serves residential customers.

16 [redacted]

17 5. Does this switch serve customer locations with [redacted]
18
19
20
21
22
23

a. 1 line only?
b. 2 or fewer lines?

c. 3 or fewer lines?
d. 4 or fewer lines?
e. 5 or fewer lines?
f. 6 or fewer lines?
g. 7 or fewer lines?
h. 8 or fewer lines?
i. 9 or fewer lines?
j. 10 or fewer lines?

6. For each grouping of customer locations identified in Question 5 (locations with 1 line, locations with 2 or fewer lines, etc.), provide: [redacted]

a. The individual customer locations. Initially, it will be sufficient to provide these locations by wire center service area. If that information is not readily available, then the information should be provided by actual customer address. To explain further, this question asks you to provide, initially by wire center service area, the number of customer locations you serve that have one line, two lines or fewer, three lines or fewer, etc. If you cannot provide the information by wire center service area, then provide this information by actual customer location, i.e. Customer A is located at 1234 Broadway, Miami, Florida, and has one line, and so forth.

b. The number of lines at each location that are used to provide voice service, and the number of lines that are used to provide data service, identified separately. If each line is used to provide both voice and data, so indicate.

c. If you know that the specific customer location is served by lines provided by another CLEC, or by an ILEC, provide the number of DS0/voice grade equivalent lines provided at each customer location by other CLECs or ILECs.

7. Provide the street address (e.g., 123 Main Street), the city (e.g., Miami), and the state (e.g., FL) where every switch identified in response to Question 1 is located.

[redacted]

8. Do you offer to provide or do you provide switching to other carriers for their use in serving customers? If yes, state: (a) the carriers to whom you provide switching; (b) the types of service, if known, that are provided by the carriers to whom you provide switching; (c) whether you will provide switching to any requesting carrier; (d) identify each wire center district (by eight digit CLLI code) in which wholesale switching is available.

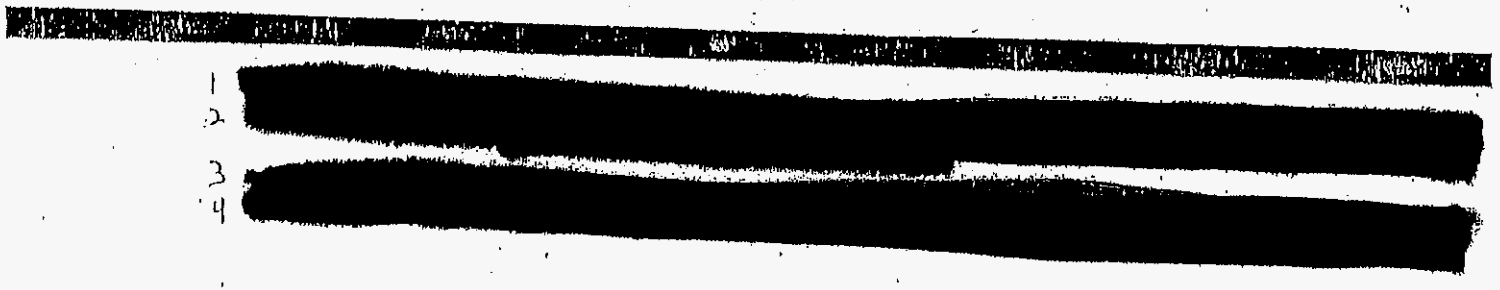
1 [redacted]
2

9. State whether you have any plans to terminate your service in any area in Florida that is currently served by the switches identified in response to Question 1. If you do, identify the areas where you intend to terminate service (and by areas we mean geographic areas, not individual customers).

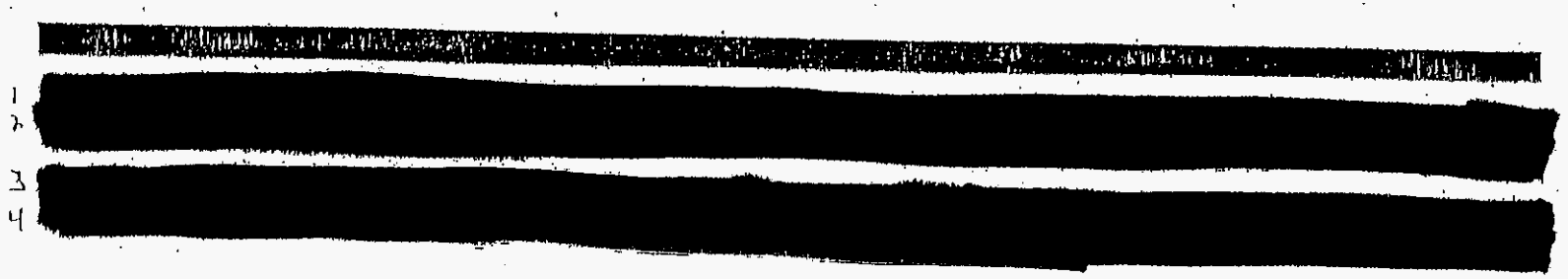
3 [redacted]

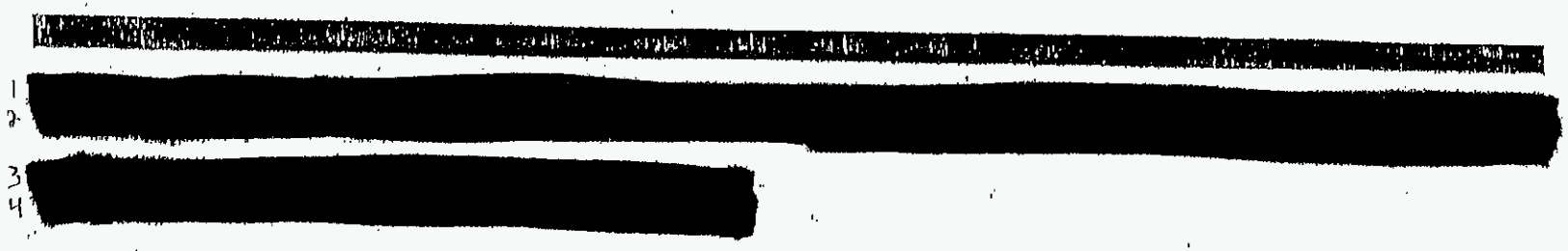
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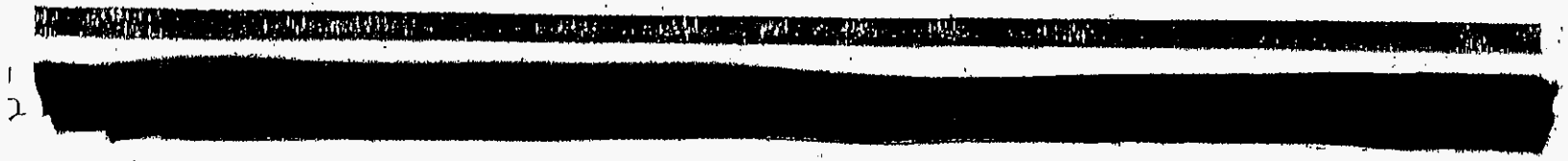
[1] A "qualifying service" is a telecommunications service that competes with a telecommunications service that has been traditionally the exclusive or primary domain of incumbent LECs, including, but not limited to, local exchange service, such as plain old telephone service, and access services, such as digital subscriber line services and high-capacity circuits. 47 C.F.R. § 51.5.

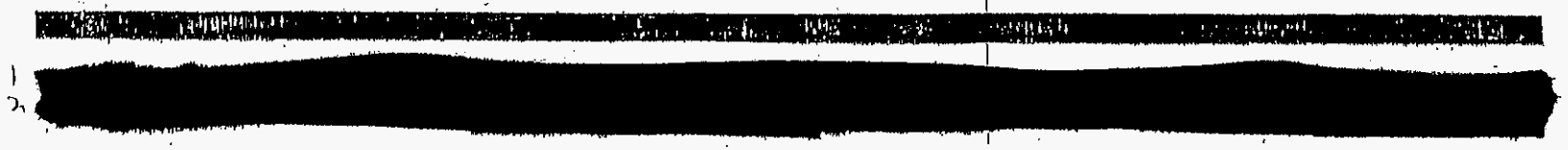


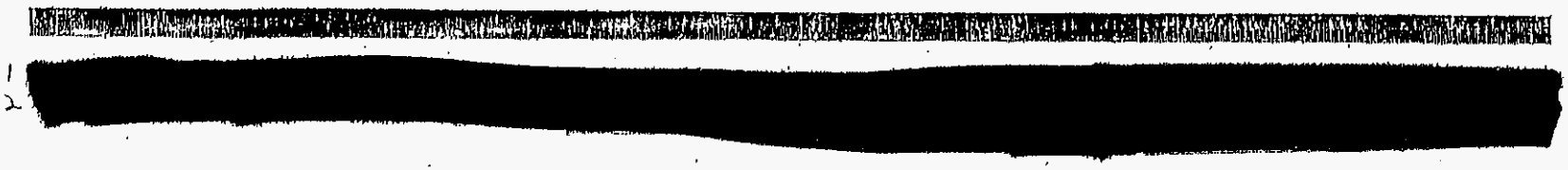
*** PROPRIETARY AND CONFIDENTIAL ***

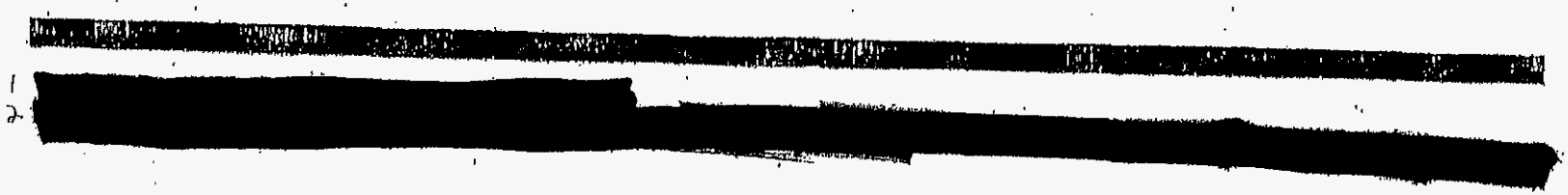


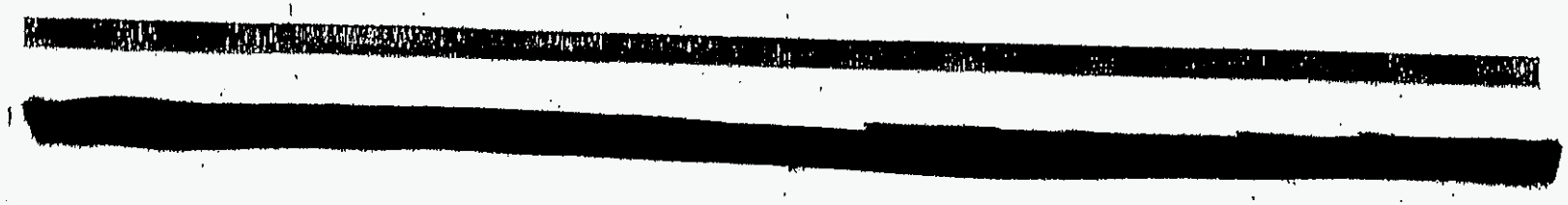












[redacted]

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing the XO Florida, Inc.'s Request for Specified Confidential Classification and Motion for Protective Order for Confidential Hearing Exhibit Nos. 11 and 99 has been provided by (*) hand delivery, (**) email, and U.S. Mail this 19th day of March 2004 to the following:

(*) (**) Jeremy Susac, Staff Counsel
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

(**) Nancy White
c/o Nancy Sims
BellSouth Telecommunications, Inc.
150 South Monroe Street, Suite 400
Tallahassee, Florida 32301-1556

(**) Richard Chapkis
Verizon Florida, Inc.
201 North Franklin Street
MC: FLTC0717
Tampa, Florida 33602

(**) Susan Masterton
Sprint Communications Company
1313 Blairstone Road
Post Office Box 2214
MC: FLTLHO0107
Tallahassee, Florida 32301

(**) Donna Canzano McNulty
MCI WorldCom
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Suite 201
Tallahassee, Florida 32301

(**) Norman H. Horton, Jr.
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Tallahassee, Florida 32302-1876

(**) Tracy Hatch
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Southern States, LLC
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Tallahassee, Florida 32301

(**) Michael Gross
Florida Cable Telecommunications
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Tallahassee, Florida 32302

(**) Matthew Feil
Florida Digital Network, Inc.
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Orlando, Florida 32801

(**) Jeffrey J. Binder
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Washington, DC 20037

(**) Floyd R. Self
Messer, Caparello & Self
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(**) Jake E. Jennings
Senior Vice-President
Regulatory Affairs & Carrier Relations
NewSouth Communications Corp.
NewSouth Center
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Greenville, SC 29601

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& Sheehan, P.A.
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Xspedius Communications
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(**) Charles J. Beck
Deputy Public Counsel
Office of Public Counsel
c/o The Florida Legislature
111 West Madison Street
Room 812
Tallahassee, Florida 32399-1400



Timothy J. Perry

EXHIBIT NO. 100

DOCKET NO.: 030851-TP

WITNESS: Ruscilli

PARTY: BellSouth

DESCRIPTION:

Late-Filed Share Update and Miscellaneous Percentages

Late-filed exhibit is not included in this package.



1. **Can BellSouth update the market share information contained in the "2003 Report on Competition in Telecommunications Markets in Florida"?**

   Based on BellSouth's data, as of December 31, 2003, CLEC market share in BellSouth's Territory was 22%. This number includes both the number of lines CLECs lease from BellSouth (i.e., resale, UNE-P and UNE-L) and the estimated number of self-provisioned lines.

2. **Of the updated percentage provided above, what percentage is UNE-P based?**

   According to BellSouth's data, CLECs use UNE-P to provide service to 42% of their end users.

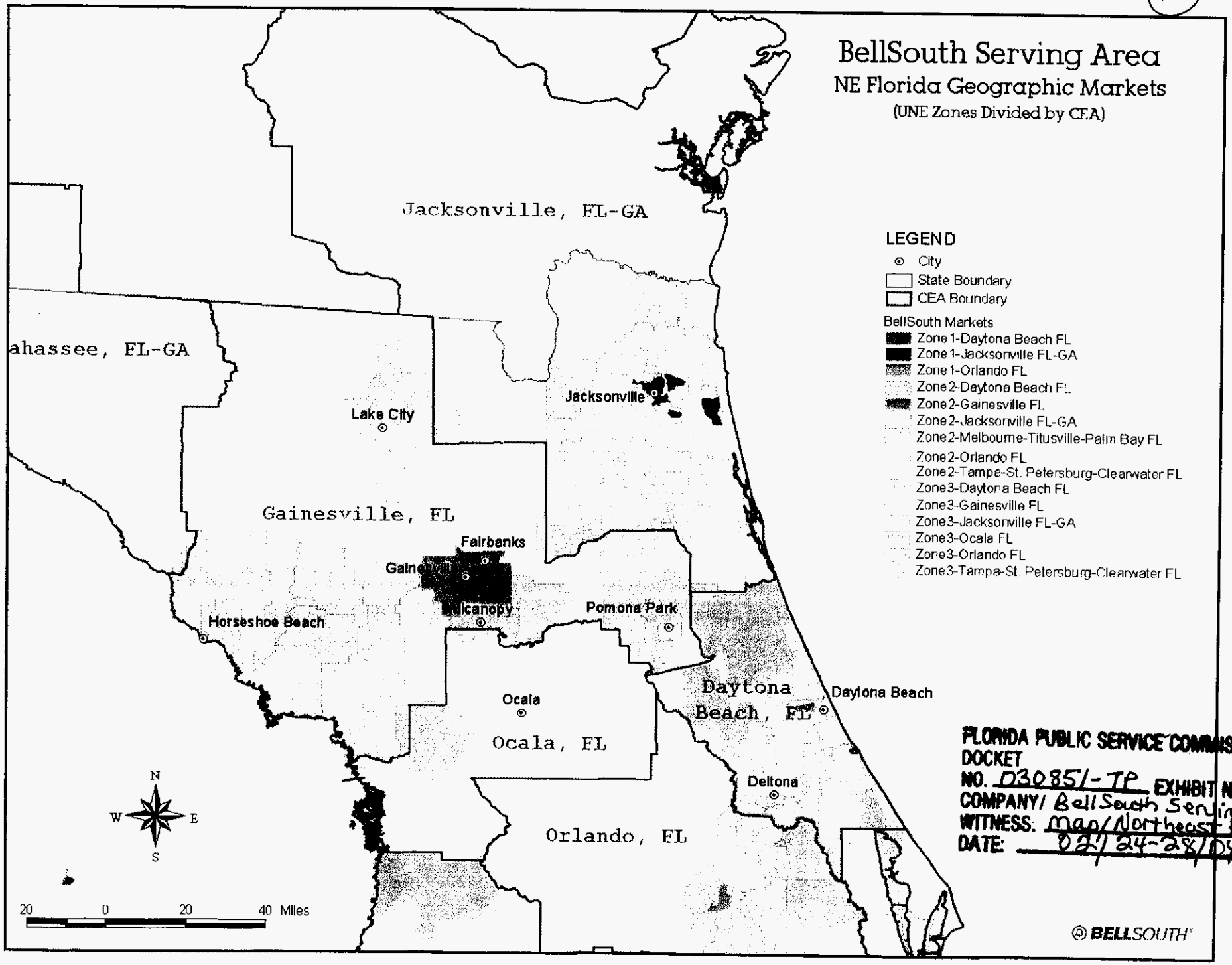
3. **How many CLECs have transitioned their UNE-P lines to another service?**
   BellSouth is only able to track a CLEC's transition away from UNE-P by reviewing its records relating to the number of hot cuts performed where a CLEC migrates from UNE-P to UNE-L. Since June 30, 2003, BellSouth has performed 19,851 of coordinated and non-coordinated hot cuts.

Charlie Beck (+)
Deputy Public Counsel
Office of Public Counsel
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400
Phone: (850) 488-9330
Fax No. (850) 488-4491
Beck.Charles@leg.state.fl.us

Nancy B. White (KM)

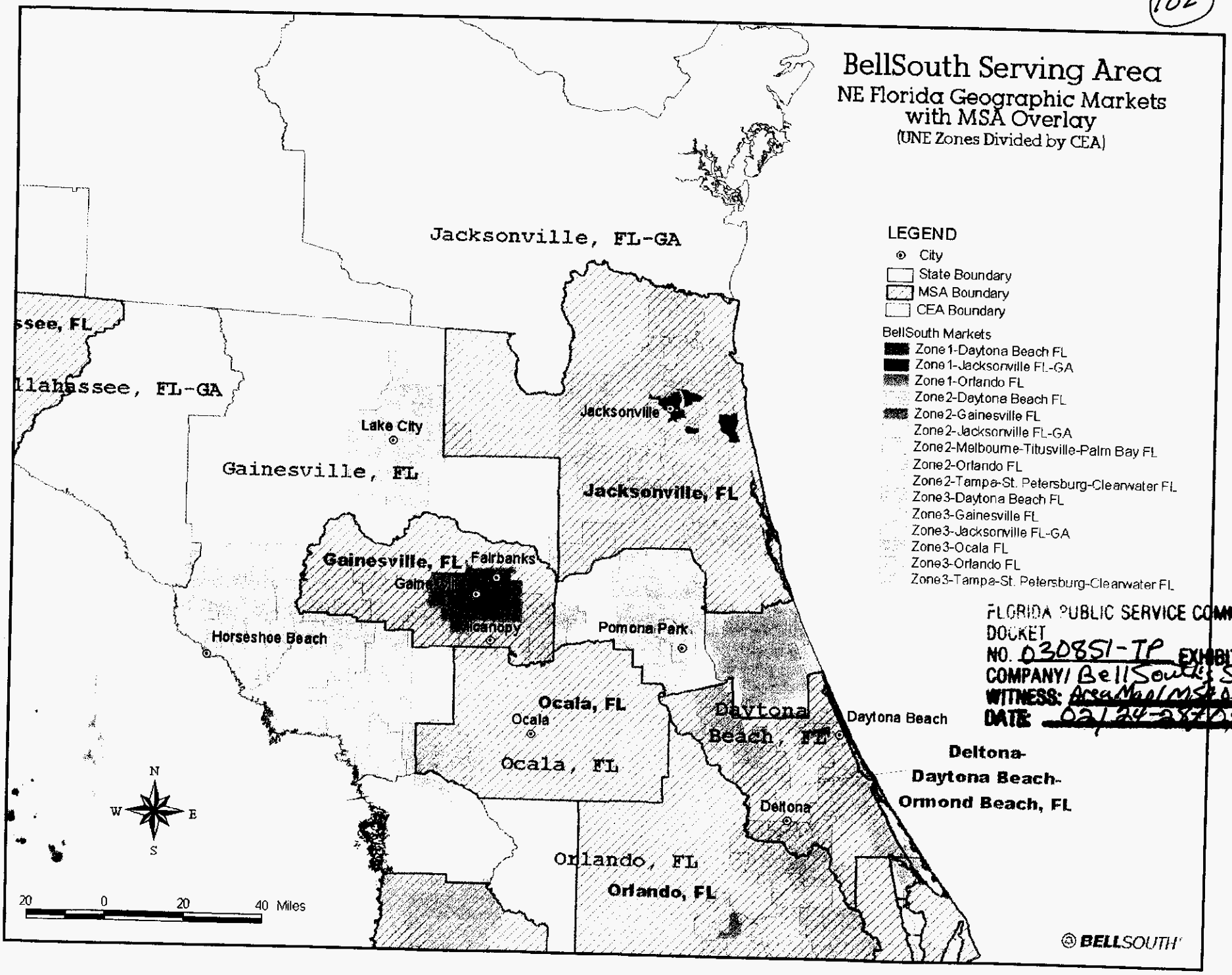
(+)signed Protective Agreement

(101)



FLORIDA PUBLIC SERVICE COMMISSION
DOCKET
NO. 030851-TP EXHIBIT NO. 101
COMPANY/ BellSouth Serving Area
WITNESS. Map/Northeast Florida
DATE: 02/24-28/04

(102)



FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 102
COMPANY/ BellSouth's Serving Area Map/MSA Overlay
WITNESS:
DATE: 02/24-25/04

Qualifications Exhibit

Present Occupation

Q. What is your present occupation?

A. I am a consulting economist and President of Ben Johnson Associates, Inc.®, a firm of economic and analytic consultants specializing in the area of public utility regulation.

Educational Background

Q. What is your educational background?

A. I graduated with honors from the University of South Florida with a Bachelor of Arts degree in Economics in March 1974. I earned a Master of Science degree in Economics at Florida State University in September 1977. The title of my Master's Thesis is a "A Critique of Economic Theory as Applied to the Regulated Firm." Finally, I graduated from Florida State University in April 1982 with the Ph.D. degree in Economics. The title of my doctoral dissertation is "Executive Compensation, Size, Profit, and Cost in the Electric Utility Industry."

Clients

Q. What types of clients employ your firm?

A Much of our work is performed on behalf of public agencies at every level of government involved in utility regulation. These agencies include state regulatory commissions, public counsels, attorneys general, and local governments, among others.



We are also employed by various private organizations and firms, both regulated and unregulated. The diversity of our clientele is illustrated below.

Regulatory Commissions

Alabama Public Service Commission—Public Staff for Utility Consumer Protection
Alaska Public Utilities Commission
Arizona Corporation Commission
Arkansas Public Service Commission
Connecticut Department of Public Utility Control
District of Columbia Public Service Commission
Idaho Public Utilities Commission
Idaho State Tax Commission
Iowa Department of Revenue and Finance
Kansas State Corporation Commission
Maine Public Utilities Commission
Minnesota Department of Public Service
Missouri Public Service Commission
National Association of State Utility Consumer Advocates
Nevada Public Service Commission
New Hampshire Public Utilities Commission
North Carolina Utilities Commission—Public Staff
Oklahoma Corporation Commission
Ontario Ministry of Culture and Communications
Staff of the Delaware Public Service Commission
Staff of the Georgia Public Service Commission
Texas Public Utilities Commission
Virginia State Corporation Commission
Washington Utilities and Transportation Commission
West Virginia Public Service Commission—Division of Consumer Advocate

Wisconsin Public Service Commission
Wyoming Public Service Commission

Public Counsels

Arizona Residential Utility Consumers Office
Colorado Office of Consumer Counsel
Colorado Office of Consumer Services
Connecticut Consumer Counsel
District of Columbia Office of People's Counsel
Florida Public Counsel
Georgia Consumers' Utility Counsel
Hawaii Division of Consumer Advocacy
Illinois Small Business Utility Advocate Office
Indiana Office of the Utility Consumer Counselor
Iowa Consumer Advocate
Maryland Office of People's Counsel
Minnesota Office of Consumer Services
Missouri Public Counsel
New Hampshire Consumer Counsel
Ohio Consumer Counsel
Pennsylvania Office of Consumer Advocate
Utah Department of Business Regulation—Committee of Consumer Services

Attorneys General

Arkansas Attorney General
Florida Attorney General—Antitrust Division
Idaho Attorney General
Kentucky Attorney General
Michigan Attorney General

Minnesota Attorney General
Nevada Attorney General's Office of Advocate for Customers of Public Utilities
South Carolina Attorney General
Utah Attorney General
Virginia Attorney General
Washington Attorney General

Local Governments

City of Austin, TX
City of Corpus Christi, TX
City of Dallas, TX
City of El Paso, TX
City of Galveston, TX
City of Norfolk, VA
City of Phoenix, AZ
City of Richmond, VA
City of San Antonio, TX
City of Tucson, AZ
County of Augusta, VA
County of Henrico, VA
County of York, VA
Town of Ashland, VA

Town of Blacksburg, VA
Town of Pecos City, TX

Other Government Agencies

Canada—Department of Communications
Hillsborough County Property Appraiser
Provincial Governments of Canada
Sarasota County Property Appraiser
State of Florida—Department of General Services
United States Department of Justice—Antitrust Division
Utah State Tax Commission

Regulated Firms

Alabama Power Company
Americall LDC, Inc.
BC Rail
CommuniGroup
Florida Association of Concerned Telephone Companies, Inc.
LDDS Communications, Inc.
Louisiana/Mississippi Resellers Association
Madison County Telephone Company
Montana Power Company
Mountain View Telephone Company
Nevada Power Company
Network I, Inc.
North Carolina Long Distance Association
Northern Lights Public Utility
Otter Tail Power Company
Pan-Alberta Gas, Ltd.
Resort Village Utility, Inc.
South Carolina Long Distance Association

Stanton Telephone
Teleconnect Company
Tennessee Resellers' Association
Westel Telecommunications
Yelcot Telephone Company, Inc.

Other Private Organizations

Arizona Center for Law in the Public Interest
Black United Fund of New Jersey
Casco Bank and Trust
Coalition of Boise Water Customers
Colorado Energy Advocacy Office
East Maine Medical Center
Georgia Legal Services Program
Harris Corporation
Helca Mining Company
Idaho Small Timber Companies
Independent Energy Producers of Idaho
Interstate Securities Corporation
J.R. Simplot Company
Merrill Trust Company
MICRON Semiconductor, Inc.
Native American Rights Fund
PenBay Memorial Hospital
Rosebud Enterprises, Inc.
Skokomish Indian Tribe
State Farm Insurance Company
Twin Falls Canal Company
World Center for Birds of Prey

Prior Experience

Q. Before becoming a consultant, what was your employment experience?

A. From August 1975 to September 1977, I held the position of Senior Utility Analyst with Office of Public Counsel in Florida. From September 1974 until August 1975, I held the position of Economic Analyst with the same office. Prior to that time, I was employed by the law firm of Holland and Knight as a corporate legal assistant.

Q. In how many formal utility regulatory proceedings have you been involved?

A. As a result of my experience with the Florida Public Counsel and my work as a consulting economist, I have been actively involved in approximately 400 different formal regulatory proceedings concerning electric, telephone, natural gas, railroad, and water and sewer utilities.

Q. Have you done any independent research and analysis in the field of regulatory economics?

A. Yes, I have undertaken extensive research and analysis of various aspects of utility regulation. Many of the resulting reports were prepared for the internal use of the Florida Public Counsel. Others were prepared for use by the staff of the Florida Legislature and for submission to the Arizona Corporation Commission, the Florida Public Service Commission, the Canadian Department of Communications, and the Provincial Governments of Canada, among others. In addition, as I already mentioned, my Master's thesis concerned the theory of the regulated firm.

Q. Have you testified previously as an expert witness in the area of public utility regulation?

A. Yes. I have provided expert testimony on more than 250 occasions in proceedings before state courts, federal courts, and regulatory commissions throughout the United States and in Canada. I have presented or have pending expert testimony before 35 state commissions, the Interstate Commerce Commission, the Federal Communications Commission, the District of Columbia Public Service Commission, the Alberta, Canada Public Utilities Board, and the Ontario Ministry of Culture and Communication.

Q. What types of companies have you analyzed?

A. My work has involved more than 425 different telephone companies, covering the entire spectrum from AT&T Communications to Stanton Telephone, and more than 55 different electric utilities ranging in size from Texas Utilities Company to Savannah Electric and Power Company. I have also analyzed more than 30 other regulated firms, including water, sewer, natural gas, and railroad companies.

Teaching and Publications

Q. Have you ever lectured on the subject of regulatory economics?

A. Yes, I have lectured to undergraduate classes in economics at Florida State University on various subjects related to public utility regulation and economic theory. I have also addressed conferences and seminars sponsored by such institutions as the National Association of Regulatory Utility Commissioners (NARUC), the Marquette University College of Business Administration, the Utah Division of Public Utilities and the University of Utah, the Competitive Telecommunications Association (COMPTEL), the

International Association of Assessing Officers (IAAO), the Michigan State University Institute of Public Utilities, the National Association of State Utility Consumer Advocates (NASUCA), the Rural Electrification Administration (REA), North Carolina State University, and the National Society of Rate of Return Analysts.

Q. Have you published any articles concerning public utility regulation?

A. Yes, I have authored or co-authored the following articles and comments:

"Attrition: A Problem for Public Utilities—Comment." *Public Utilities Fortnightly*, March 2, 1978, pp. 32-33.

"The Attrition Problem: Underlying Causes and Regulatory Solutions." *Public Utilities Fortnightly*, March 2, 1978, pp. 17-20.

"The Dilemma in Mixing Competition with Regulation." *Public Utilities Fortnightly,* February 15, 1979, pp. 15-19.

"Cost Allocations: Limits, Problems, and Alternatives." *Public Utilities Fortnightly,* December 4, 1980, pp. 33-36.

"AT&T is Wrong." *The New York Times,* February 13, 1982, p. 19.

"Deregulation and Divestiture in a Changing Telecommunications Industry," with Sharon D. Thomas. *Public Utilities Fortnightly*, October 14, 1982, pp. 17-22.

"Is the Debt-Equity Spread Always Positive?" *Public Utilities Fortnightly,* November 25, 1982, pp. 7-8.

"Working Capital: An Evaluation of Alternative Approaches." *Electric Rate-Making,* December 1982/January 1983, pp. 36-39.

"The Staggers Rail Act of 1980: Deregulation Gone Awry," with Sharon D. Thomas. *West Virginia Law Review,* Coal Issue 1983, pp. 725-738.

"Bypassing the FCC: An Alternative Approach to Access Charges." *Public Utilities Fortnightly,* March 7, 1985, pp. 18-23.

"On the Results of the Telephone Network's Demise—Comment," with Sharon D. Thomas. *Public Utilities Fortnightly,* May 1, 1986, pp. 6-7.

"Universal Local Access Service Tariffs: An Alternative Approach to Access Charges." In *Public Utility Regulation in an Environment of Change,* edited by Patrick C. Mann and Harry M. Trebing, pp. 63-75. Proceedings of the Institute of Public Utilities Seventeenth Annual Conference. East Lansing, Michigan: Michigan State University Public Utilities Institute, 1987.

With E. Ray Canterbery. Review of *The Economics of Telecommunications: Theory and Policy* by John T. Wenders. *Southern Economic Journal* 54.2 (October 1987).

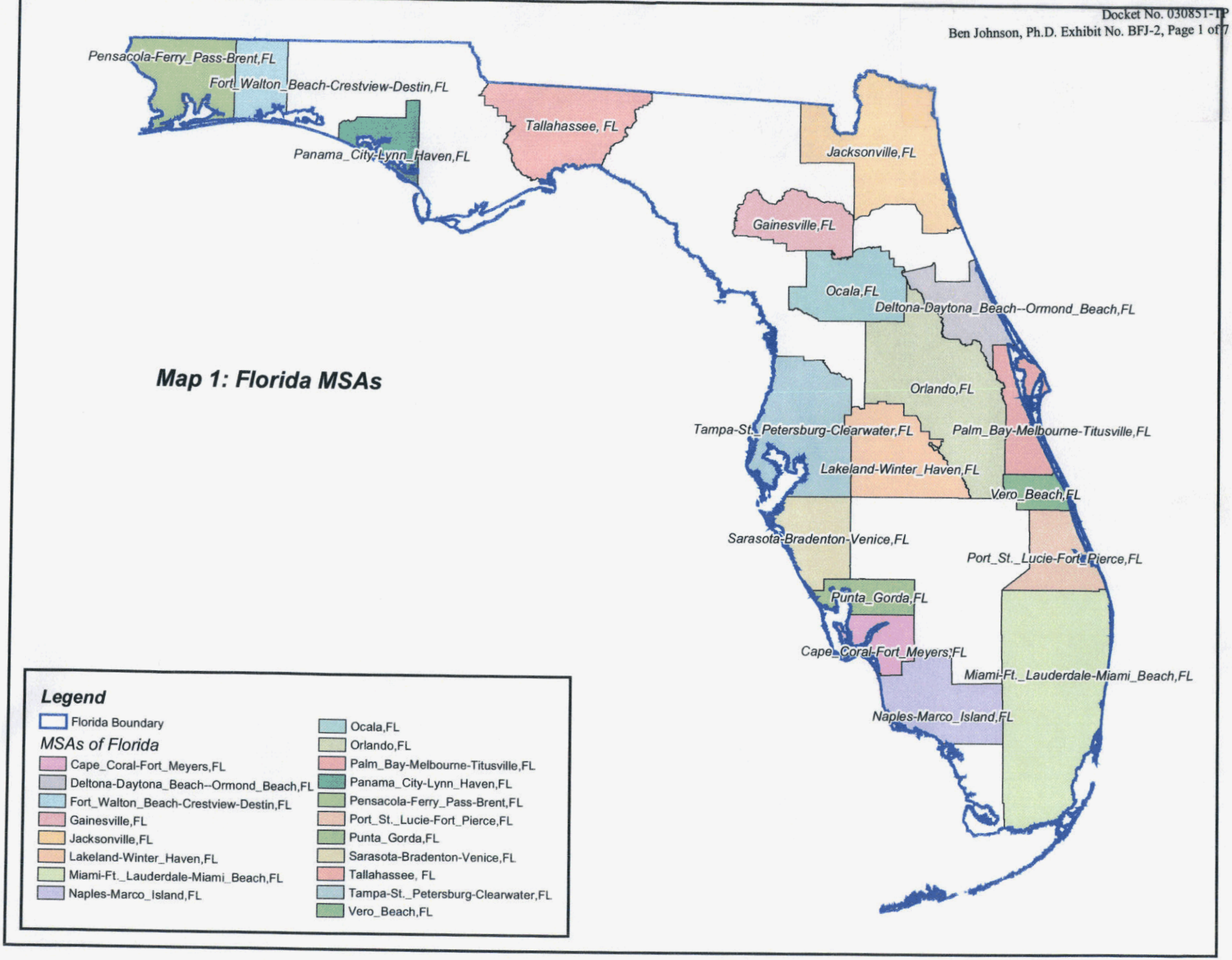
"The Marginal Costs of Subscriber Loops," A Paper Published in the Proceedings of the Symposia on Marginal Cost Techniques for Telephone Services. The National Regulatory Research Institute, July 15-19, 1990 and August 12-16, 1990.

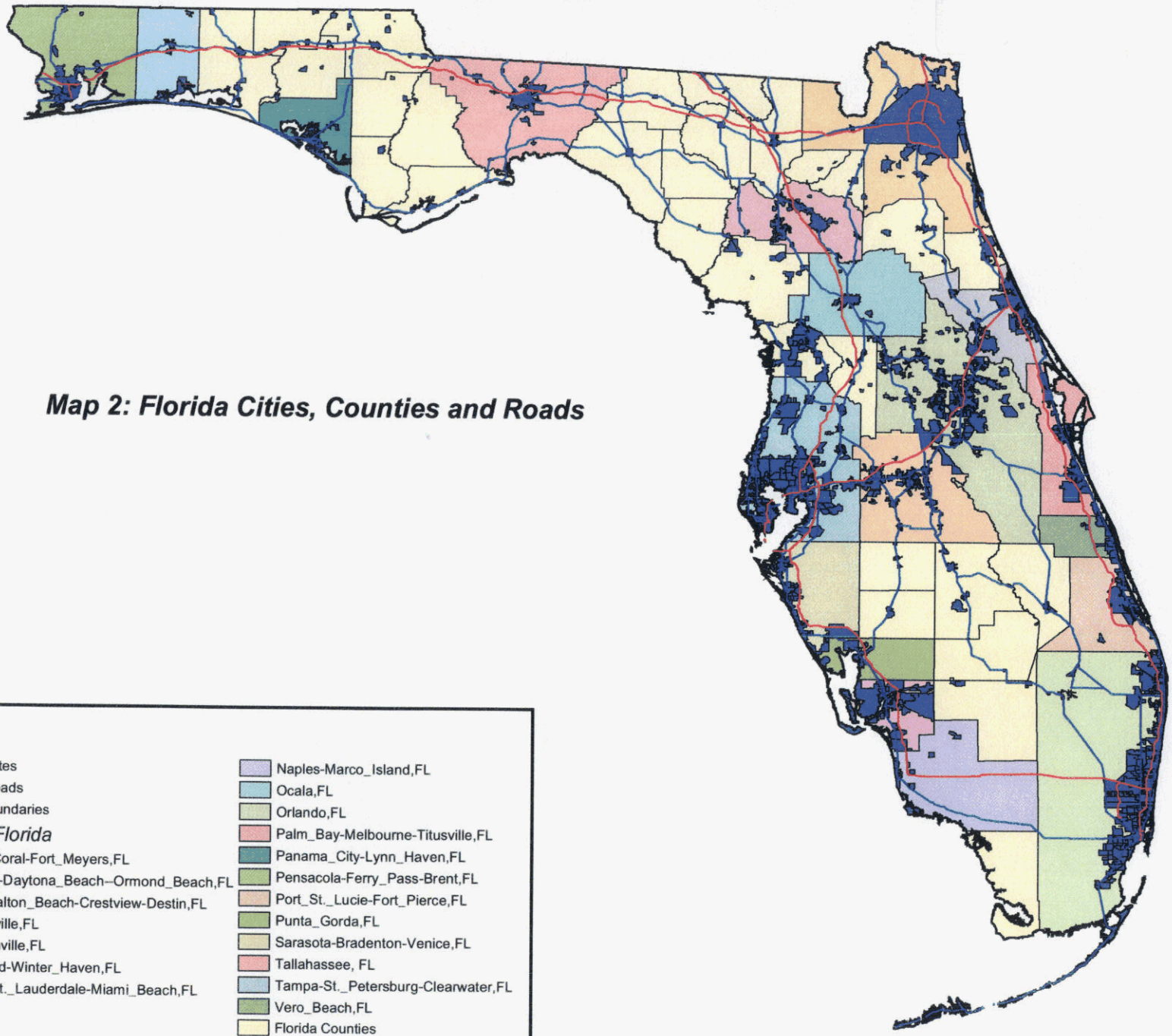
With E. Ray Canterbery and Don Reading. "Cost Savings from Nuclear Regulatory Reform: An Econometric Model." *Southern Economic Journal,* January 1996.

Professional Memberships

Q. Do you belong to any professional societies?

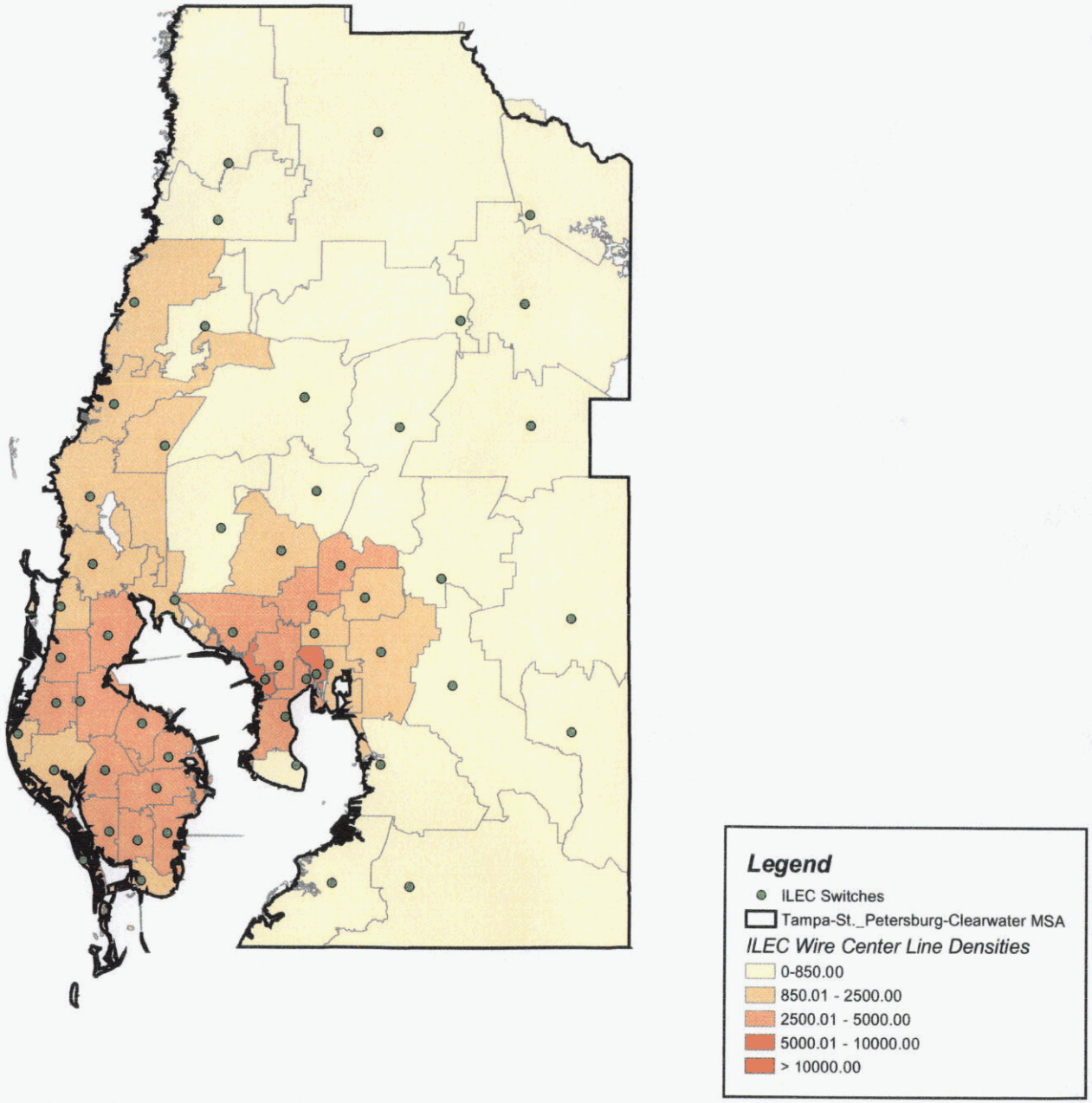
A. Yes. I am a member of the American Economic Association.


Pensacola-Ferry_Pass-Brent,FL
Fort_Walton_Beach-Crestview-Destin,FL
Panama_City-Lynn_Haven,FL
Tallahassee, FL
Jacksonville,FL
Gainesville,FL
Ocala,FL
Deltona-Daytona_Beach--Ormond_Beach,FL
Orlando,FL
Tampa-St._Petersburg-Clearwater,FL
Palm_Bay-Melbourne-Titusville,FL
Lakeland-Winter_Haven,FL
Vero_Beach,FL
Sarasota-Bradenton-Venice,FL
Port_St._Lucie-Fort_Pierce,FL
Punta_Gorda,FL
Cape_Coral-Fort_Meyers,FL
Miami-Ft._Lauderdale-Miami_Beach,FL
Naples-Marco_Island,FL
Map 1: Florida MSAs
Legend
Florida Boundary
MSAs of Florida
Cape_Coral-Fort_Meyers,FL
Deltona-Daytona_Beach--Ormond_Beach,FL
Fort_Walton_Beach-Crestview-Destin,FL
Gainesville,FL
Jacksonville,FL
Lakeland-Winter_Haven,FL
Miami-Ft._Lauderdale-Miami_Beach,FL
Naples-Marco_Island,FL
Ocala,FL
Orlando,FL
Palm_Bay-Melbourne-Titusville,FL
Panama_City-Lynn_Haven,FL
Pensacola-Ferry_Pass-Brent,FL
Port_St._Lucie-Fort_Pierce,FL
Punta_Gorda,FL
Sarasota-Bradenton-Venice,FL
Tallahassee, FL
Tampa-St._Petersburg-Clearwater,FL
Vero_Beach,FL

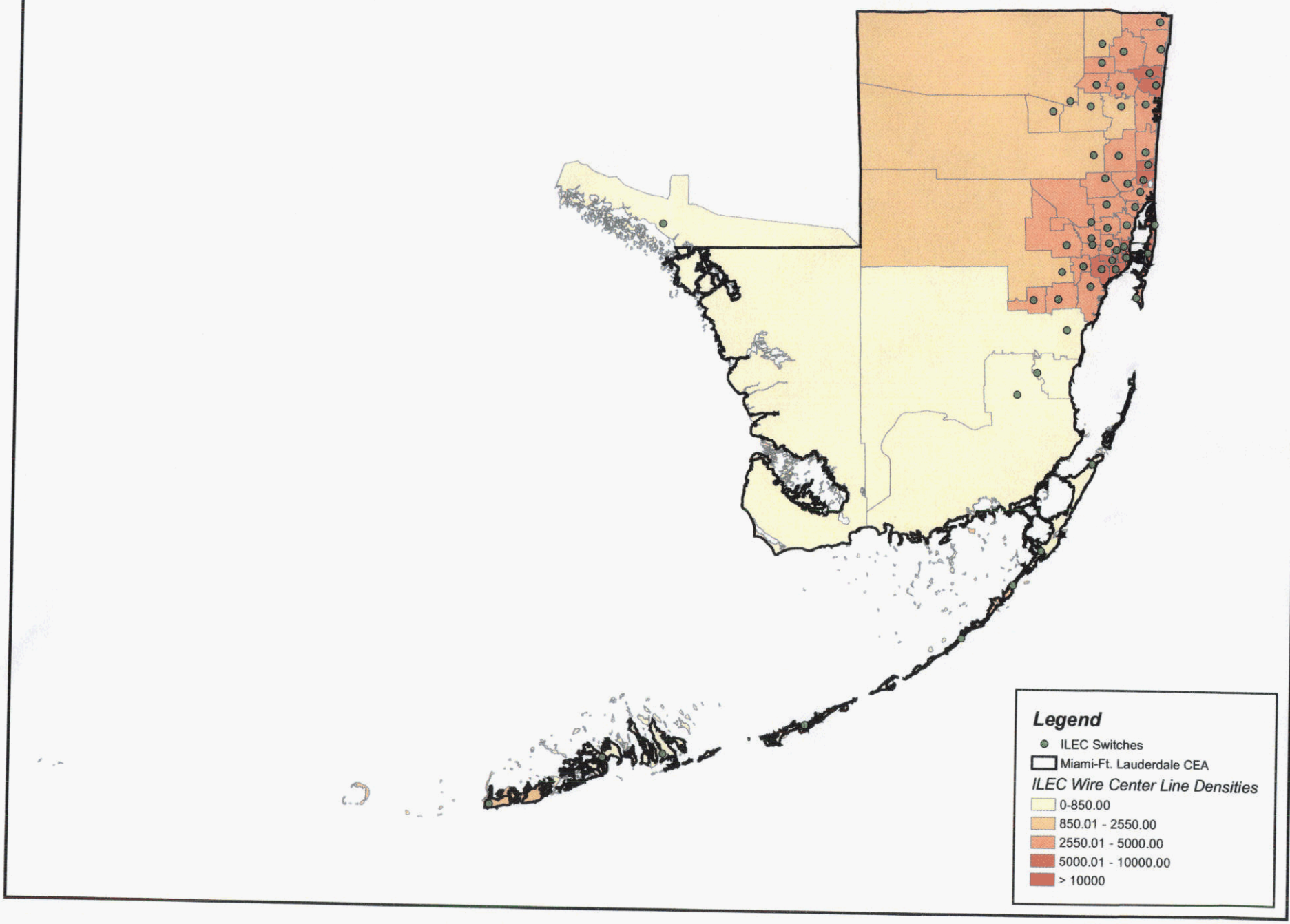


Map 2: Florida Cities, Counties and Roads

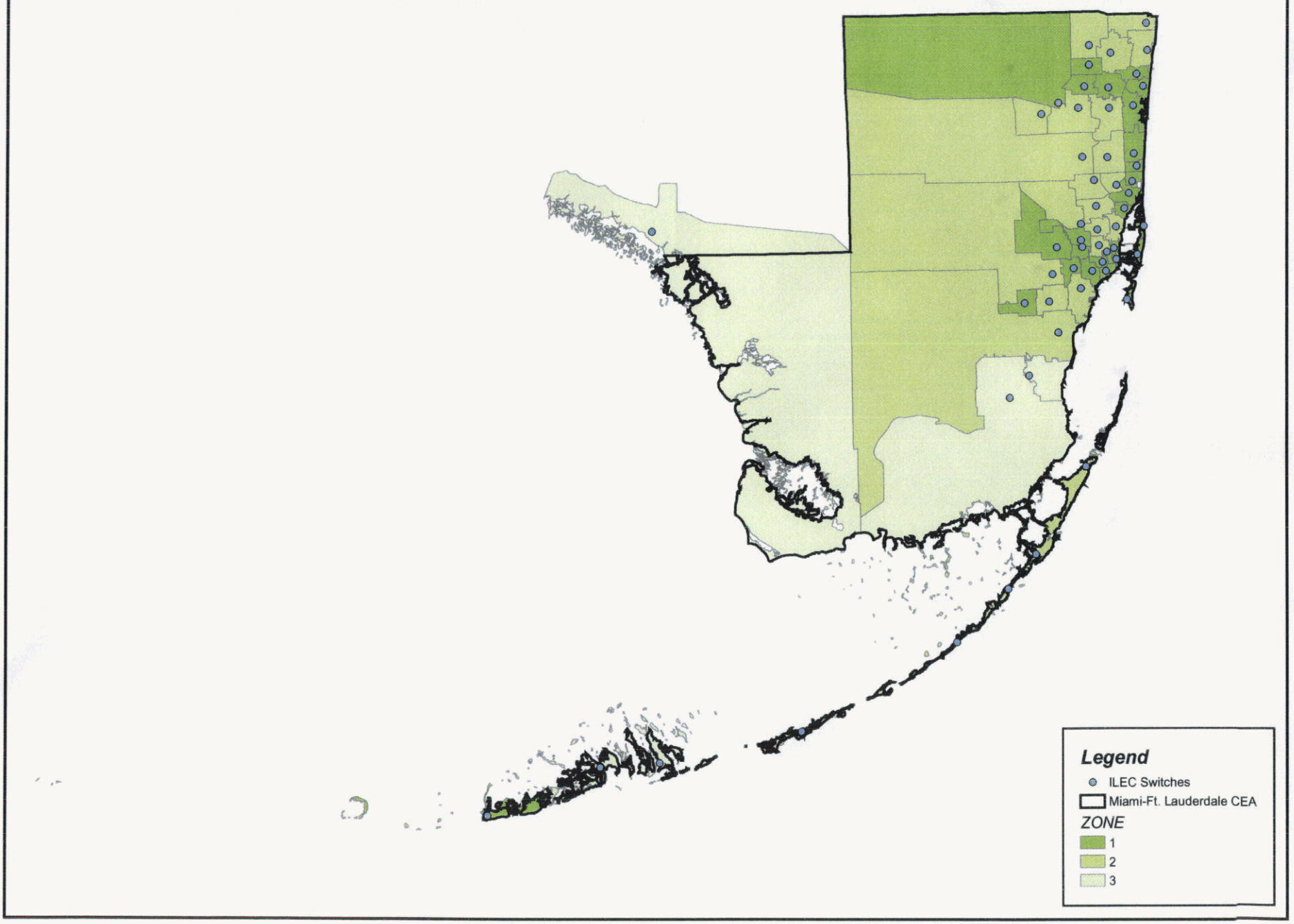
Map 3: ILEC Switches in the Tampa - St. Petersburg - Clearwater MSA



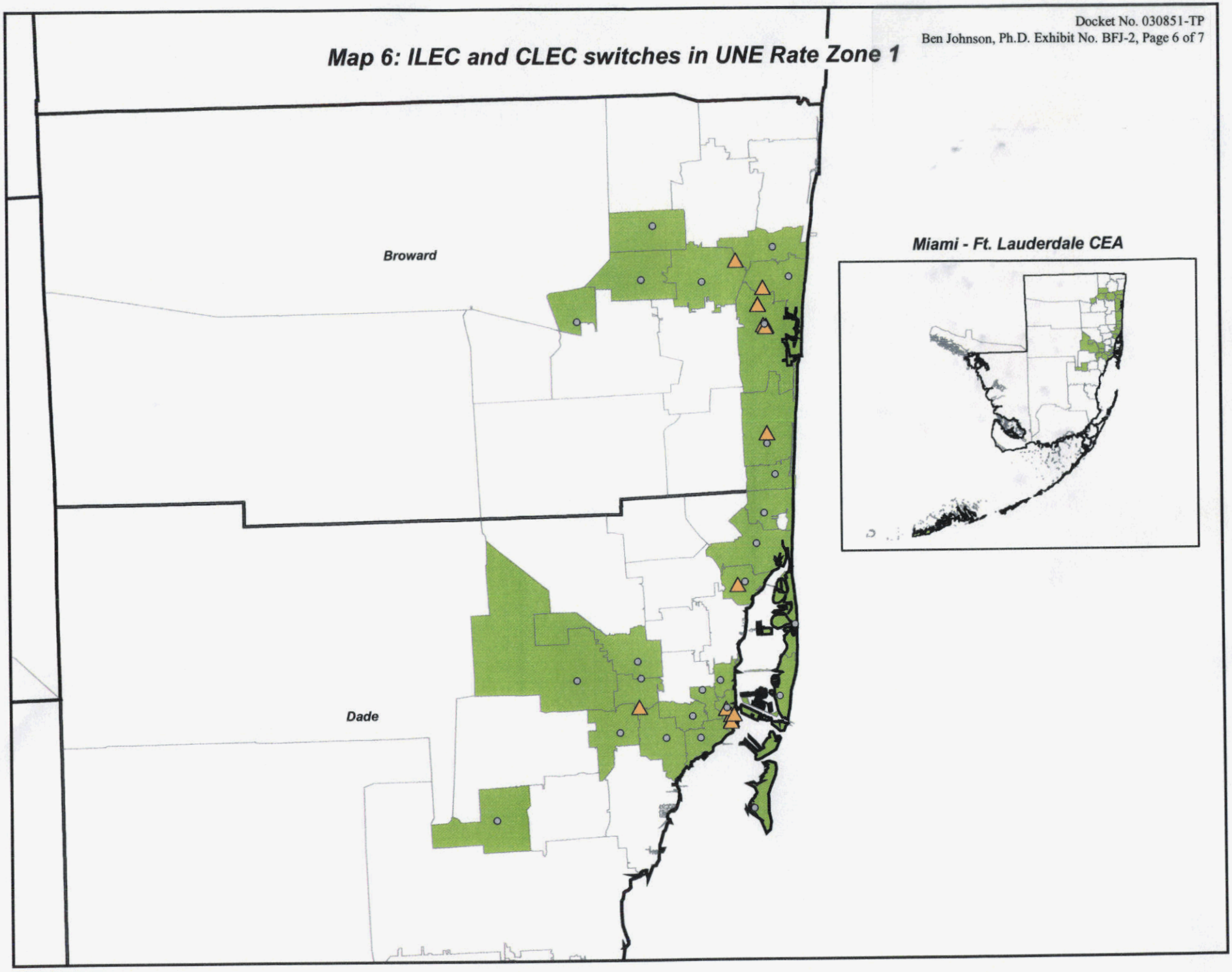
Map 4: ILEC Switches in the Miami - Ft. Lauderdale CEAs



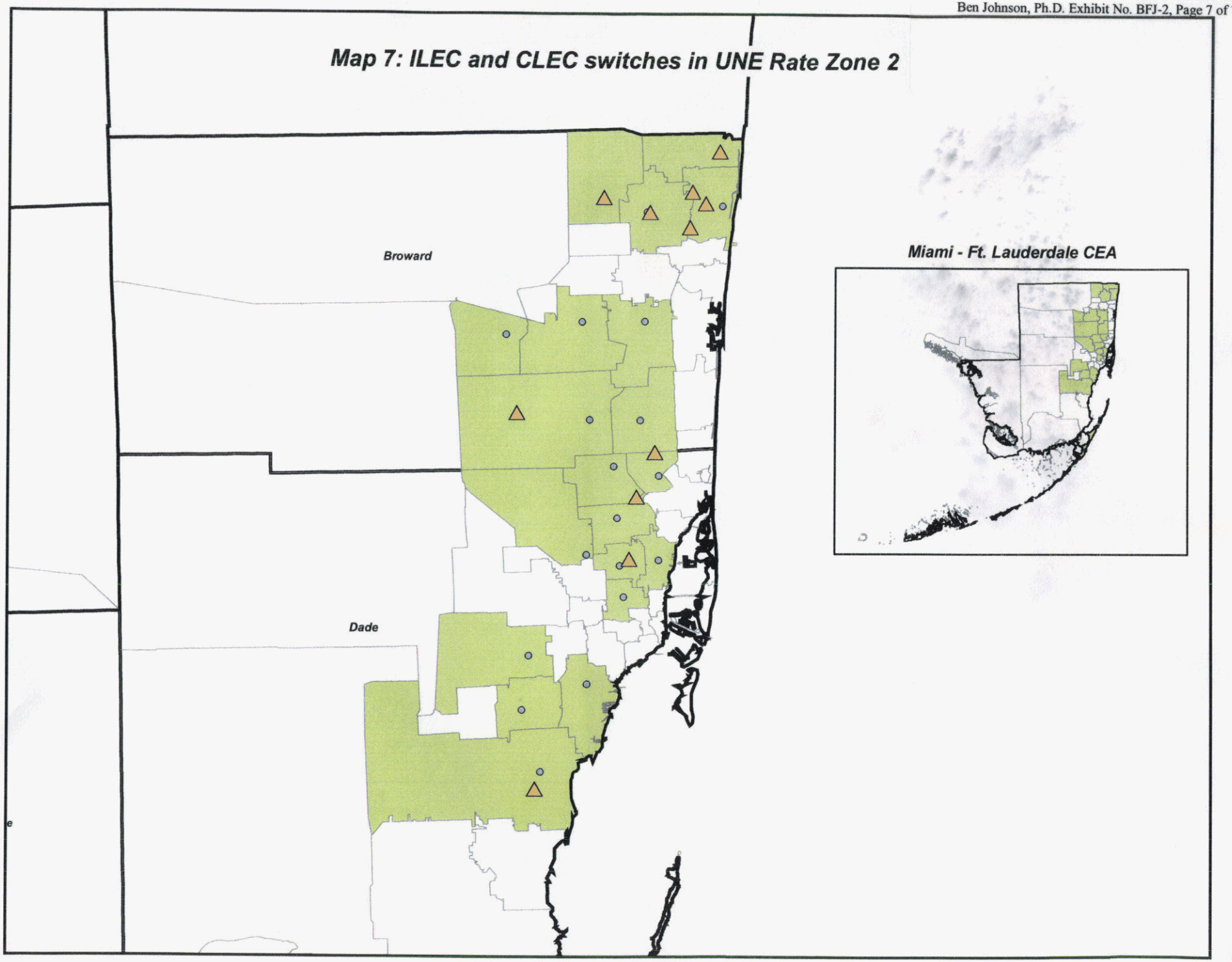
Map 5: ILEC Wire Centers in the Miami - Ft. Lauderdale CEAs by UNE Rate Zone



Map 6: ILEC and CLEC switches in UNE Rate Zone 1



Map 7: ILEC and CLEC switches in UNE Rate Zone 2



JAMES E. "JIM" KING, JR.
President

JOHNNIE BYRD
Speaker

STATE OF FLORIDA
OFFICE OF PUBLIC COUNSEL

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850-488-9330

Harold McLean
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Charles J. Beck
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February 10, 2003

Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Original
for
Transcript

Re: Docket No. 030851-TP

Dear Ms. Bayo:

Enclosed for filing in the above-referenced docket are the original and 15 copies of the revised exhibit BFJ-3 to the surrebuttal testimony of Dr. Ben Johnson.

Please indicate the time and date of receipt on the enclosed duplicate of this letter and return it to our office.

Sincerely,

Charles J. Beck
Deputy Public Counsel

CJB:bsr
Enclosures

[redacted] cc: Comp

DOCUMENT NUMBER-DATE
01890 FEB 10 03
FPSC-COMMISSION CLERK

Matrix of Intervenor Proposals Regarding Market Definition

Parties Recommending Specific Geographic Markets

Party	Network Interface Device	Individual Wire Center	Cluster of Wire Centers	UNE Zones within MSA	UNE Zones within Component Economic Area (CEA)	Metropolitan Statistical Area (MSA)	Local Access and Transport Area (LATA)
MCI	Bryant Direct, p. 40	Bryant Direct, p. 2					
Supra		Nilson Rebuttal, p. 25					
State of Florida		Johnson Rebuttal, p. 19	Johnson Rebuttal, p. 20				
Verizon				Taylor Rebuttal, p. 23			
Bellsouth					Pleatsikas Direct, p. 4		
Sprint						Staihr Direct, p. 4	
Verizon						Flup Direct, p. 8	
FCCA							Gillan Rebuttal, p. 3

Parties Discussing Market Definition But Not Recommending Specific Geographic Markets

AT&T (Bradbury)
AT&T (Wood)
Newsouth (Jen
FDN (Gallag
Z-Tel (Reith

JAMES E. "JIM" KING, JR.
President

Harold McLean
Public Counsel

ORIGINAL

STATE OF FLORIDA
OFFICE OF PUBLIC COUNSEL

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TALLAHASSEE, FLORIDA 32399-1400
850-488-9330

JOHNNIE BYRD
Speaker

Charles J. Beck
Deputy Public Counsel

March 19, 2004

Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Cx - Rpr

Re: Docket No. 030851-TP

Dear Ms. Bayo:

Enclosed for filing in the above-referenced dockets is the original and 15 copies of Citizens' Redacted Late Filed Hearing Exhibit 104.

Please indicate the time and date of receipt on the enclosed duplicate of this letter and return it to our office.

AUS
CAF
CMP
COM 5+orig1Ct+Rpr
CTR
ECR
GCL
OPC
MMS
SEC 1
OTH

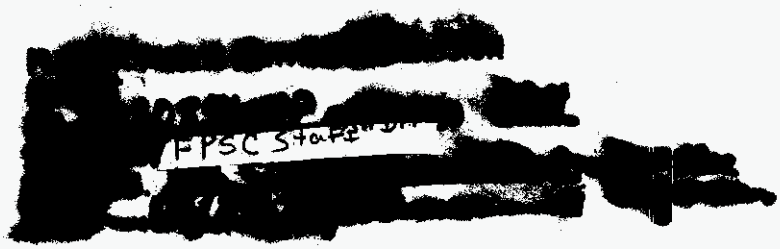
Sincerely,

Charles J. Beck
Deputy Public Counsel

CJB:bsr

Enclosures

cc: All parties of record



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FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER-DATE
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FPSC-COMMISSION CLERK

ORIGINAL

BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

REDACTED

In re: Implementation of requirements arising from Federal Communications Commission's triennial UNE review: Local Circuit Switching for Mass Market Customers	))))	Docket No. 030851-TP

Late Filed Exhibit 104

Submitted by

Ben Johnson, Ph.D.

Ben Johnson Associates, Inc.

on behalf of the

Citizens of the State of Florida

March 18, 2004

DOCUMENT NUMBER-DATE
03700 MAR 19 04
FPSC-COMMISSION CLERK

Contents

1. Executive Summary *1*
Provides the high-level results of the illustrative market analysis

2. Maps *15*
A visual depiction of the illustrative markets for the Miami-Ft. Lauderdale-Miami Beach, Jacksonville, and Tampa-St. Petersburg-Clearwater MSAs into

3. Technical Notes *18*
A brief narrative explaining how the illustrative market groupings were developed

4. Indexing *24*
Illustrates the process used to identify homogeneous wire centers considering multiple factors (line counts, line density, etc.)

5. Market Development *54*
Illustrates the grouping of wire centers into markets, using the indexed data

6. Trigger Analysis *102*
Provides information concerning the number of CLECs operating in the illustrative markets

7. Foundation Data *110*
Contains FCC model worksheets and other calculations supporting the analysis

1 Executive Summary

Markets in Miami-Ft. Lauderdale-Miami Beach MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1, 2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 1									
MIAMFLGR	BellSouth	1	78,130	88%	15,066	29	0.00	7	7
Market 2									
FTLDFLCY	BellSouth	1	67,867	59%	5,891	16	17.00	6	4
Market 3									
MIAMFLAE	BellSouth	1	95,775	52%	6,826	16	17.75	8	7
Market 4									
FTLDFLMR	BellSouth	1	112,251	52%	4,692	24	20.00	5	4
FTLDFLPL	BellSouth	2	87,802	44%	2,526	22	41.25	10	5
FTLDFLCR	BellSouth	1	66,537	46%	5,104	14	33.25	4	4
Average			*88,863*	*48%*	*3,717*	*20*	*31.50*		
Market 5									
MIAMFLPL	BellSouth	1	96,854	93%	3,061	20	19.50	6	6
MIAMFLWM	BellSouth	1	58,124	51%	4,802	16	31.50	7	5
MIAMFLPB	BellSouth	1	62,333	56%	4,221	15	28.50	6	4
MIAMFLHL	BellSouth	2	157,037	41%	3,471	19	42.75	7	6
MIAMFLRR	BellSouth	2	79,895	53%	2,730	17	31.00	7	6
Average			*90,849*	*58%*	*3,415*	*17*	*30.65*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Miami-Ft. Lauderdale-Miami Beach MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 6									
BCRTFLMA	BellSouth	1	95,932	50%	3,871	22	23.50	5	3
Market 7									
WPBHFLAN	BellSouth	1	54,805	61%	4,118	15	31.50	6	4
WPBHFLHH	BellSouth	2	105,514	46%	2,805	15	42.25	5	4
WPBHFLRB	BellSouth	2	68,213	49%	3,015	12	43.00	4	3
Average			*76,177*	*51%*	*3,107*	*14*	*38.92*		
Market 8									
PMBHFLFE	BellSouth	2	102,773	42%	3,859	17	36.75	7	4
DRBHFLMA	BellSouth	2	73,600	42%	2,936	12	52.00	4	3
PMBHFLMA	BellSouth	2	109,195	38%	3,534	15	49.75	8	5
FTLDFLOA	BellSouth	1	87,844	35%	4,083	16	50.00	7	5
Average			*90,213*	*38%*	*3,493*	*14*	*50.58*		
Market 9									
MIAMFLBR	BellSouth	1	64,051	43%	8,961	12	40.75	6	4

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Miami-Ft. Lauderdale-Miami Beach MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 10									
HLWDFLWH	BellSouth	2	123,975	36%	3,603	19	51.75	7	5
NDADFLGG	BellSouth	2	48,121	40%	4,093	12	62.00	2	0
HLWDFLMA	BellSouth	1	66,144	38%	3,452	15	51.75	3	2
NDADFLOL	BellSouth	1	44,268	43%	6,012	10	62.75	5	3
Average			*55,206*	*40%*	*4,163*	*13*	*57.25*		
Market 11									
BCRTFLBT	BellSouth	1	38,855	66%	2,626	19	51.50	5	2
DLBHFLMA	BellSouth	2	53,638	40%	3,148	8	72.50	3	1
Average			*46,247*	*51%*	*2,905*	*14*	*62.00*		
Market 12									
MIAMFLSO	BellSouth	2	81,526	38%	2,975	13	55.50	6	4
MIAMFLCA	BellSouth	2	119,427	25%	2,519	16	94.50	7	6
MIAMFLWD	BellSouth	1	66,210	19%	3,451	8	116.25	4	1
PRRNFLMA	BellSouth	2	112,119	40%	797	14	79.25	5	4
Average			*94,821*	*31%*	*1,616*	*13*	*86.38*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Miami-Ft. Lauderdale-Miami Beach MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1, 2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 13									
MIAMFLBA	BellSouth	1	46,170	42%	6,726	10	60.00	5	2
MIAMFLFL	BellSouth	1	44,734	38%	7,115	10	70.25	2	2
MIAMFLME	BellSouth	1	33,647	59%	9,867	3	81.75	0	0
MIAMFLBC	BellSouth	1	23,374	53%	6,083	5	83.00	2	1
MIAMFLAL	BellSouth	2	49,959	52%	4,151	4	71.50	2	2
MIAMFLAP	BellSouth	1	10,517	83%	2,858	6	104.25	2	1
MIAMFLKE	BellSouth	1	9,928	37%	4,327	1	158.00	2	0
MIAMFLNS	BellSouth	2	48,092	42%	3,461	5	83.50	5	3
MIAMFLSH	BellSouth	2	62,659	44%	4,020	6	63.25	2	2
MIAMFLIC	BellSouth	1	46,065	26%	5,664	5	119.50	5	2
MIAMFLOL	BellSouth	2	51,984	48%	2,683	6	76.00	4	3
MIAMFLNM	BellSouth	1	39,706	36%	4,849	7	87.00	3	1
NDADFLBR	BellSouth	2	56,669	36%	2,589	8	86.00	2	1
NDADFLAC	BellSouth	1	60,961	35%	4,516	8	72.50	3	2
Average			*41,748*	*42%*	*4,205*	*6*	*86.89*		
Market 14									
WPBHFLGR	BellSouth	2	75,761	39%	1,091	14	72.00	3	2

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Miami-Ft. Lauderdale-Miami Beach MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1, 2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 15									
FTLDFLJA	BellSouth	2	84,806	33%	2,000	15	75.75	6	4
FTLDFLSU	BellSouth	1	65,223	30%	3,873	7	92.50	4	2
HLWDFLPE	BellSouth	2	113,121	29%	1,504	20	92.00	7	3
Average			*87,717*	*31%*	*1,957*	*14*	*86.75*		
Market 16									
PMBHFLCS	BellSouth	2	81,618	36%	2,099	11	74.75	4	1
Market 17									
WPBHFLGA	BellSouth	2	121,489	27%	1,859	15	97.25	6	3
WPBHFLLE	BellSouth	2	61,485	33%	2,732	8	90.75	3	2
BYBHFLMA	BellSouth	2	81,273	30%	1,548	11	97.25	2	2
Average			*88,082*	*29%*	*1,882*	*11*	*95.08*		
Market 18									
JPTRFLMA	BellSouth	2	61,692	36%	989	7	105.50	3	1
WPBHFLRP	BellSouth	3	56,831	31%	296	8	143.75	0	0
DLBHFLKP	BellSouth	2	49,407	22%	1,770	6	145.25	2	1
BCRTFLSA	BellSouth	2	72,118	23%	1,690	11	114.00	3	1
Average			*60,012*	*28%*	*738*	*8*	*127.13*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Miami-Ft. Lauderdale-Miami Beach MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1, 2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 19									
HLWDFLHA	BellSouth	1	32,443	32%	6,034	5	111.50	2	1
Market 20									
PMBHFLTA	BellSouth	1	49,305	22%	3,547	5	130.25	4	2
FTLDFLSG	BellSouth	1	8,607	87%	1,369	0	168.25	2	1
FTLDFLWN	BellSouth	2	17,890	29%	1,186	5	168.50	3	3
BLGLFLMA	BellSouth	2	13,383	40%	271	0	214.25	0	0
PAHKFLMA	BellSouth	2	4,472	29%	203	0	269.75	0	0
Average			*18,731*	*33%*	*878*	*2*	*190.20*		
Market 21									
HMSTFLNA	BellSouth	3	9,913	36%	381	0	222.25	0	0
HMSTFLHM	BellSouth	3	40,805	35%	254	2	178.25	0	0
Average			*25,359*	*35%*	*272*	*1*	*200.25*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Jacksonville MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1, 2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 1									
JCVLFLCL	BellSouth	1	75,150	66%	3,660	26	13.50	6	4
Market 2									
JCVLFLSJ	BellSouth	2	76,016	53%	3,112	18	26.25	7	4
JCVLFLSM	BellSouth	1	35,437	63%	3,715	19	43.75	5	3
Average			*55,727*	*56%*	*3,281*	*19*	*35.00*		
Market 3									
JCVLFLRV	BellSouth	2	46,657	39%	2,357	11	84.00	5	4
JCVLFLNO	BellSouth	2	48,448	44%	590	10	100.75	3	3
Average			*47,553*	*42%*	*933*	*11*	*92.38*		
Market 4									
JCVLFLAR	BellSouth	2	40,218	39%	2,129	12	88.50	4	4
JCVLFLBW	BellSouth	2	42,825	33%	1,101	11	115.75	4	4
JCVLFLJT	BellSouth	1	6,834	97%	5,720	3	119.00	1	1
MNDRFLAV	BellSouth	2	10,689	46%	6,148	7	100.00	3	3
Average			*25,142*	*41%*	*1,657*	*8*	*105.81*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Jacksonville MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 5									
MNDRFLLO	BellSouth	2	49,467	33%	1,008	12	110.00	8	3
ORPKFLMA	BellSouth	2	33,054	32%	1,246	8	131.00	4	2
JCVLFLWC	BellSouth	2	47,544	23%	607	8	156.25	5	3
Average			*43,355*	*29%*	*845*	*9*	*132.42*		
Market 6									
JCBHFLMA	BellSouth	2	41,136	31%	2,118	11	111.50	6	2
Market 7									
STAGFLMA	BellSouth	3	33,179	45%	177	10	135.50	2	2
Market 8									
JCVLFLFC	BellSouth	1	25,831	24%	2,059	5	160.25	2	2
JCVLFLLF	BellSouth	3	45,409	26%	399	6	165.75	2	2
JCVLFLOW	BellSouth	3	25,169	38%	295	3	174.50	2	2
JCBHFLAB	BellSouth	2	12,518	15%	962	0	252.75	1	1
FTGRFLMA	BellSouth	3	517	2%	65	0	349.00	1	1
JCVLFLIA	BellSouth	2	924	72%	227	0	232.00	1	1
JCBHFLSP	BellSouth	1	5,835	33%	522	0	233.75	2	1
YULEFLMA	BellSouth	3	3,560	4%	79	0	326.75	0	0
FRBHFLFP	BellSouth	2	19,513	30%	375	2	206.25	0	0
Average			*14,181*	*28%*	*341*	*1*	*242.59*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Jacksonville MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	Number of Collocators	Index	Total CLECs	Significant CLECs
Market 9									
ORPKFLRW	BellSouth	2	19,595	22%	1,219	3	195.00	2	1
MNDRFLLW	BellSouth	3	5,157	17%	118	0	303.75	2	1
MDBGFLPM	BellSouth	3	15,008	14%	145	0	284.25	1	1
GCSPFLCN	BellSouth	3	10,322	29%	75	0	268.25	1	1
MXVLFLMA	BellSouth	3	2,316	20%	41	0	322.50	0	0
BLDWFLMA	BellSouth	3	2,151	22%	45	0	315.50	0	0
KYHGFLMA	BellSouth	3	6,580	14%	83	0	309.50	0	0
Average			*7,275*	*19%*	*86*	*0*	*300.00*		
Market 10									
PNVDFLMA	BellSouth	2	18,543	24%	400	4	205.25	2	1
Market 11									
STAGFLSH	BellSouth	2	15,887	29%	303	1	225.00	0	0
STAGFLBS	BellSouth	2	9,628	20%	1,131	0	245.50	0	0
Average			*12,758*	*26%*	*419*	*1*	*235.25*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Tampa-St. Petersburg-Clearwater MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	**Proprietary** Number of Collocators	Index	Total CLECs	Significant CLECs
Market 1									
WSSDFLXA	Verizon	1	64,495	64%	4,155		22.25	9	7
Market 2									
CLWRFLXA	Verizon	1	74,732	50%	3,774		33.50	9	7
CNSDFLXA	Verizon	1	72,486	42%	2,965		61.00	7	5
PNLSFLXA	Verizon	1	76,442	51%	3,533		39.75	8	6
Average			*74,553*	*47%*	*3,395*		*44.75*		
Market 3									
BHPKFLXA	Verizon	1	38,276	83%	5,839		43.25	9	5
HYPKFLXA	Verizon	1	34,247	55%	4,235		66.25	6	4
SWTHFLXA	Verizon	1	68,701	48%	2,765		45.75	9	7
TAMPFLXX	Verizon	1	40,499	80%	7,459		47.50	9	7
Average			*45,431*	*64%*	*4,046*		*50.69*		
Market 4									
SPBGFLXA	Verizon	1	65,528	51%	3,517		46.00	6	4

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Tampa-St. Petersburg-Clearwater MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	**Proprietary** Number of Collocators	Index	Total CLECs	Significant CLECs
Market 5									
TAMPFLXE	Verizon	2	65,358	71%	1,287		50.00	8	6
YBCTFLXA	Verizon	2	25,995	70%	1,983		97.00	5	3
Average			*45,677*	*71%*	*1,430*		*73.50*		
Market 6									
FHSDFLXA	Verizon	1	35,437	81%	3,030		76.75	5	4
BAYUFLXA	Verizon	1	54,938	44%	3,095		84.00	5	3
Average			*45,188*	*58%*	*3,069*		*80.38*		
Market 7									
CRWDFLXA	Verizon	1	79,387	37%	1,858		83.25	7	4
SLSPFLXA	Verizon	1	51,846	40%	2,741		89.75	6	4
UNVRFLXA	Verizon	1	48,846	48%	2,708		83.00	6	4
SMNLFLXA	Verizon	2	28,382	35%	2,348		141.25	5	3
TMTRFLXA	Verizon	1	48,230	34%	2,458		118.25	5	3
Average			*51,338*	*39%*	*2,304*		*103.10*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Tampa-St. Petersburg-Clearwater MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	**Proprietary** Number of Collocators	Index	Total CLECs	Significant CLECs
Market 8									
PSDNFLXA	Verizon	1	51,127	41%	3,205		91.75	5	2
SKWYFLXA	Verizon	2	41,129	42%	2,839		107.75	6	4
SGBEFLXA	Verizon	1	21,928	41%	3,443		148.25	3	1
LLMNFLXA	Verizon	1	59,140	31%	2,577		118.50	6	4
SPBGFLXS	Verizon	1	26,949	25%	1,887		199.25	3	1
GNDYFLXA	Verizon	1	33,517	40%	2,795		117.25	5	3
NGBHFLXA	Verizon	1	65,883	32%	2,450		110.25	5	4
INRKFLXX	Verizon	1	25,098	24%	2,197		199.75	3	1
LRGOFLXA	Verizon	1	53,150	36%	2,668		114.00	5	3
Average			*40,849*	*34%*	*2,547*		*139.38*		
Market 9									
STGRFLXA	Verizon	1	63,718	34%	1,791		108.50	6	3
DNDNFLXA	Verizon	1	33,423	29%	2,360		168.00	4	1
TRSPFLXA	Verizon	2	56,176	32%	1,194		148.00	5	2
OLDSFLXA	Verizon	1	17,510	48%	886		153.25	5	3
NPRCFLXA	Verizon	2	66,442	31%	1,302		133.50	5	2
Average			*47,454*	*33%*	*1,416*		*142.25*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Tampa-St. Petersburg-Clearwater MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	**Proprietary** Number of Collocators	Index	Total CLECs	Significant CLECs
Market 10									
BRNDFLXA	Verizon	2	79,512	33%	713		111.00	7	5
PTCYFLXA	Verizon	3	40,031	38%	287		178.75	0	0
Average			*59,772*	*34%*	*477*		*144.88*		
Market 11									
WLCRFLXA	Verizon	1	53,629	30%	3,223		132.50	5	3
BYSHFLXA	Verizon	1	34	41%	16		291.25	2	0
Average			*26,832*	*30%*	*2,857*		*211.88*		

Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

Markets in Tampa-St. Petersburg-Clearwater MSA

Developed by Grouping Wire Centers

CLLI	Company	UNE Zone	Line Counts [1]	Enterprise & SA % [1,2]	Density	**Proprietary** Number of Collocators	Index	Total CLECs	Significant CLECs
Market 12									
HDSNFLXA	Verizon	2	52,048	25%	939		171.25	2	0
MNLKFLXA	Verizon	2	8,432	18%	216		285.25	1	0
WWSPFLSH	BellSouth	2	43,098	16%	597		216.75	0	0
SNSPFLXA	Verizon	1	17,891	17%	1,038		228.00	3	1
WWSPFLHI	BellSouth	3	19,105	23%	278		248.75	0	0
LNLKFLXA	Verizon	3	9,989	32%	116		252.25	0	0
KYSTFLXA	Verizon	2	12,605	22%	223		266.00	4	2
LUTZFLXA	Verizon	2	14,941	33%	351		224.25	4	2
WLCHFLXA	Verizon	2	13,664	31%	222		239.50	4	2
SNANFLXA	United Tel Co		2,929	24%	36		300.25		
DDCYFLXA	United Tel Co		15,469	35%	147		199.25		
THNTFLXA	Verizon	3	8,650	30%	150		261.50	0	0
TLCHFLXA	United Tel Co		4,507	14%	78		304.75		
ZPHYFLXA	Verizon	2	N/A	N/A	N/A		N/A	2	1
Average			*17,179*	*24%*	*279*		*245.98*		
Market 13									
ALFAFLXA	Verizon	2	18,659	28%	330		233.00	2	0
RSKNFLXA	Verizon	3	17,139	28%	380		233.00	0	0
PNCRFLXA	Verizon	3	5,119	21%	72		300.75	0	0
WIMMFLXA	Verizon	3	14,064	22%	127		270.75	0	0
Average			*13,745*	*26%*	*194*		*259.38*		

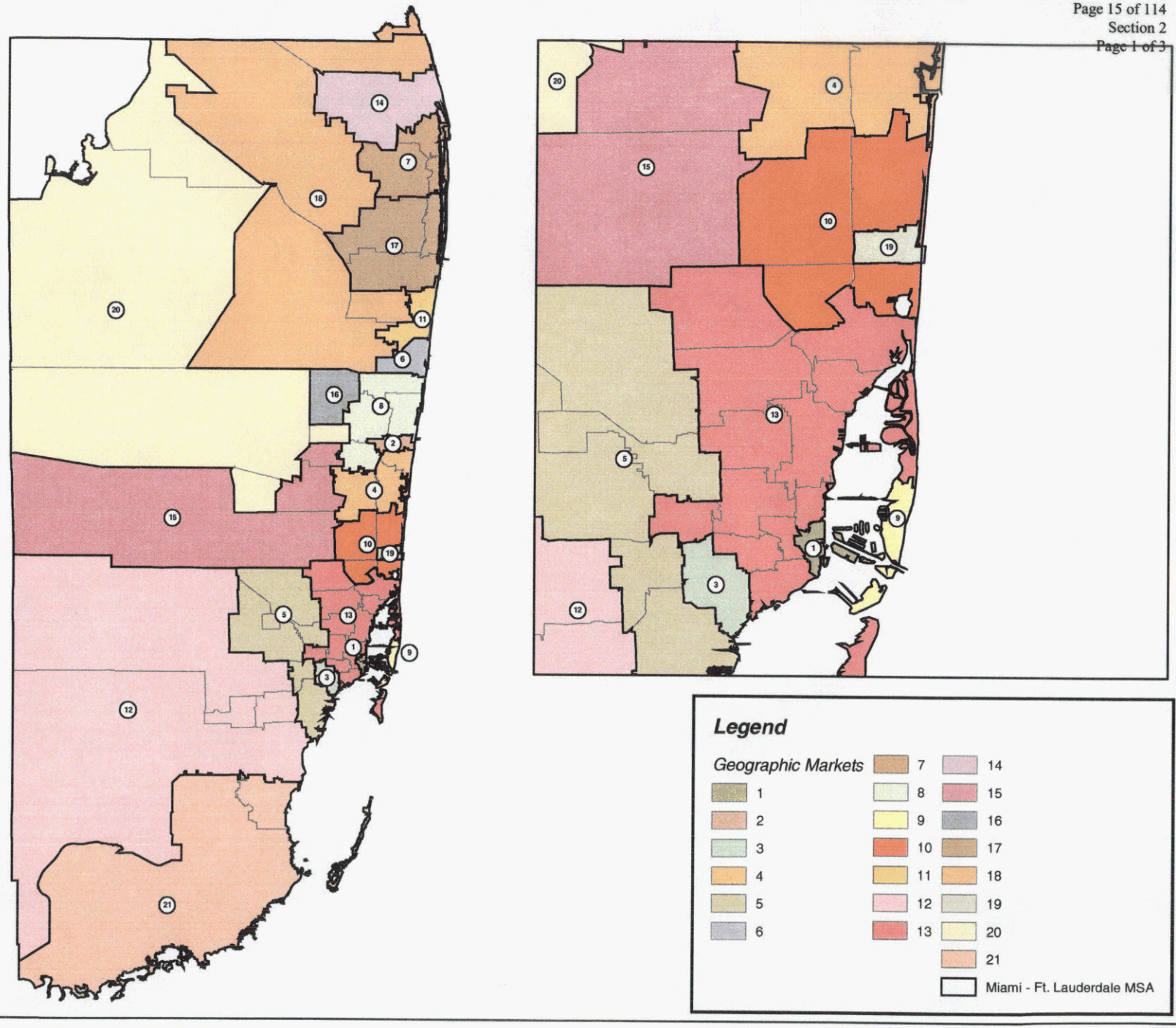
Notes:

[1] Line counts, enterprise and special access counts are obtained from the FCC's Hybrid Cost Proxy Model

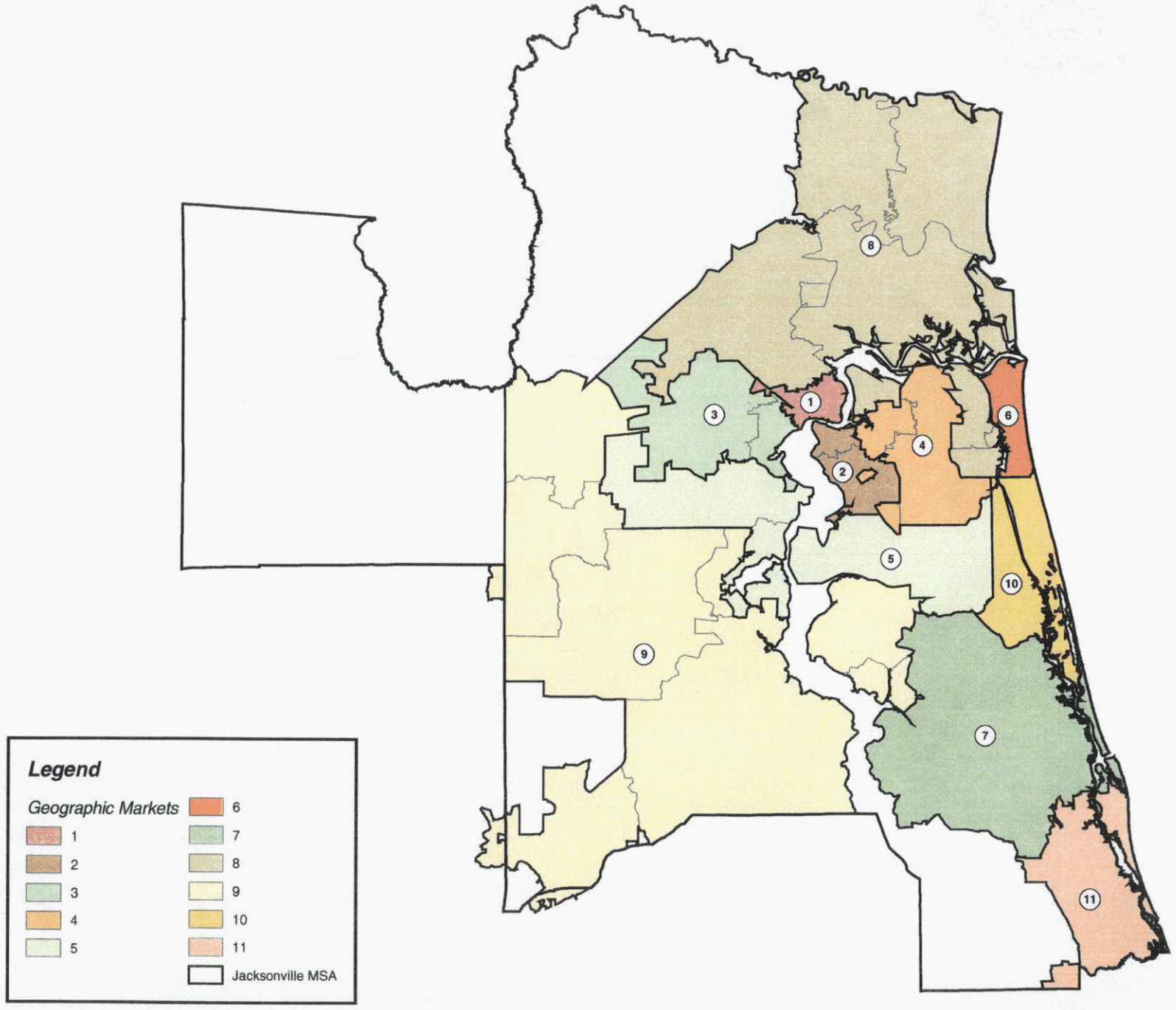
[2] Enterprise & SA % = (multi-line business lines + special access lines) / total lines

2 Maps

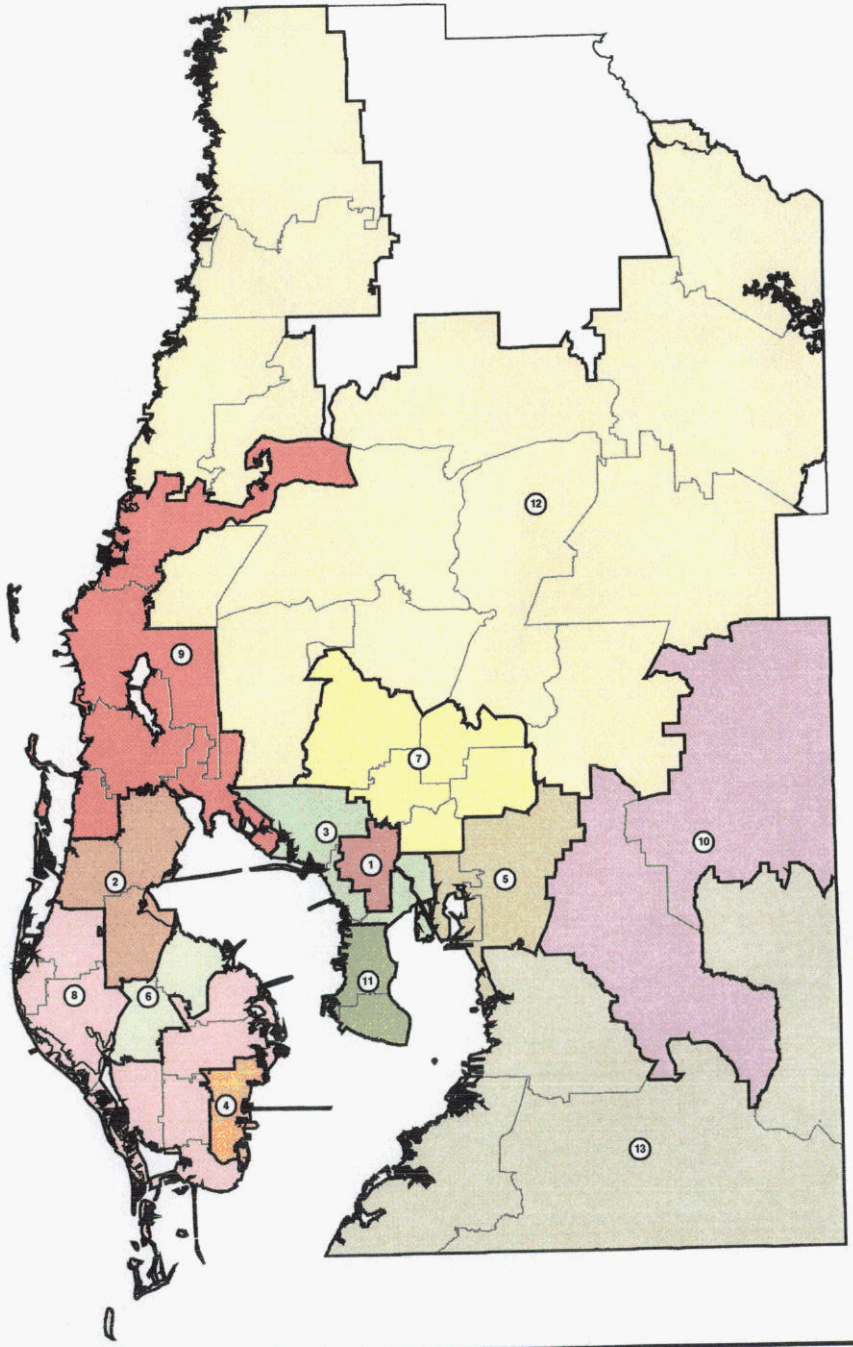
Map 8: Recommended Geographic Markets in the Miami - Ft. Lauderdale MSA



Map 9: Recommended Geographic Markets in the Jacksonville MSA



Map 10: Recommended Geographic Markets in the Tampa MSA



Legend

Geographic Markets

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- Tampa MSA

3 Technical Notes

Geographic Market Area Analysis

Introduction

In order to fulfill the Late Filed Exhibit request, we analyzed data for wire centers in three Florida MSAs. We followed a multi-step process, starting with quantitative data for wire centers of each major ILEC [BellSouth, Sprint (f/k/a Central and United), and Verizon (f/k/a GTE Florida)]. We ranked each wire center with respect to the following factors: total number of lines; the ratio of enterprise lines to total lines, the number of lines per square mile (density), and the total number of carriers collocated at the wire center. We then combined these rankings by giving them equal weight in the form of an index value.

In general, the data sets were selected, and the index structured, to be suggestive of the likelihood of more extensive CLEC activity currently or in the future. In other words, a lower index value suggests a greater likelihood that CLECs will conclude that it is economically feasible to serve mass market customers in that wire center using their own switch (either now or in the future). These index values were then used, in conjunction with information concerning airline distances, UNE rate zones, and other factors, in identifying contiguous groups of wire centers with reasonably homogeneous characteristics.

Step by Step Analytical Process

First, we selected a single high density wire center in the state as a base for the index. We started with the MIAMFLGR wire center. It is centrally located in downtown Miami, has the highest line density in the state, one of the highest line counts, and is experiencing a high level of collocation activity.

Second, data for all of the remaining major ILEC wire centers in the state were sorted and

compared to the initial wire center. Each wire center was sorted with respect to the total number of lines served. The initially selected wire center was assigned a ranking of 0. All other wire centers were ranked in order, based upon how closely they compared with the initially selected wire center. For instance, a wire center with slightly fewer lines was assigned a ranking of 1, the wire center with the next fewest lines was given a ranking of 2, and so forth. The same basic process was used to develop rankings using each of the data sets mentioned earlier.

The initially selected wire center (i.e., MIAMFLGR) was assigned an index value of 0, regardless of where it might otherwise have been ranked. Where the data for other wire centers fell both above and below the corresponding data for the initially selected wire center, this was accommodated by ranking the other wire centers in both directions, based upon their proximity to the initially selected wire center's data. Thus, for example, MIAMFLGR is experiencing the second highest collocation activity in the state. The wire center with the most collocation activity (e.g., ORLDFLMA) was assigned a ranking of 1, indicating it is ranked one step higher than the initially selected wire center. The wire center with the third highest level of collocation activity was also assigned a ranking of 1, indicating that it is ranked one step lower than the initial wire center. This approach is conceptually sound, because our goal was to sort wire centers on the basis of the degree to which they share characteristics that are similar to those of the benchmark wire center (i.e., MIAMFLGR). A wire center that has slightly more, or slightly less collocation activity, (regardless of the direction of the difference) is one step removed from the initially selected wire center. Other wire centers (with even more disparate collocation activity) are logically ranked farther away from the initially selected wire center. (See the worksheet pages "Line Sorts," "Ent&SA% Sorts," "Line Density Sorts," and "Collocation Sorts" for details of the sorting process).

Third, once the sorting and indexing process was completed for each variable (total lines,

proportion of enterprise lines, line density, and number of collocating carriers), the index values for each wire center were combined to develop a cumulative index value for each wire center. Since we were not aware of any compelling reason to give greater weight to particular factors, we gave the same weight to each of the four variables (i.e, the index for lines was given the same weight as the index for collocation). The resulting index values ranged from 0 (for the initially selected wire center) to approximately 370. In total, we indexed 417 major ILEC wire centers. This process allowed us to systematically identify those wire centers with characteristics that were relatively similar to each other (since they were all indexed relative to the same benchmark). Those with dissimilar index values had relatively dissimilar characteristics. (For details, see the worksheet page labeled "Indexing.")

Fourth, we looked closely at each of the wire centers that was adjacent to the initially selected wire center. During this step we looked at maps showing the location of each wire center, as well as data showing the airline distance from the initially selected wire center. Airline distance between wire centers was calculated using standard industry practice. (For details, see the worksheet labeled "...Distance Cales" for distance calculations between wire center based upon Vertical and Horizontal coordinates). We also considered the UNE rate zone. Any contiguous wire center with an index value that was similar to the initially selected wire center and that fell within the same UNE rate zone was considered a very good candidate for grouping with the initial wire center. To achieve a reasonably small number of geographic markets or clusters, these criteria were relaxed in some cases, while still ensuring that each group included reasonably homogeneous wire centers. As wire centers were selected for grouping, we sequentially considered other contiguous wire centers, until we reached a point where we had developed a reasonably well defined geographic area with sufficiently homogeneous wire centers.

Once these initial groupings had been developed, we started the process over again, by

selecting another wire center with the lowest remaining index value in the relevant area and comparing it with the index values of the other remaining wire centers in that particular MSA. The details of this iterative process are displayed on the numerically labeled worksheet pages following the "...Initial Cluster" worksheets.

Description of Underlying Data and Sources

Wire center line count and density data from the FCC's Synthesis or Hybrid Cost Proxy Model (HCPM) was used in the sorting process. This data can be downloaded from the FCC's website at http://www.fcc.gov/wcb/tapd/hcpm/. Data from this model was also used to estimate the extent to which enterprise customers are present in each wire center. These data are significant because CLECs that are attracted to a wire center because of the potential for profitably serving enterprise customers may find it is also economically feasible to serve mass market customers. This variable was developed in the following manner: Single-line business lines were subtracted from total business lines to develop an estimate of multiline business lines. Voice grade equivalent special access lines were added to the latter number to develop an estimate of the number of enterprise lines. This estimate was divided by total lines (including voice grade equivalent special access lines), to develop the relative proportion of enterprise lines present in each wire center.

With respect to the BellSouth and Verizon wire centers, we also used data that indicates the total number of carriers collocated in each wire center. These carriers are not necessarily serving mass market customers through that collocation facility, and in some cases the carrier may only use the collocation facility for special or switched access services. To the extent available, this data was also used, because it provides a further, independent indication of the extent to which the characteristics of each wire center are likely to attract competitive activity (currently or in the future). The BellSouth

collocation data was downloaded from BellSouth's triennial review filing website located at http://bellsouthcorp.com/policy/triennialreview/filings/2003-12-03/GA_INTER_ATTACH_55.pdf. The Verizon data is claimed to be confidential; it was obtained from DN 10462-03 (Bates Stamp page 968). Collocation data for the Sprint wire centers was not readily available; instead, an estimate was used, based upon regression coefficients derived from the BellSouth and Verizon collocation data.

Results

We developed a total of 45 markets, with an average of 3.3 wire centers in each market. Table 1 below summarizes the number of wire centers and the number of recommended markets in each MSA.

Table 1

Recommended Geographic Market Data

MSA	Number of Wire Centers	Number of Markets
Miami - Fort Lauderdale - Miami Beach	64	21
Jacksonville	33	11
Tampa - St. Petersburg - Clearwater	53 [1]	13

Map 8 shows the 21 geographic market areas we developed for the Miami MSA. Maps 9 - 10 show the analogous geographic market areas we developed for the Jacksonville and Tampa MSAs.

[1] Includes 48 Verizon (Former GTE Florida), 3 Sprint (Former United), and 2 BellSouth wire centers. The Verizon Zephyrhills wire center (ZPHYFLXA) was missing from the underlying FCC Model data and is not included in this total. However, the Zephyrhills wire center was grouped with the Tampa Market 12 wire centers.

respectively.

To illustrate the potential impact of defining small groups of homogenous wire centers as individual markets we have included two columns of additional data, providing estimates of the number of "triggering" CLECs in each market, based upon data received from BellSouth and Verizon. For this purpose, we relied on data provided in BellSouth's response to Staff's 4th Requests for Production and Verizon's FULP SURREBUTTAL ATTACHMENT 1-CON.xls. BellSouth's response to Staff's 4th Requests for Production includes the number of CLECs allegedly serving mass market customers and the corresponding number of customer locations by wire center. These data are reproduced in the column labeled "Total CLECs" on the Executive Summary workpapers. For additional perspective, we also included a column labeled "Significant CLECs" which excludes data for CLECs that are not serving at least 7 customer locations in a wire center. An analogous procedure was performed on the Verizon data; excluding CLECs whose data was not available at the wire center level or they are not serving a significant number of customers in a particular wire center.

These columns help illustrate the potential impact of a specific market definition on the issue of whether or not the self-provisioning "trigger" has been pulled. They are not offered a proof that CLECs are, or are not, serving mass market customers in any particular market. Needless to say, it will be necessary for the Commission to reconcile conflicting data responses, and reach conclusions regarding whether, in fact each of these CLECs meet the applicable TRO requirements. For purposes of this exhibit, we relied exclusively on the BellSouth and Verizon data, without verifying the appropriateness of this data.

4 Indexing

0.25

CLLI	Total Lines	Ent&SA	Offset Density	Collocation	Cumulative
ARCHFLMA	315	351	353	287	326.5
BCRTFLBT	108	12	78	8	51.5
BCRTFLMA	12	46	33	3	23.5
BCRTFLSA	13	273	112	58	114
BGPIFLMA	308	395	292	287	320.5
BKVLFLJF	120	204	305	214	210.75
BLDWFLMA	338	286	351	287	315.5
BLGLFLMA	218	100	252	287	214.25
BNNLFLMA	294	346	376	287	325.75
BRSNFLMA	331	383	380	287	345.25
BYBHFLMA	5	210	116	58	97.25
CCBHFLAF	369	3	179	287	209.5
CCBHFLMA	154	177	88	154	143.25
CDKYFLMA	374	362	395	287	354.5
CFLDFLMA	287	329	372	287	318.75
CHPLFLJA	282	299	368	287	309
CNTMFLLE	231	180	273	287	242.75
COCOFLMA	29	195	168	58	112.5
COCOFLME	129	154	182	154	154.75
CSCYFLBA	343	400	392	287	355.5
DBRYFLDL	183	345	163	287	244.5
DBRYFLMA	255	309	209	287	265
DELDFLMA	107	119	216	181	155.75
DLBHFLKP	71	288	110	112	145.25
DLBHFLMA	57	98	55	80	72.5
DLSPFLMA	319	327	316	287	312.25
DNLNFLWM	226	339	343	287	298.75
DRBHFLMA	9	89	63	47	52
DYBHFLFN	326	164	172	287	237.25
DYBHFLMA	27	64	140	35	66.5
DYBHFLOB	86	187	255	112	160
DYBHFLOS	249	364	128	287	257
DYBHFLPO	25	293	136	96	137.5
EGLLFLBG	46	185	151	80	115.5
EGLLFLIH	143	265	117	181	176.5
EORNFLMA	272	287	317	287	290.75
FLBHFLMA	299	333	250	287	292.25
FRBHFLFP	176	212	223	214	206.25
FTGRFLMA	380	393	336	287	349
FTLDFLCR	20	62	16	35	33.25
FTLDFLCY	18	21	12	17	17
FTLDFLJA	8	170	101	24	75.75
FTLDFLMR	22	36	20	2	20
FTLDFLOA	10	143	30	17	50
FTLDFLPL	9	72	81	3	41.25
FTLDFLSG	261	1	124	287	168.25
FTLDFLSU	31	211	32	96	92.5
FTLDFLWN	188	219	139	128	168.5
FTPRFLMA	10	165	248	96	129.75
GCSPFLCN	239	221	326	287	268.25
GCVLFLMA	311	368	381	287	336.75
GENVFLMA	329	344	342	287	325.5
GLBRFLMC	163	208	173	243	196.75
GSVLFLMA	19	148	188	42	99.25
GSVLFLNW	199	149	194	154	174
HAVNFLMA	286	374	334	287	320.25
HBSDFLMA	232	310	214	243	249.75
HLNVFLMA	222	246	307	287	265.5
HLWDFLHA	130	178	10	128	111.5
HLWDFLMA	23	115	45	24	51.75
HLWDFLPE	23	220	119	6	92
HLWDFLWH	27	134	38	8	51.75
HMSTFLHM	100	142	257	214	178.25
HMSTFLNA	244	137	221	287	222.25
HTISFLMA	216	236	159	243	213.5
HWTHFLMA	295	386	373	287	335.25
ISLMFLMA	314	163	186	287	237.5
JAY_FLMA	313	347	398	287	336.25
JCBHFLAB	224	348	152	287	252.75
JCBHFLMA	97	194	97	58	111.5
JCBHFLSP	285	166	197	287	233.75
JCVLFLAR	102	109	96	47	88.5
JCVLFLBW	95	167	143	58	115.75
JCVLFLCL	5	11	37	1	13.5
JCVLFLFC	150	264	99	128	160.25
JCVLFLIA	371	7	263	287	232

JCVLFLJT	277	4	14	181	119
JCVLFLLF	88	245	218	112	165.75
JCVLFLNO	75	69	191	68	100.75
JCVLFLOW	155	116	246	181	174.5
JCVLFLRV	80	108	90	58	84
JCVLFLSJ	2	35	56	12	26.25
JCVLFLSM	115	16	36	8	43.75
JCVLFLWC	79	277	189	80	156.25
JPTRFLMA	41	135	150	96	105.5
KYHGFLMA	279	354	318	287	309.5
KYLRFLLS	260	153	165	287	216.25
KYLRFLMA	259	229	146	287	230.25
KYWSFLMA	121	101	85	243	137.5
LKCYFLMA	157	281	340	287	266.25
LKMRFLMA	234	23	170	154	145.25
LYHNFLOH	208	272	283	243	251.5
MCNPFLMA	346	391	390	287	353.5
MDBGFLPM	204	353	293	287	284.25
MIAMFLAE	11	37	6	17	17.75
MIAMFLAL	67	38	27	154	71.5
MIAMFLAP	238	2	65	112	104.25
MIAMFLBA	83	82	7	68	60
MIAMFLBC	161	34	9	128	83
MIAMFLBR	36	77	3	47	40.75
MIAMFLCA	24	255	82	17	94.5
MIAMFLFL	90	118	5	68	70.25
MIAMFLGR	0	0	0	0	0
MIAMFLHL	29	91	43	8	42.75
MIAMFLIC	85	250	15	128	119.5
MIAMFLKE	243	123	23	243	158
MIAMFLME	122	22	2	181	81.75
MIAMFLNM	105	130	17	96	87
MIAMFLNS	78	84	44	128	83.5
MIAMFLOL	63	53	76	112	76
MIAMFLPB	40	25	25	24	28.5
MIAMFLPL	13	1	58	6	19.5
MIAMFLRR	4	33	73	14	31
MIAMFLSH	39	71	31	112	63.25
MIAMFLSO	6	113	61	42	55.5
MIAMFLWD	22	317	46	80	116.25
MIAMFLWM	51	39	19	17	31.5
MICCFLBB	262	359	213	287	280.25
MLBRFLMA	25	147	169	24	91.25
MLTNFLRA	153	214	287	214	217
MNDRFLAV	236	60	8	96	100
MNDRFLLO	70	174	149	47	110
MNDRFLLW	289	338	301	287	303.75
MNSNFLMA	379	355	416	287	359.25
MRTHFLVE	228	201	175	287	222.75
MXVLFLMA	336	308	359	287	322.5
NDADFLAC	43	146	21	80	72.5
NDADFLBR	53	132	79	80	86
NDADFLGG	77	95	29	47	62
NDADFLOL	91	81	11	68	62.75
NKLRFLMA	348	182	231	287	262
NSBHFLMA	87	252	220	181	185
NWBYFLMA	318	381	369	287	338.75
OKHLFLMA	325	373	339	287	331
OLTWFLLN	333	401	386	287	351.75
ORLDFLAP	20	249	148	35	113
ORLDFLCL	60	40	54	12	41.5
ORLDFLMA	14	10	22	1	11.75
ORLDFLPC	15	32	125	5	44.25
ORLDFLPH	28	79	105	17	57.25
ORLDFLSA	61	24	83	14	45.5
ORPKFLMA	127	184	133	80	131
ORPKFLRW	175	289	135	181	195
OVIDFLCA	141	259	202	181	195.75
PACEFLPV	210	306	295	214	256.25
PAHKFLMA	298	222	272	287	269.75
PCBHFLNT	139	150	212	181	170.5
PLCSFLMA	178	305	219	287	247.25
PLTKFLMA	168	284	314	243	252.25
PMBHFLCS	7	136	98	58	74.75
PMBHFLFE	16	83	34	14	36.75
PMBHFLMA	18	117	40	24	49.75
PMBHFLTA	72	282	39	128	130.25
PMPKFLMA	335	402	338	287	340.5
PNCYFLCA	242	371	277	243	283.25
PNCYFLMA	30	85	161	128	101
PNSCFLBL	34	54	100	24	53
PNSCFLFP	11	105	137	75	82
PNSCFLHC	229	292	258	243	255.5
PNSCFLPB	276	326	265	287	288.5
PNSCFLWA	92	294	176	80	160.5
PNVDFLMA	184	266	217	154	205.25

PRRNFLMA	21	99	162	35	79.25
PRSNFLFD	320	206	379	287	298
PTSLFLMA	99	315	193	181	197
PTSLFLSO	179	158	130	214	170.25
SBSTFLFE	352	217	363	287	304.75
SBSTFLMA	197	314	240	243	248.5
SGKYFLMA	322	397	296	287	325.5
SNFRFLMA	38	191	200	58	121.75
STAGFLBS	247	307	141	287	245.5
STAGFLMA	125	68	281	68	135.5
STAGFLSH	198	218	241	243	225
STRTFLMA	14	102	206	112	108.5
SYHSFLCC	361	385	410	287	360.75
TRENFLMA	293	325	382	287	321.75
TTVLFLMA	73	193	210	112	147
VERNFLMA	345	403	403	287	359.5
VRBHFLBE	212	242	142	287	220.75
VRBHFLMA	50	173	207	96	131.5
WELKFLMA	334	404	356	287	345.25
WPBHFLAN	56	18	28	24	31.5
WPBHFLGA	26	235	104	24	97.25
WPBHFLGR	3	106	144	35	72
WPBHFLHH	17	61	67	24	42.25
WPBHFLLE	42	169	72	80	90.75
WPBHFLRB	17	48	60	47	43
WPBHFLRP	52	199	244	80	143.75
WWSPFLHI	180	279	249	287	248.75
WWSPFLSH	94	340	190	243	216.75
YNFNFLMA	323	370	389	287	342.25
YNTWFLMA	330	312	377	287	326.5
YULEFLMA	312	387	321	287	326.75
ABDLFLXA	174	126	195	214	177.25
ALFAFLXA	181	232	232	287	233
ALTRFLXA	340	380	370	287	344.25
ANMRFLXA	269	301	111	287	242
BARTFLXA	186	50	239	287	190.5
BAYUFLXA	55	70	57	154	84
BBPKFLXA	316	336	303	287	310.5
BHPKFLXA	110	3	13	47	43.25
BRBAFLXA	19	202	126	287	158.5
BRJTFLXA	377	378	393	287	358.75
BRNDFLXA	3	171	174	96	111
BRTNFLXX	65	66	192	243	141.5
BYSHFLXA	387	92	399	287	291.25
CLWRFLXA	7	45	35	47	33.5
CNSDFLXA	12	90	62	80	61
CRWDFLXA	2	129	106	96	83.25
CYGRFLXA	202	238	226	243	227.25
DNDNFLXA	124	216	89	243	168
DUNDFLXA	278	300	304	287	292.25
ENWDFLXA	144	247	198	287	219
FHSDFLXA	116	4	59	128	76.75
FRSTFLXA	291	276	337	287	297.75
GNDYFLXA	123	97	68	181	117.25
HDSNFLXA	62	256	153	214	171.25
HGLDFLXA	109	181	180	243	178.25
HNCYFLXA	207	260	279	287	258.25
HNCYFLXN	307	377	332	287	325.75
HYPKFLXA	118	27	24	96	66.25
INLKFLXA	365	332	383	287	341.75
INRKFLXX	156	262	94	287	199.75
KYSTFLXA	223	290	264	287	266
LGBKFLXA	267	159	114	287	206.75
LKALFLXA	303	268	286	287	286
LKLDFLXA	45	63	121	154	95.75
LKLDFLXE	162	120	205	243	182.5
LKLDFLXN	134	269	245	243	222.75
LKWLFLXA	194	111	243	287	208.75
LKWLFLXE	296	375	348	287	326.5
LLMNFLXA	48	192	80	154	118.5
LNLKFLXA	241	179	302	287	252.25
LRGOFLXA	59	139	77	181	114
LUTZFLXA	205	175	230	287	224.25
MLBYFLXA	251	74	236	287	212
MNLKFLXA	263	324	267	287	285.25
MYCYFLXA	362	337	409	287	348.75
NGBHFLXA	24	176	87	154	110.25
NPRCFLXA	21	205	127	181	133.5
NRPTFLXA	190	361	242	287	270
NRSDFLXA	132	121	132	287	168
OLDSFLXA	192	52	155	214	153.25
OSPRFLXA	253	233	183	287	239
PKCYFLXA	309	243	354	287	298.25
PLMTFLXA	147	237	196	287	216.75
PLSLFLXA	126	241	107	287	190.25
PNCRFLXA	290	297	329	287	300.75

PNLSFLXA	1	42	41	75	39.75
POINFLXA	347	392	311	287	334.25
PRSHFLXA	332	285	397	287	325.25
PSDNFLXA	66	94	53	154	91.75
PTCYFLXA	103	122	247	243	178.75
RSKNFLXA	193	230	222	287	233
SARKFLXA	305	67	92	287	187.75
SEKYFLXA	221	298	108	287	228.5
SGBEFLXA	166	93	47	287	148.25
SKWYFLXA	98	86	66	181	107.75
SLSPFLXA	64	96	71	128	89.75
SMNLFLXA	142	151	91	181	141.25
SNSPFLXA	187	335	147	243	228
SPBGFLXA	26	41	42	75	46
SPBGFLXS	146	261	103	287	199.25
SPRGFLXA	106	168	177	243	173.5
SRSTFLXA	33	30	48	112	55.75
SSDSFLXA	44	110	171	243	142
STGRFLXA	37	160	109	128	108.5
SWTHFLXA	15	57	69	42	45.75
TAMPFLXE	28	8	129	35	50
TAMPFLXX	101	5	4	80	47.5
THNTFLXA	258	213	288	287	261.5
TMTRFLXA	76	157	86	154	118.25
TRSPFLXA	54	186	138	214	148
UNVRFLXA	74	55	75	128	83
VENCFLXA	112	198	156	287	188.25
VENCFLXS	152	303	154	287	224
WIMMFLXA	214	283	299	287	270.75
WLCHFLXA	217	188	266	287	239.5
WLCRFLXA	58	207	51	214	132.5
WNHNFLXC	89	125	160	154	132
WSSDFLXA	32	14	26	17	22.25
YBCTFLXA	149	9	102	128	97
ALFRFLXA	350	350	401	243	336
BAKRFLXA	327	304	400	243	318.5
BNFYFLXA	270	183	366	214	258.25
CFVLFLXA	300	390	374	287	337.75
CHLKFLXA	354	405	407	287	363.25
CRVWFLXA	170	78	269	128	161.25
CTDLFLXA	366	369	387	287	352.25
DESTFLXA	266	379	164	243	263
DFSPFLXA	252	156	350	181	234.75
ELFDFLXA	342	15	360	154	217.75
FRPTFLXA	337	360	394	243	333.5
FTWBFLXA	117	31	52	75	68.75
FTWBFLXB	138	51	204	96	122.25
FTWBFLXC	310	189	201	214	228.5
GDRGFLXA	351	319	388	243	325.25
GLDLFLXA	378	389	413	287	366.75
GNVLFLXA	368	388	414	287	364.25
GNWDFLXA	358	356	406	243	340.75
HRFDFLXA	384	330	331	243	322
KGLKFLXA	385	394	396	287	365.5
LEE_FLXA	370	405	412	287	368.75
LWTYFLXA	364	407	378	287	359
MALNFLXA	363	311	402	243	329.75
MDSNFLXA	288	76	328	181	218.25
MNTIFLXA	275	248	384	214	280.25
MRNNFLXA	195	58	313	128	173.5
PANCFLXA	367	399	371	287	356
PNLNFLXA	372	408	411	287	369.5
RYHLFLXA	373	398	408	287	366.5
SGBHFLXA	353	190	357	214	278.5
SHLMFLXA	230	133	120	154	159.25
SNDSFLXA	344	334	362	243	320.75
SNRSFLXA	271	114	271	181	209.25
SPCPFLXA	376	409	405	287	369.25
STMKFLXA	383	410	391	287	367.75
STRKFLXA	245	59	320	154	194.5
TLHSFLXA	68	13	18	42	35.25
TLHSFLXB	131	73	113	96	103.25
TLHSFLXC	104	80	235	80	124.75
TLHSFLXD	35	56	208	58	89.25
TLHSFLXF	140	144	285	112	170.25
TLHSFLXG	304	366	349	243	315.5
TLHSFLXH	248	382	203	243	269
VLPRFLXA	165	145	215	128	163.25
WSTVFLXA	386	411	355	287	359.75
ALSPFLXA	1	43	70	24	34.5
ALVAFLXA	328	20	291	181	205
APPKFLXA	84	107	199	80	117.5
ARCDFLXA	203	203	341	181	232
ASTRFLXA	360	341	333	243	319.25
AVPKFLXA	206	197	284	181	217
BCGRFLXA	382	412	300	287	345.25

BLVWFLXA	160	302	289	154	226.25
BNSPFLXA	128	228	211	112	169.75
BSHNFLXA	256	316	358	214	286
BVHLFLXA	215	295	274	181	241.25
BWLGFLXA	359	384	361	287	347.75
CHSWFLXA	306	372	308	243	307.25
CLMTFLXA	209	172	309	181	217.75
CLTNFLXA	227	44	315	154	185
CPCRFLXA	111	234	131	96	143
CPCRFLXB	119	140	187	96	135.5
CPHZFLXA	237	363	261	214	268.75
CRRVFLXA	177	103	268	128	169
CSLBFLXA	145	275	118	128	166.5
CYLKFLXA	81	75	122	75	88.25
CYLKFLXB	225	28	228	128	152.25
DDCYFLXA	201	152	290	154	199.25
ESTSFLXA	173	155	234	154	179
EVRGFLXA	375	376	385	287	355.75
FTMBFLXA	219	257	50	128	163.5
FTMDFLXA	301	225	347	214	271.75
FTMYFLXA	113	19	64	68	66
FTMYFLXB	167	215	238	154	193.5
FTMYFLXC	69	29	95	58	62.75
GLGCFLXA	148	270	280	128	206.5
GLRDFLXA	16	104	84	42	61.5
GVLDFLXA	284	258	345	214	275.25
HMSPFLXA	235	320	275	214	261
HOWYFLXA	339	254	330	243	291.5
IMKLFLXA	274	131	297	181	220.75
INVRFLXA	114	240	270	112	184
IONAFLXA	196	313	134	154	199.25
KNVLFLXA	381	321	415	243	340
KSSMFLXA	49	88	185	68	97.5
KSSMFLXB	158	26	229	112	131.25
KSSMFLXD	213	323	166	181	220.75
LBLLFLXA	268	251	364	214	274.25
LDLKFLXA	185	358	260	181	246
LHACFLXA	172	296	262	154	221
LKBRFLXA	47	87	74	47	63.75
LKHLFLXA	341	280	323	243	296.75
LKPCFLXA	211	239	327	181	239.5
LSBGFLXA	82	162	227	80	137.75
MOISFLXA	171	224	115	128	159.5
MRDCFLXA	302	6	157	128	148.25
MRHNFLXA	349	342	365	243	324.75
MTDRFLXA	182	223	276	154	208.75
MTLDFLTC	317	2	1	47	91.75
MTVRFLXA	356	322	325	243	311.5
NFMYFLXA	164	274	123	128	172.25
NFMYFLXB	169	291	225	154	209.75
NNPLFLXA	93	124	145	80	110.5
NPLSFLXC	96	231	259	96	170.5
NPLSFLXD	8	47	93	35	45.75
OCALFLXA	6	65	224	47	85.5
OCALFLXB	136	112	278	112	159.5
OCALFLXC	250	244	158	181	208.25
OCALFLXJ	292	343	167	214	254
OCNFFLXA	280	365	324	243	303
OKCBFLXA	159	128	335	128	187.5
OKLWFLXA	321	352	306	243	305.5
ORCYFLXA	200	138	184	154	169
ORCYFLXC	191	349	181	181	225.5
PNGRFLXA	137	141	294	112	171
PNISFLXA	257	318	282	214	267.75
SBNGFLXA	135	227	254	112	182
SCPKFLXA	220	271	251	181	230.75
SLHLFLXA	283	209	319	214	256.25
SNANFLXA	324	267	367	243	300.25
SNISFLXA	233	161	178	181	188.25
SSPRFLXA	357	367	344	287	338.75
STCDFLXA	151	226	312	128	204.25
SVSPFLXA	273	263	298	214	262
SVSSFLXA	254	278	256	214	250.5
TLCHFLXA	297	357	322	243	304.75
TVRSFLXA	189	196	233	154	193
UMTLFLXA	246	328	346	214	283.5
WCHLFLXA	264	127	352	181	231
WLSTFLXA	281	253	375	214	280.75
WLWDFLXA	240	331	310	214	273.75
WNDRFLXA	265	200	253	181	224.75
WNGRFLXA	133	49	237	96	128.75
WNPKFLXA	4	17	49	24	23.5
ZLSPFLXA	355	396	404	287	360.5

[redacted]

	Offset Method			
	Rank			Auto Sorting
1	368	ARCHFLMA	MIAMFLGR	0.0
2	39	BCRTFLBT	ORLDFLMA	11.8
3	9	BCRTFLMA	JCVLFLCL	13.5
4	114	BCRTFLSA	FTLDFLCY	17.0
5	356	BGPIFLMA	MIAMFLAE	17.8
6	230	BKVLFLJF	MIAMFLPL	19.5
7	350	BLDWFLMA	FTLDFLMR	20.0
8	233	BLGLFLMA	WSSDFLXA	22.3
9	366	BNNLFLMA	BCRTFLMA	23.5
10	389	BRSNFLMA	WNPKFLXA	23.5
11	93	BYBHFLMA	JCVLFLSJ	26.3
12	228	CCBHFLAF	MIAMFLPB	28.5
13	146	CCBHFLMA	MIAMFLRR	31.0
14	398	CDKYFLMA	MIAMFLWM	31.5
15	353	CFLDFLMA	WPBHFLAN	31.5
16	345	CHPLFLJA	FTLDFLCR	33.3
17	276	CNTMFLLE	CLWRFLXA	33.5
18	112	COCOFLMA	ALSPFLXA	34.5
19	156	COCOFLME	TLHSFLXA	35.3
20	399	CSCYFLBA	PMBHFLFE	36.8
21	277	DBRYFLDL	PNLSFLXA	39.8
22	301	DBRYFLMA	MIAMFLBR	40.8
23	157	DELDFLMA	FTLDFLPL	41.3
24	148	DLBHFLKP	ORLDFLCL	41.5
25	62	DLBHFLMA	WPBHFLHH	42.3
26	349	DLSPFLMA	MIAMFLHL	42.8
27	336	DNLNFLWM	WPBHFLRB	43.0
28	42	DRBHFLMA	BHPKFLXA	43.3
29	269	DYBHFLFN	JCVLFLSM	43.8
30	57	DYBHFLMA	ORLDFLPC	44.3
31	164	DYBHFLOB	ORLDFLSA	45.5
32	293	DYBHFLOS	SWTHFLXA	45.8
33	139	DYBHFLPO	NPLSFLXD	45.8
34	116	EGLLFLBG	SPBGFLXA	46.0
35	190	EGLLFLIH	TAMPFLXX	47.5
36	327	EORNFLMA	PMBHFLMA	49.8
37	330	FLBHFLMA	FTLDFLOA	50.0
38	221	FRBHFLFP	TAMPFLXE	50.0
39	394	FTGRFLMA	BCRTFLBT	51.5
40	16	FTLDFLCR	HLWDFLMA	51.8
41	4	FTLDFLCY	HLWDFLWH	51.8
42	65	FTLDFLJA	DRBHFLMA	52.0
43	7	FTLDFLMR	PNSCFLBL	53.0
44	37	FTLDFLOA	MIAMFLSO	55.5
45	23	FTLDFLPL	SRSTFLXA	55.8
46	174	FTLDFLSG	ORLDFLPH	57.3
47	89	FTLDFLSU	MIAMFLBA	60.0
48	175	FTLDFLWN	CNSDFLXA	61.0
49	129	FTPRFLMA	GLRDFLXA	61.5
50	306	GCSPFLCN	NDADFLGG	62.0
51	379	GCVLFLMA	NDADFLOL	62.8
52	364	GENVFLMA	FTMYFLXC	62.8
53	212	GLBRFLMC	MIAMFLSH	63.3
54	96	GSVLFLMA	LKBRFLXA	63.8
55	188	GSVLFLNW	FTMYFLXA	66.0
56	355	HAVNFLMA	HYPKFLXA	66.3
57	283	HBSDFLMA	DYBHFLMA	66.5
58	302	HLNVFLMA	FTWBFLXA	68.8
59	110	HLWDFLHA	MIAMFLFL	70.3
60	40	HLWDFLMA	MIAMFLAL	71.5
61	88	HLWDFLPE	WPBHFLGR	72.0
62	41	HLWDFLWH	DLBHFLMA	72.5
63	192	HMSTFLHM	NDADFLAC	72.5
64	247	HMSTFLNA	PMBHFLCS	74.8
65	232	HTISFLMA	FTLDFLJA	75.8
66	376	HWTHFLMA	MIAMFLOL	76.0
67	270	ISLMFLMA	FHSDFLXA	76.8
68	378	JAY_FLMA	PRRNFLMA	79.3
69	288	JCBHFLAB	MIAMFLME	81.8
70	111	JCBHFLMA	PNSCFLFP	82.0
71	267	JCBHFLSP	MIAMFLBC	83.0
72	81	JCVLFLAR	UNVRFLXA	83.0
73	117	JCVLFLBW	CRWDFLXA	83.3
74	3	JCVLFLCL	MIAMFLNS	83.5
75	165	JCVLFLFC	JCVLFLRV	84.0
76	263	JCVLFLIA	BAYUFLXA	84.0

77	123	JCVLFLJT	OCALFLXA	85.5
78	170	JCVLFLLF	NDADFLBR	86.0
79	98	JCVLFLNO	MIAMFLNM	87.0
80	189	JCVLFLOW	CYLKFLXA	88.3
81	75	JCVLFLRV	JCVLFLAR	88.5
82	11	JCVLFLSJ	TLHSFLXD	89.3
83	29	JCVLFLSM	SLSPFLXA	89.8
84	158	JCVLFLWC	WPBHFLLE	90.8
85	102	JPTRFLMA	MLBRFLMA	91.3
86	346	KYHGFLMA	PSDNFLXA	91.8
87	234	KYLRFLLS	MTLDFLTC	91.8
88	260	KYLRFLMA	HLWDFLPE	92.0
89	140	KYWSFLMA	FTLDFLSU	92.5
90	304	LKCYFLMA	MIAMFLCA	94.5
91	149	LKMRFLMA	LKLDFLXA	95.8
92	285	LYHNFLOH	YBCTFLXA	97.0
93	397	MCNPFLMA	BYBHFLMA	97.3
94	322	MDBGFLPM	WPBHFLGA	97.3
95	5	MIAMFLAE	KSSMFLXA	97.5
96	60	MIAMFLAL	GSVLFLMA	99.3
97	101	MIAMFLAP	MNDRFLAV	100.0
98	47	MIAMFLBA	JCVLFLNO	100.8
99	71	MIAMFLBC	PNCYFLMA	101.0
100	22	MIAMFLBR	TLHSFLXB	103.3
101	90	MIAMFLCA	MIAMFLAP	104.3
102	59	MIAMFLFL	JPTRFLMA	105.5
103	1	MIAMFLGR	SKWYFLXA	107.8
104	26	MIAMFLHL	STRTFLMA	108.5
105	124	MIAMFLIC	STGRFLXA	108.5
106	159	MIAMFLKE	MNDRFLLO	110.0
107	69	MIAMFLME	NGBHFLXA	110.3
108	79	MIAMFLNM	NNPLFLXA	110.5
109	74	MIAMFLNS	BRNDFLXA	111.0
110	66	MIAMFLOL	HLWDFLHA	111.5
111	12	MIAMFLPB	JCBHFLMA	111.5
112	6	MIAMFLPL	COCOFLMA	112.5
113	13	MIAMFLRR	ORLDFLAP	113.0
114	53	MIAMFLSH	BCRTFLSA	114.0
115	44	MIAMFLSO	LRGOFLXA	114.0
116	118	MIAMFLWD	EGLLFLBG	115.5
117	14	MIAMFLWM	JCVLFLBW	115.8
118	317	MICCFLBB	MIAMFLWD	116.3
119	85	MLBRFLMA	GNDYFLXA	117.3
120	237	MLTNFLRA	APPKFLXA	117.5
121	97	MNDRFLAV	TMTRFLXA	118.3
122	106	MNDRFLLO	LLMNFLXA	118.5
123	340	MNDRFLLW	JCVLFLJT	119.0
124	404	MNSNFLMA	MIAMFLIC	119.5
125	248	MRTHFLVE	SNFRFLMA	121.8
126	360	MXVLFLMA	FTWBFLXB	122.3
127	63	NDADFLAC	TLHSFLXC	124.8
128	78	NDADFLBR	WNGRFLXA	128.8
129	50	NDADFLGG	FTPRFLMA	129.8
130	51	NDADFLOL	PMBHFLTA	130.3
131	298	NKLRFLMA	ORPKFLMA	131.0
132	199	NSBHFLMA	KSSMFLXB	131.3
133	381	NWBYFLMA	VRBHFLMA	131.5
134	373	OKHLFLMA	WNHNFLXC	132.0
135	395	OLTWFLLN	WLCRFLXA	132.5
136	113	ORLDFLAP	NPRCFLXA	133.5
137	24	ORLDFLCL	STAGFLMA	135.5
138	2	ORLDFLMA	CPCRFLXB	135.5
139	30	ORLDFLPC	DYBHFLPO	137.5
140	46	ORLDFLPH	KYWSFLMA	137.5
141	31	ORLDFLSA	LSBGFLXA	137.8
142	131	ORPKFLMA	SMNLFLXA	141.3
143	210	ORPKFLRW	BRTNFLXX	141.5
144	211	OVIDFLCA	SSDSFLXA	142.0
145	291	PACEFLPV	CPCRFLXA	143.0
146	309	PAHKFLMA	CCBHFLMA	143.3
147	181	PCBHFLNT	WPBHFLRP	143.8
148	280	PLCSFLMA	DLBHFLKP	145.3
149	286	PLTKFLMA	LKMRFLMA	145.3
150	64	PMBHFLCS	TTVLFLMA	147.0
151	20	PMBHFLFE	TRSPFLXA	148.0
152	36	PMBHFLMA	SGBEFLXA	148.3
153	130	PMBHFLTA	MRDCFLXA	148.3
154	384	PMPKFLMA	CYLKFLXB	152.3
155	320	PNCYFLCA	OLDSFLXA	153.3
156	99	PNCYFLMA	COCOFLME	154.8
157	43	PNSCFLBL	DELDFLMA	155.8
158	70	PNSCFLFP	JCVLFLWC	156.3
159	290	PNSCFLHC	MIAMFLKE	158.0
160	326	PNSCFLPB	BRBAFLXA	158.5
161	166	PNSCFLWA	SHLMFLXA	159.3
162	220	PNVDFLMA	MOISFLXA	159.5

163	68	PRRNFLMA	OCALFLXB	159.5
164	334	PRSNFLFD	DYBHFLOB	160.0
165	213	PTSLFLMA	JCVLFLFC	160.3
166	179	PTSLFLSO	PNSCFLWA	160.5
167	341	SBSTFLFE	CRVWFLXA	161.3
168	281	SBSTFLMA	VLPRFLXA	163.3
169	365	SGKYFLMA	FTMBFLXA	163.5
170	125	SNFRFLMA	JCVLFLLF	165.8
171	278	STAGFLBS	CSLBFLXA	166.5
172	137	STAGFLMA	DNDNFLXA	168.0
173	253	STAGFLSH	NRSDFLXA	168.0
174	104	STRTFLMA	FTLDFLSG	168.3
175	408	SYHSFLCC	FTLDFLWN	168.5
176	358	TRENFLMA	CRRVFLXA	169.0
177	150	TTVLFLMA	ORCYFLXA	169.0
178	405	VERNFLMA	BNSPFLXA	169.8
179	243	VRBHFLBE	PTSLFLSO	170.3
180	133	VRBHFLMA	TLHSFLXF	170.3
181	390	WELKFLMA	PCBHFLNT	170.5
182	15	WPBHFLAN	NPLSFLXC	170.5
183	94	WPBHFLGA	PNGRFLXA	171.0
184	61	WPBHFLGR	HDSNFLXA	171.3
185	25	WPBHFLHH	NFMYFLXA	172.3
186	84	WPBHFLLE	SPRGFLXA	173.5
187	27	WPBHFLRB	MRNNFLXA	173.5
188	147	WPBHFLRP	GSVLFLNW	174.0
189	282	WWSPFLHI	JCVLFLOW	174.5
190	235	WWSPFLSH	EGLLFLIH	176.5
191	387	YNFNFLMA	ABDLFLXA	177.3
192	369	YNTWFLMA	HMSTFLHM	178.3
193	371	YULEFLMA	HGLDFLXA	178.3
194	191	ABDLFLXA	PTCYFLXA	178.8
195	265	ALFAFLXA	ESTSFLXA	179.0
196	388	ALTRFLXA	SBNGFLXA	182.0
197	275	ANMRFLXA	LKLDFLXE	182.5
198	206	BARTFLXA	INVRFLXA	184.0
199	76	BAYUFLXA	NSBHFLMA	185.0
200	347	BBPKFLXA	CLTNFLXA	185.0
201	28	BHPKFLXA	OKCBFLXA	187.5
202	160	BRBAFLXA	SARKFLXA	187.8
203	402	BRJTFLXA	VENCFLXA	188.3
204	109	BRNDFLXA	SNISFLXA	188.3
205	143	BRTNFLXX	PLSLFLXA	190.3
206	328	BYSHFLXA	BARTFLXA	190.5
207	17	CLWRFLXA	TVRSFLXA	193.0
208	48	CNSDFLXA	FTMYFLXB	193.5
209	73	CRWDFLXA	STRKFLXA	194.5
210	256	CYGRFLXA	ORPKFLRW	195.0
211	172	DNDNFLXA	OVIDFLCA	195.8
212	331	DUNDFLXA	GLBRFLMC	196.8
213	242	ENWDFLXA	PTSLFLMA	197.0
214	67	FHSDFLXA	SPBGFLXS	199.3
215	333	FRSTFLXA	ODCYFLXA	199.3
216	119	GNDYFLXA	IONAFLXA	199.3
217	184	HDSNFLXA	INRKFLXX	199.8
218	193	HGLDFLXA	STCDFLXA	204.3
219	294	HNCYFLXA	ALVAFLXA	205.0
220	367	HNCYFLXN	PNVDFLMA	205.3
221	56	HYPKFLXA	FRBHFLFP	206.3
222	386	INLKFLXA	GLGCFLXA	206.5
223	217	INRKFLXX	LGBKFLXA	206.8
224	303	KYSTFLXA	OCALFLXC	208.3
225	223	LGBKFLXA	LKWLFLXA	208.8
226	324	LKALFLXA	MTDRFLXA	208.8
227	91	LKLDFLXA	SNRSFLXA	209.3
228	197	LKLDFLXE	CCBHFLAF	209.5
229	249	LKLDFLXN	NFMYFLXB	209.8
230	225	LKWLFLXA	BKVLFLJF	210.8
231	370	LKWLFLXE	MLBYFLXA	212.0
232	122	LLMNFLXA	HTISFLMA	213.5
233	287	LNLKFLXA	BLGLFLMA	214.3
234	115	LRGOFLXA	KYLRFLLS	216.3
235	251	LUTZFLXA	WWSPFLSH	216.8
236	231	MLBYFLXA	PLMTFLXA	216.8
237	323	MNLKFLXA	MLTNFLRA	217.0
238	393	MYCYFLXA	AVPKFLXA	217.0
239	107	NGBHFLXA	ELFDFLXA	217.8
240	136	NPRCFLXA	CLMTFLXA	217.8
241	310	NRPTFLXA	MDSNFLXA	218.3
242	173	NRSDFLXA	ENWDFLXA	219.0
243	155	OLDSFLXA	VRBHFLBE	220.8
244	271	OSPRFLXA	IMKLFLXA	220.8
245	335	PKCYFLXA	KSSMFLXD	220.8
246	236	PLMTFLXA	LHACFLXA	221.0
247	205	PLSLFLXA	HMSTFLNA	222.3
248	338	PNCRFLXA	MRTHFLVE	222.8

249	21	PNLSFLXA	LKLDFLXN	222.8
250	375	POINFLXA	VENCFLXS	224.0
251	362	PRSHFLXA	LUTZFLXA	224.3
252	86	PSDNFLXA	WNDRFLXA	224.8
253	194	PTCYFLXA	STAGFLSH	225.0
254	266	RSKNFLXA	ORCYFLXC	225.5
255	202	SARKFLXA	BLVWFLXA	226.3
256	258	SEKYFLXA	CYGRFLXA	227.3
257	152	SGBEFLXA	SNSPFLXA	228.0
258	103	SKWYFLXA	SEKYFLXA	228.5
259	83	SLSPFLXA	FTWBFLXC	228.5
260	142	SMNLFLXA	KYLRFLMA	230.3
261	257	SNSPFLXA	SCPKFLXA	230.8
262	34	SPBGFLXA	WCHLFLXA	231.0
263	214	SPBGFLXS	JCVLFLIA	232.0
264	186	SPRGFLXA	ARCDFLXA	232.0
265	45	SRSTFLXA	ALFAFLXA	233.0
266	144	SSDSFLXA	RSKNFLXA	233.0
267	105	STGRFLXA	JCBHFLSP	233.8
268	32	SWTHFLXA	DFSPFLXA	234.8
269	38	TAMPFLXE	DYBHFLFN	237.3
270	35	TAMPFLXX	ISLMFLMA	237.5
271	297	THNTFLXA	OSPRFLXA	239.0
272	121	TMTRFLXA	WLCHFLXA	239.5
273	151	TRSPFLXA	LKPCFLXA	239.5
274	72	UNVRFLXA	BVHLFLXA	241.3
275	203	VENCFLXA	ANMRFLXA	242.0
276	250	VENCFLXS	CNTMFLLE	242.8
277	311	WIMMFLXA	DBRYFLDL	244.5
278	272	WLCHFLXA	STAGFLBS	245.5
279	135	WLCRFLXA	LDLKFLXA	246.0
280	134	WNHNFLXC	PLCSFLMA	247.3
281	8	WSSDFLXA	SBSTFLMA	248.5
282	92	YBCTFLXA	WWSPFLHI	248.8
283	377	ALFRFLXA	HBSDFLMA	249.8
284	352	BAKRFLXA	SVSSFLXA	250.5
285	295	BNFYFLXA	LYHNFLOH	251.5
286	380	CFVLFLXA	PLTKFLMA	252.3
287	409	CHLKFLXA	LNLKFLXA	252.3
288	167	CRVWFLXA	JCBHFLAB	252.8
289	396	CTDLFLXA	OCALFLXJ	254.0
290	300	DESTFLXA	PNSCFLHC	255.5
291	268	DFSPFLXA	PACEFLPV	256.3
292	239	ELFDFLXA	SLHLFLXA	256.3
293	374	FRPTFLXA	DYBHFLOS	257.0
294	58	FTWBFLXA	HNCYFLXA	258.3
295	126	FTWBFLXB	BNFYFLXA	258.3
296	259	FTWBFLXC	HMSPFLXA	261.0
297	363	GDRGFLXA	THNTFLXA	261.5
298	413	GLDLFLXA	NKLRFLMA	262.0
299	410	GNVLFLXA	SVSPFLXA	262.0
300	385	GNWDFLXA	DESTFLXA	263.0
301	359	HRFDFLXA	DBRYFLMA	265.0
302	411	KGLKFLXA	HLNVFLMA	265.5
303	415	LEE_FLXA	KYSTFLXA	266.0
304	403	LWTYFLXA	LKCYFLMA	266.3
305	372	MALNFLXA	PNISFLXA	267.8
306	241	MDSNFLXA	GCSPFLCN	268.3
307	318	MNTIFLXA	CPHZFLXA	268.8
308	187	MRNNFLXA	TLHSFLXH	269.0
309	401	PANCFLXA	PAHKFLMA	269.8
310	417	PNLNFLXA	NRPTFLXA	270.0
311	412	RYHLFLXA	WIMMFLXA	270.8
312	316	SGBHFLXA	FTMDFLXA	271.8
313	161	SHLMFLXA	WLWDFLXA	273.8
314	357	SNDSFLXA	LBLLFLXA	274.3
315	227	SNRSFLXA	GVLDFLXA	275.3
316	416	SPCPFLXA	SGBHFLXA	278.5
317	414	STMKFLXA	MICCFLBB	280.3
318	209	STRKFLXA	MNTIFLXA	280.3
319	19	TLHSFLXA	WLSTFLXA	280.8
320	100	TLHSFLXB	PNCYFLCA	283.3
321	127	TLHSFLXC	UMTLFLXA	283.5
322	82	TLHSFLXD	MDBGFLPM	284.3
323	180	TLHSFLXF	MNLKFLXA	285.3
324	351	TLHSFLXG	LKALFLXA	286.0
325	308	TLHSFLXH	BSHNFLXA	286.0
326	168	VLPRFLXA	PNSCFLPB	288.5
327	406	WSTVFLXA	EORNFLMA	290.8
328	18	ALSPFLXA	BYSHFLXA	291.3
329	219	ALVAFLXA	HOWYFLXA	291.5
330	120	APPKFLXA	FLBHFLMA	292.3
331	264	ARCDFLXA	DUNDFLXA	292.3
332	354	ASTRFLXA	LKHLFLXA	296.8
333	238	AVPKFLXA	FRSTFLXA	297.8
334	391	BCGRFLXA	PRSNFLFD	298.0

335	255	BLVWFLXA	PKCYFLXA	298.3
336	178	BNSPFLXA	DNLNFLWM	298.8
337	325	BSHNFLXA	SNANFLXA	300.3
338	274	BVHLFLXA	PNCRFLXA	300.8
339	392	BWLGFLXA	OCNFFLXA	303.0
340	344	CHSWFLXA	MNDRFLLW	303.8
341	240	CLMTFLXA	SBSTFLFE	304.8
342	200	CLTNFLXA	TLCHFLXA	304.8
343	145	CPCRFLXA	OKLWFLXA	305.5
344	138	CPCRFLXB	CHSWFLXA	307.3
345	307	CPHZFLXA	CHPLFLJA	309.0
346	176	CRRVFLXA	KYHGFLMA	309.5
347	171	CSLBFLXA	BBPKFLXA	310.5
348	80	CYLKFLXA	MTVRFLXA	311.5
349	154	CYLKFLXB	DLSPFLMA	312.3
350	215	DDCYFLXA	BLDWFLMA	315.5
351	195	ESTSFLXA	TLHSFLXG	315.5
352	400	EVRGFLXA	BAKRFLXA	318.5
353	169	FTMBFLXA	CFLDFLMA	318.8
354	312	FTMDFLXA	ASTRFLXA	319.3
355	55	FTMYFLXA	HAVNFLMA	320.3
356	208	FTMYFLXB	BGPIFLMA	320.5
357	52	FTMYFLXC	SNDSFLXA	320.8
358	222	GLGCFLXA	TRENFLMA	321.8
359	49	GLRDFLXA	HRFDFLXA	322.0
360	315	GVLDFLXA	MXVLFLMA	322.5
361	296	HMSPFLXA	MRHNFLXA	324.8
362	329	HOWYFLXA	PRSHFLXA	325.3
363	244	IMKLFLXA	GDRGFLXA	325.3
364	198	INVRFLXA	GENVFLMA	325.5
365	216	IONAFLXA	SGKYFLMA	325.5
366	383	KNVLFLXA	BNNLFLMA	325.8
367	95	KSSMFLXA	HNCYFLXN	325.8
368	132	KSSMFLXB	ARCHFLMA	326.5
369	245	KSSMFLXD	YNTWFLMA	326.5
370	314	LBLLFLXA	LKWLFLXE	326.5
371	279	LDLKFLXA	YULEFLMA	326.8
372	246	LHACFLXA	MALNFLXA	329.8
373	54	LKBRFLXA	OKHLFLMA	331.0
374	332	LKHLFLXA	FRPTFLXA	333.5
375	273	LKPCFLXA	POINFLXA	334.3
376	141	LSBGFLXA	HWTHFLMA	335.3
377	162	MOISFLXA	ALFRFLXA	336.0
378	153	MRDCFLXA	JAY_FLMA	336.3
379	361	MRHNFLXA	GCVLFLMA	336.8
380	226	MTDRFLXA	CFVLFLXA	337.8
381	87	MTLDFLTC	NWBYFLMA	338.8
382	348	MTVRFLXA	SSPRFLXA	338.8
383	185	NFMYFLXA	KNVLFLXA	340.0
384	229	NFMYFLXB	PMPKFLMA	340.5
385	108	NNPLFLXA	GNWDFLXA	340.8
386	182	NPLSFLXC	INLKFLXA	341.8
387	33	NPLSFLXD	YNFNFLMA	342.3
388	77	OCALFLXA	ALTRFLXA	344.3
389	163	OCALFLXB	BRSNFLMA	345.3
390	224	OCALFLXC	WELKFLMA	345.3
391	289	OCALFLXJ	BCGRFLXA	345.3
392	339	OCNFFLXA	BWLGFLXA	347.8
393	201	OKCBFLXA	MYCYFLXA	348.8
394	343	OKLWFLXA	FTGRFLMA	349.0
395	177	ORCYFLXA	OLTWFLLN	351.8
396	254	ORCYFLXC	CTDLFLXA	352.3
397	183	PNGRFLXA	MCNPFLMA	353.5
398	305	PNISFLXA	CDKYFLMA	354.5
399	196	SBNGFLXA	CSCYFLBA	355.5
400	261	SCPKFLXA	EVRGFLXA	355.8
401	292	SLHLFLXA	PANCFLXA	356.0
402	337	SNANFLXA	BRJTFLXA	358.8
403	204	SNISFLXA	LWTYFLXA	359.0
404	382	SSPRFLXA	MNSNFLMA	359.3
405	218	STCDFLXA	VERNFLMA	359.5
406	299	SVSPFLXA	WSTVFLXA	359.8
407	284	SVSSFLXA	ZLSPFLXA	360.5
408	342	TLCHFLXA	SYHSFLCC	360.8
409	207	TVRSFLXA	CHLKFLXA	363.3
410	321	UMTLFLXA	GNVLFLXA	364.3
411	262	WCHLFLXA	KGLKFLXA	365.5
412	319	WLSTFLXA	RYHLFLXA	366.5
413	313	WLWDFLXA	GLDLFLXA	366.8
414	252	WNDRFLXA	STMKFLXA	367.8
415	128	WNGRFLXA	LEE_FLXA	368.8
416	10	WNPKFLXA	SPCPFLXA	369.3
417	407	ZLSPFLXA	PNLNFLXA	369.5

from Combined Data tab in Section 7

Index	clli	Collocation	
1	ORLDFLMA	31	1
2	MIAMFLGR	29	-
3	JCVLFLCL	26	1
4	FTLDFLMR	24	2
5	BCRTFLMA	22	3
6	FTLDFLPL	22	3
7	ORLDFLPC	21	5
8	HLWDFLPE	20	6
9	MIAMFLPL	20	6
10	BCRTFLBT	19	8
11	HLWDFLWH	19	8
12	JCVLFLSM	19	8
13	MIAMFLHL	19	8
14	JCVLFLSJ	18	12
15	ORLDFLCL	18	12
16	MIAMFLRR	17	14
17	ORLDFLSA	17	14
18	PMBHFLFE	17	14
19	FTLDFLCY	16	17
20	FTLDFLOA	16	17
21	MIAMFLAE	16	17
22	MIAMFLCA	16	17
23	MIAMFLWM	16	17
24	ORLDFLPH	16	17
25	WSSDFLXA	16	17
26	FTLDFLJA	15	24
27	HLWDFLMA	15	24
28	MIAMFLPB	15	24
29	MLBRFLMA	15	24
30	PMBHFLMA	15	24
31	PNSCFLBL	15	24
32	WPBHFLAN	15	24
33	WPBHFLGA	15	24
34	WPBHFLHH	15	24
35	ALSPFLXA	15	24
36	WNPKFLXA	15	24
37	DYBHFLMA	14	35
38	FTLDFLCR	14	35
39	ORLDFLAP	14	35
40	PRRNFLMA	14	35
41	WPBHFLGR	14	35
42	TAMPFLXE	14	35
43	NPLSFLXD	14	35
44	GSVLFLMA	13	42
45	MIAMFLSO	13	42
46	SWTHFLXA	13	42
47	TLHSFLXA	13	42
48	GLRDFLXA	13	42
49	DRBHFLMA	12	47
50	JCVLFLAR	12	47
51	MIAMFLBR	12	47
52	MNDRFLLO	12	47
53	NDADFLGG	12	47
54	WPBHFLRB	12	47
55	BHPKFLXA	12	47
56	CLWRFLXA	12	47
57	LKBRFLXA	12	47
58	MTLDFLTC	12	47
59	OCALFLXA	12	47
60	BCRTFLSA	11	58
61	BYBHFLMA	11	58
62	COCOFLMA	11	58
63	JCBHFLMA	11	58
64	JCVLFLBW	11	58
65	JCVLFLRV	11	58
66	PMBHFLCS	11	58
67	SNFRFLMA	11	58
68	TLHSFLXD	11	58
69	FTMYFLXC	11	58
70	JCVLFLNO	10	68
71	MIAMFLBA	10	68
72	MIAMFLFL	10	68
73	NDADFLOL	10	68
74	STAGFLMA	10	68
75	FTMYFLXA	10	68
76	KSSMFLXA	10	68

77	PNSCFLFP	9	75
78	PNLSFLXA	9	75
79	SPBGFLXA	9	75
80	FTWBFLXA	9	75
81	CYLKFLXA	9	75
82	DLBHFLMA	8	80
83	EGLLFLBG	8	80
84	JCVLFLWC	8	80
85	MIAMFLWD	8	80
86	NDADFLAC	8	80
87	NDADFLBR	8	80
88	ORPKFLMA	8	80
89	PNSCFLWA	8	80
90	WPBHFLLE	8	80
91	WPBHFLRP	8	80
92	CNSDFLXA	8	80
93	TAMPFLXX	8	80
94	TLHSFLXC	8	80
95	APPKFLXA	8	80
96	LSBGFLXA	8	80
97	NNPLFLXA	8	80
98	DYBHFLPO	7	96
99	FTLDFLSU	7	96
100	FTPRFLMA	7	96
101	JPTRFLMA	7	96
102	MIAMFLNM	7	96
103	MNDRFLAV	7	96
104	VRBHFLMA	7	96
105	BRNDFLXA	7	96
106	CRWDFLXA	7	96
107	HYPKFLXA	7	96
108	FTWBFLXB	7	96
109	TLHSFLXB	7	96
110	CPCRFLXA	7	96
111	CPCRFLXB	7	96
112	NPLSFLXC	7	96
113	WNGRFLXA	7	96
114	DLBHFLKP	6	112
115	DYBHFLOB	6	112
116	JCVLFLLF	6	112
117	MIAMFLAP	6	112
118	MIAMFLOL	6	112
119	MIAMFLSH	6	112
120	STRTFLMA	6	112
121	TTVLFLMA	6	112
122	SRSTFLXA	6	112
123	TLHSFLXF	6	112
124	BNSPFLXA	6	112
125	INVRFLXA	6	112
126	KSSMFLXB	6	112
127	OCALFLXB	6	112
128	PNGRFLXA	6	112
129	SBNGFLXA	6	112
130	FTLDFLWN	5	128
131	HLWDFLHA	5	128
132	JCVLFLFC	5	128
133	MIAMFLBC	5	128
134	MIAMFLIC	5	128
135	MIAMFLNS	5	128
136	PMBHFLTA	5	128
137	PNCYFLMA	5	128
138	FHSDFLXA	5	128
139	SLSPFLXA	5	128
140	STGRFLXA	5	128
141	UNVRFLXA	5	128
142	YBCTFLXA	5	128
143	CRVWFLXA	5	128
144	MRNNFLXA	5	128
145	VLPRFLXA	5	128
146	CRRVFLXA	5	128
147	CSLBFLXA	5	128
148	CYLKFLXB	5	128
149	FTMBFLXA	5	128
150	GLGCFLXA	5	128
151	MOISFLXA	5	128
152	MRDCFLXA	5	128
153	NFMYFLXA	5	128
154	OKCBFLXA	5	128
155	STCDFLXA	5	128
156	CCBHFLMA	4	154
157	COCOFLME	4	154
158	GSVLFLNW	4	154
159	LKMRFLMA	4	154
160	MIAMFLAL	4	154
161	PNVDFLMA	4	154
162	BAYUFLXA	4	154

163	LKLDFLXA	4	154
164	LLMNFLXA	4	154
165	NGBHFLXA	4	154
166	PSDNFLXA	4	154
167	TMTRFLXA	4	154
168	WNHNFLXC	4	154
169	ELFDFLXA	4	154
170	SHLMFLXA	4	154
171	STRKFLXA	4	154
172	BLVWFLXA	4	154
173	CLTNFLXA	4	154
174	DDCYFLXA	4	154
175	ESTSFLXA	4	154
176	FTMYFLXB	4	154
177	IONAFLXA	4	154
178	LHACFLXA	4	154
179	MTDRFLXA	4	154
180	NFMYFLXB	4	154
181	ORCYFLXA	4	154
182	TVRSFLXA	4	154
183	DELDFLMA	3	181
184	EGLLFLIH	3	181
185	JCVLFLJT	3	181
186	JCVLFLOW	3	181
187	MIAMFLME	3	181
188	NSBHFLMA	3	181
189	ORPKFLRW	3	181
190	OVIDFLCA	3	181
191	PCBHFLNT	3	181
192	PTSLFLMA	3	181
193	GNDYFLXA	3	181
194	LRGOFLXA	3	181
195	NPRCFLXA	3	181
196	SKWYFLXA	3	181
197	SMNLFLXA	3	181
198	DFSPFLXA	3	181
199	MDSNFLXA	3	181
200	SNRSFLXA	3	181
201	ALVAFLXA	3	181
202	ARCDFLXA	3	181
203	AVPKFLXA	3	181
204	BVHLFLXA	3	181
205	CLMTFLXA	3	181
206	IMKLFLXA	3	181
207	KSSMFLXD	3	181
208	LDLKFLXA	3	181
209	LKPCFLXA	3	181
210	OCALFLXC	3	181
211	ORCYFLXC	3	181
212	SCPKFLXA	3	181
213	SNISFLXA	3	181
214	WCHLFLXA	3	181
215	WNDRFLXA	3	181
216	BKVLFLJF	2	214
217	FRBHFLFP	2	214
218	HMSTFLHM	2	214
219	MLTNFLRA	2	214
220	PACEFLPV	2	214
221	PTSLFLSO	2	214
222	ABDLFLXA	2	214
223	HDSNFLXA	2	214
224	OLDSFLXA	2	214
225	TRSPFLXA	2	214
226	WLCRFLXA	2	214
227	BNFYFLXA	2	214
228	FTWBFLXC	2	214
229	MNTIFLXA	2	214
230	SGBHFLXA	2	214
231	BSHNFLXA	2	214
232	CPHZFLXA	2	214
233	FTMDFLXA	2	214
234	GVLDFLXA	2	214
235	HMSPFLXA	2	214
236	LBLLFLXA	2	214
237	OCALFLXJ	2	214
238	PNISFLXA	2	214
239	SLHLFLXA	2	214
240	SVSPFLXA	2	214
241	SVSSFLXA	2	214
242	UMTLFLXA	2	214
243	WLSTFLXA	2	214
244	WLWDFLXA	2	214
245	GLBRFLMC	1	243
246	HBSDFLMA	1	243
247	HTISFLMA	1	243
248	KYWSFLMA	1	243

249	LYHNFLOH	1	243
250	MIAMFLKE	1	243
251	PLTKFLMA	1	243
252	PNCYFLCA	1	243
253	PNSCFLHC	1	243
254	SBSTFLMA	1	243
255	STAGFLSH	1	243
256	WWSPFLSH	1	243
257	BRTNFLXX	1	243
258	CYGRFLXA	1	243
259	DNDNFLXA	1	243
260	HGLDFLXA	1	243
261	LKLDFLXE	1	243
262	LKLDFLXN	1	243
263	PTCYFLXA	1	243
264	SNSPFLXA	1	243
265	SPRGFLXA	1	243
266	SSDSFLXA	1	243
267	ALFRFLXA	1	243
268	BAKRFLXA	1	243
269	DESTFLXA	1	243
270	FRPTFLXA	1	243
271	GDRGFLXA	1	243
272	GNWDFLXA	1	243
273	HRFDFLXA	1	243
274	MALNFLXA	1	243
275	SNDSFLXA	1	243
276	TLHSFLXG	1	243
277	TLHSFLXH	1	243
278	ASTRFLXA	1	243
279	CHSWFLXA	1	243
280	HOWYFLXA	1	243
281	KNVLFLXA	1	243
282	LKHLFLXA	1	243
283	MRHNFLXA	1	243
284	MTVRFLXA	1	243
285	OCNFFLXA	1	243
286	OKLWFLXA	1	243
287	SNANFLXA	1	243
288	TLCHFLXA	1	243
289	ARCHFLMA	0	287
290	BGPIFLMA	0	287
291	BLDWFLMA	0	287
292	BLGLFLMA	0	287
293	BNNLFLMA	0	287
294	BRSNFLMA	0	287
295	CCBHFLAF	0	287
296	CDKYFLMA	0	287
297	CFLDFLMA	0	287
298	CHPLFLJA	0	287
299	CNTMFLLE	0	287
300	CSCYFLBA	0	287
301	DBRYFLDL	0	287
302	DBRYFLMA	0	287
303	DLSPFLMA	0	287
304	DNLNFLWM	0	287
305	DYBHFLFN	0	287
306	DYBHFLOS	0	287
307	EORNFLMA	0	287
308	FLBHFLMA	0	287
309	FTGRFLMA	0	287
310	FTLDFLSG	0	287
311	GCSPFLCN	0	287
312	GCVLFLMA	0	287
313	GENVFLMA	0	287
314	HAVNFLMA	0	287
315	HLNVFLMA	0	287
316	HMSTFLNA	0	287
317	HWTHFLMA	0	287
318	ISLMFLMA	0	287
319	JAY_FLMA	0	287
320	JCBHFLAB	0	287
321	JCBHFLSP	0	287
322	JCVLFLIA	0	287
323	KYHGFLMA	0	287
324	KYLRFLLS	0	287
325	KYLRFLMA	0	287
326	LKCYFLMA	0	287
327	MCNPFLMA	0	287
328	MDBGFLPM	0	287
329	MICCFLBB	0	287
330	MNDRFLLW	0	287
331	MNSNFLMA	0	287
332	MRTHFLVE	0	287
333	MXVLFLMA	0	287
334	NKLRFLMA	0	287

335	NWBYFLMA	0	287
336	OKHLFLMA	0	287
337	OLTWFLLN	0	287
338	PAHKFLMA	0	287
339	PLCSFLMA	0	287
340	PMPKFLMA	0	287
341	PNSCFLPB	0	287
342	PRSNFLFD	0	287
343	SBSTFLFE	0	287
344	SGKYFLMA	0	287
345	STAGFLBS	0	287
346	SYHSFLCC	0	287
347	TRENFLMA	0	287
348	VERNFLMA	0	287
349	VRBHFLBE	0	287
350	WELKFLMA	0	287
351	WWSPFLHI	0	287
352	YNFNFLMA	0	287
353	YNTWFLMA	0	287
354	YULEFLMA	0	287
355	ALFAFLXA	0	287
356	ALTRFLXA	0	287
357	ANMRFLXA	0	287
358	BARTFLXA	0	287
359	BBPKFLXA	0	287
360	BRBAFLXA	0	287
361	BRJTFLXA	0	287
362	BYSHFLXA	0	287
363	DUNDFLXA	0	287
364	ENWDFLXA	0	287
365	FRSTFLXA	0	287
366	HNCYFLXA	0	287
367	HNCYFLXN	0	287
368	INLKFLXA	0	287
369	INRKFLXX	0	287
370	KYSTFLXA	0	287
371	LGBKFLXA	0	287
372	LKALFLXA	0	287
373	LKWLFLXA	0	287
374	LKWLFLXE	0	287
375	LNLKFLXA	0	287
376	LUTZFLXA	0	287
377	MLBYFLXA	0	287
378	MNLKFLXA	0	287
379	MYCYFLXA	0	287
380	NRPTFLXA	0	287
381	NRSDFLXA	0	287
382	OSPRFLXA	0	287
383	PKCYFLXA	0	287
384	PLMTFLXA	0	287
385	PLSLFLXA	0	287
386	PNCRFLXA	0	287
387	POINFLXA	0	287
388	PRSHFLXA	0	287
389	RSKNFLXA	0	287
390	SARKFLXA	0	287
391	SEKYFLXA	0	287
392	SGBEFLXA	0	287
393	SPBGFLXS	0	287
394	THNTFLXA	0	287
395	VENCFLXA	0	287
396	VENCFLXS	0	287
397	WIMMFLXA	0	287
398	WLCHFLXA	0	287
399	CFVLFLXA	0	287
400	CHLKFLXA	0	287
401	CTDLFLXA	0	287
402	GLDLFLXA	0	287
403	GNVLFLXA	0	287
404	KGLKFLXA	0	287
405	LEE_FLXA	0	287
406	LWTYFLXA	0	287
407	PANCFLXA	0	287
408	PNLNFLXA	0	287
409	RYHLFLXA	0	287
410	SPCPFLXA	0	287
411	STMKFLXA	0	287
412	WSTVFLXA	0	287
413	BCGRFLXA	0	287
414	BWLGFLXA	0	287
415	EVRGFLXA	0	287
416	SSPRFLXA	0	287
417	ZLSPFLXA	0	287

from Combined Data tab in Section 7

Index	CLLI	Line Density	
1	MIAMFLGR	15066.43	-
2	MTLDFLTC	10943.08	1
3	MIAMFLME	9867.44	2
4	MIAMFLBR	8961.32	3
5	TAMPFLXX	7458.79	4
6	MIAMFLFL	7114.86	5
7	MIAMFLAE	6826.49	6
8	MIAMFLBA	6726.50	7
9	MNDRFLAV	6148.05	8
10	MIAMFLBC	6083.49	9
11	HLWDFLHA	6034.45	10
12	NDADFLOL	6011.73	11
13	FTLDFLCY	5891.44	12
14	BHPKFLXA	5839.47	13
15	JCVLFLJT	5720.26	14
16	MIAMFLIC	5663.96	15
17	FTLDFLCR	5103.55	16
18	MIAMFLNM	4848.82	17
19	TLHSFLXA	4834.22	18
20	MIAMFLWM	4802.45	19
21	FTLDFLMR	4692.28	20
22	NDADFLAC	4515.63	21
23	ORLDFLMA	4490.18	22
24	MIAMFLKE	4327.43	23
25	HYPKFLXA	4235.08	24
26	MIAMFLPB	4221.16	25
27	WSSDFLXA	4155.02	26
28	MIAMFLAL	4150.94	27
29	WPBHFLAN	4118.48	28
30	NDADFLGG	4093.07	29
31	FTLDFLOA	4082.58	30
32	MIAMFLSH	4019.88	31
33	FTLDFLSU	3873.08	32
34	BCRTFLMA	3871.32	33
35	PMBHFLFE	3859.24	34
36	CLWRFLXA	3773.64	35
37	JCVLFLSM	3714.88	36
38	JCVLFLCL	3659.87	37
39	HLWDFLWH	3602.87	38
40	PMBHFLTA	3546.59	39
41	PMBHFLMA	3534.32	40
42	PNLSFLXA	3532.83	41
43	SPBGFLXA	3516.92	42
44	MIAMFLHL	3470.77	43
45	MIAMFLNS	3461.08	44
46	HLWDFLMA	3452.23	45
47	MIAMFLWD	3451.06	46
48	SGBEFLXA	3443.03	47
49	SRSTFLXA	3426.67	48
50	WNPKFLXA	3322.19	49
51	FTMBFLXA	3302.59	50
52	WLCRFLXA	3223.30	51
53	FTWBFLXA	3210.35	52
54	PSDNFLXA	3205.01	53
55	ORLDFLCL	3199.52	54
56	DLBHFLMA	3147.77	55
57	JCVLFLSJ	3111.98	56
58	BAYUFLXA	3094.87	57
59	MIAMFLPL	3061.20	58
60	FHSDFLXA	3029.76	59
61	WPBHFLRB	3015.18	60
62	MIAMFLSO	2975.42	61
63	CNSDFLXA	2965.21	62
64	DRBHFLMA	2936.24	63
65	FTMYFLXA	2874.19	64
66	MIAMFLAP	2858.27	65
67	SKWYFLXA	2839.32	66
68	WPBHFLHH	2804.90	67
69	GNDYFLXA	2794.53	68
70	SWTHFLXA	2765.42	69
71	ALSPFLXA	2755.62	70
72	SLSPFLXA	2740.68	71
73	WPBHFLLE	2732.11	72
74	MIAMFLRR	2729.50	73
75	LKBRFLXA	2719.47	74
76	UNVRFLXA	2708.07	75

77	MIAMFLOL	2683.23	76
78	LRGOFLXA	2667.88	77
79	BCRTFLBT	2625.87	78
80	NDADFLBR	2588.96	79
81	LLMNFLXA	2577.06	80
82	FTLDFLPL	2526.04	81
83	MIAMFLCA	2518.60	82
84	ORLDFLSA	2500.62	83
85	GLRDFLXA	2479.52	84
86	KYWSFLMA	2469.39	85
87	TMTRFLXA	2458.19	86
88	NGBHFLXA	2450.24	87
89	CCBHFLMA	2432.90	88
90	DNDNFLXA	2359.58	89
91	JCVLFLRV	2356.81	90
92	SMNLFLXA	2348.18	91
93	SARKFLXA	2264.91	92
94	NPLSFLXD	2242.84	93
95	INRKFLXX	2197.34	94
96	FTMYFLXC	2175.68	95
97	JCVLFLAR	2129.04	96
98	JCBHFLMA	2117.71	97
99	PMBHFLCS	2099.49	98
100	JCVLFLFC	2059.12	99
101	PNSCFLBL	2051.62	100
102	FTLDFLJA	1999.53	101
103	*YBCTFLXA*	*1982.57*	*102*
104	SPBGFLXS	1887.36	103
105	WPBHFLGA	1858.77	104
106	ORLDFLPH	1857.61	105
107	CRWDFLXA	1857.51	106
108	PLSLFLXA	1821.37	107
109	SEKYFLXA	1800.87	108
110	*STGRFLXA*	*1791.34*	*109*
111	DLBHFLKP	1770.30	110
112	ANMRFLXA	1703.15	111
113	BCRTFLSA	1690.37	112
114	TLHSFLXB	1585.93	113
115	LGBKFLXA	1563.97	114
116	MOISFLXA	1549.10	115
117	BYBHFLMA	1547.69	116
118	EGLLFLIH	1533.24	117
119	CSLBFLXA	1503.85	118
120	HLWDFLPE	1503.70	119
121	SHLMFLXA	1481.26	120
122	LKLDFLXA	1456.85	121
123	CYLKFLXA	1397.72	122
124	NFMYFLXA	1395.89	123
125	FTLDFLSG	1368.93	124
126	ORLDFLPC	1357.50	125
127	BRBAFLXA	1318.03	126
128	NPRCFLXA	1302.29	127
129	DYBHFLOS	1290.27	128
130	TAMPFLXE	1286.77	129
131	PTSLFLSO	1276.87	130
132	CPCRFLXA	1269.13	131
133	NRSDFLXA	1251.53	132
134	ORPKFLMA	1245.67	133
135	IONAFLXA	1221.61	134
136	ORPKFLRW	1219.47	135
137	DYBHFLPO	1212.41	136
138	PNSCFLFP	1200.08	137
139	TRSPFLXA	1193.89	138
140	FTLDFLWN	1186.00	139
141	DYBHFLMA	1141.14	140
142	STAGFLBS	1130.51	141
143	VRBHFLBE	1120.35	142
144	JCVLFLBW	1101.34	143
145	WPBHFLGR	1090.83	144
146	*NNPLFLXA*	*1086.94*	*145*
147	KYLRFLMA	1070.16	146
148	SNSPFLXA	1038.19	147
149	ORLDFLAP	1021.88	148
150	MNDRFLLO	1008.24	149
151	JPTRFLMA	988.94	150
152	EGLLFLBG	974.52	151
153	JCBHFLAB	962.39	152
154	HDSNFLXA	938.65	153
155	VENCFLXS	911.83	154
156	OLDSFLXA	885.95	155
157	VENCFLXA	869.98	156
158	MRDCFLXA	851.42	157
159	OCALFLXC	844.02	158
160	HTISFLMA	839.63	159
161	WNHNFLXC	798.86	160
162	PNCYFLMA	797.22	161

163	PRRNFLMA	797.19	162
164	DBRYFLDL	796.49	163
165	DESTFLXA	786.83	164
166	KYLRFLLS	781.01	165
167	KSSMFLXD	780.04	166
168	OCALFLXJ	756.71	167
169	COCOFLMA	754.19	168
170	MLBRFLMA	737.51	169
171	LKMRFLMA	734.59	170
172	SSDSFLXA	734.38	171
173	DYBHFLFN	733.82	172
174	GLBRFLMC	720.91	173
175	BRNDFLXA	713.34	174
176	MRTHFLVE	711.80	175
177	PNSCFLWA	706.79	176
178	SPRGFLXA	702.91	177
179	SNISFLXA	698.81	178
180	CCBHFLAF	682.54	179
181	HGLDFLXA	665.23	180
182	ORCYFLXC	656.90	181
183	COCOFLME	655.81	182
184	OSPRFLXA	655.27	183
185	ORCYFLXA	653.79	184
186	KSSMFLXA	647.95	185
187	ISLMFLMA	635.87	186
188	CPCRFLXB	624.77	187
189	GSVLFLMA	610.55	188
190	JCVLFLWC	607.15	189
191	WWSPFLSH	597.26	190
192	JCVLFLNO	590.16	191
193	BRTNFLXX	585.77	192
194	PTSLFLMA	568.97	193
195	GSVLFLNW	561.42	194
196	ABDLFLXA	524.78	195
197	PLMTFLXA	524.14	196
198	JCBHFLSP	521.98	197
199	ENWDFLXA	518.70	198
200	APPKFLXA	515.31	199
201	SNFRFLMA	515.16	200
202	FTWBFLXC	498.06	201
203	OVIDFLCA	485.06	202
204	TLHSFLXH	484.95	203
205	FTWBFLXB	483.98	204
206	LKLDFLXE	482.30	205
207	STRTFLMA	478.80	206
208	VRBHFLMA	462.85	207
209	TLHSFLXD	456.40	208
210	DBRYFLMA	455.32	209
211	TTVLFLMA	452.44	210
212	BNSPFLXA	451.03	211
213	PCBHFLNT	444.20	212
214	MICCFLBB	442.22	213
215	HBSDFLMA	438.76	214
216	VLPRFLXA	425.93	215
217	DELDFLMA	415.87	216
218	PNVDFLMA	399.51	217
219	JCVLFLLF	398.81	218
220	PLCSFLMA	396.03	219
221	NSBHFLMA	381.56	220
222	HMSTFLNA	380.82	221
223	RSKNFLXA	380.36	222
224	FRBHFLFP	375.29	223
225	OCALFLXA	374.21	224
226	NFMYFLXB	372.84	225
227	CYGRFLXA	368.29	226
228	LSBGFLXA	358.81	227
229	CYLKFLXB	355.93	228
230	KSSMFLXB	355.48	229
231	LUTZFLXA	351.15	230
232	NKLRFLMA	348.36	231
233	ALFAFLXA	330.21	232
234	TVRSFLXA	329.99	233
235	ESTSFLXA	328.80	234
236	TLHSFLXC	322.82	235
237	MLBYFLXA	320.95	236
238	WNGRFLXA	317.77	237
239	FTMYFLXB	316.63	238
240	BARTFLXA	315.15	239
241	SBSTFLMA	313.46	240
242	STAGFLSH	303.39	241
243	NRPTFLXA	300.01	242
244	LKWLFLXA	298.31	243
245	WPBHFLRP	295.65	244
246	LKLDFLXN	294.82	245
247	JCVLFLOW	294.77	246
248	PTCYFLXA	287.33	247

249	FTPRFLMA	286.94	248
250	WWSPFLHI	278.02	249
251	FLBHFLMA	276.80	250
252	SCPKFLXA	272.23	251
253	BLGLFLMA	270.90	252
254	WNDRFLXA	269.79	253
255	SBNGFLXA	266.14	254
256	DYBHFLOB	264.00	255
257	SVSSFLXA	254.47	256
258	HMSTFLHM	254.26	257
259	PNSCFLHC	245.74	258
260	NPLSFLXC	241.04	259
261	LDLKFLXA	235.93	260
262	CPHZFLXA	232.05	261
263	LHACFLXA	230.81	262
264	JCVLFLIA	227.03	263
265	KYSTFLXA	222.91	264
266	PNSCFLPB	222.69	265
267	WLCHFLXA	221.74	266
268	MNLKFLXA	215.91	267
269	CRRVFLXA	208.91	268
270	CRVWFLXA	206.47	269
271	INVRFLXA	204.90	270
272	SNRSFLXA	202.87	271
273	PAHKFLMA	202.79	272
274	CNTMFLLE	195.35	273
275	BVHLFLXA	193.77	274
276	HMSPFLXA	191.57	275
277	MTDRFLXA	186.61	276
278	PNCYFLCA	185.74	277
279	OCALFLXB	185.52	278
280	HNCYFLXA	183.93	279
281	GLGCFLXA	178.82	280
282	STAGFLMA	177.31	281
283	PNISFLXA	173.17	282
284	LYHNFLOH	172.21	283
285	AVPKFLXA	171.63	284
286	TLHSFLXF	165.83	285
287	LKALFLXA	164.71	286
288	MLTNFLRA	152.09	287
289	THNTFLXA	150.49	288
290	BLVWFLXA	147.90	289
291	DDCYFLXA	147.36	290
292	ALVAFLXA	146.60	291
293	BGPIFLMA	145.79	292
294	MDBGFLPM	145.49	293
295	PNGRFLXA	145.48	294
296	PACEFLPV	143.99	295
297	SGKYFLMA	136.82	296
298	IMKLFLXA	134.80	297
299	SVSPFLXA	130.09	298
300	WIMMFLXA	126.80	299
301	BCGRFLXA	123.01	300
302	MNDRFLLW	117.83	301
303	LNLKFLXA	115.57	302
304	BBPKFLXA	115.34	303
305	DUNDFLXA	112.68	304
306	BKVLFLJF	111.06	305
307	OKLWFLXA	110.54	306
308	HLNVFLMA	107.91	307
309	CHSWFLXA	103.79	308
310	CLMTFLXA	102.93	309
311	WLWDFLXA	101.85	310
312	POINFLXA	97.52	311
313	STCDFLXA	96.17	312
314	MRNNFLXA	95.62	313
315	PLTKFLMA	95.03	314
316	CLTNFLXA	95.01	315
317	DLSPFLMA	93.49	316
318	EORNFLMA	91.54	317
319	KYHGFLMA	83.44	318
320	SLHLFLXA	81.47	319
321	STRKFLXA	80.54	320
322	YULEFLMA	79.21	321
323	TLCHFLXA	77.94	322
324	LKHLFLXA	76.57	323
325	OCNFFLXA	76.25	324
326	MTVRFLXA	75.53	325
327	GCSPFLCN	75.49	326
328	LKPCFLXA	73.92	327
329	MDSNFLXA	73.08	328
330	PNCRFLXA	72.32	329
331	HOWYFLXA	68.77	330
332	HRFDFLXA	67.81	331
333	HNCYFLXN	67.53	332
334	ASTRFLXA	67.44	333

335	HAVNFLMA	66.51	334
336	OKCBFLXA	66.48	335
337	FTGRFLMA	64.88	336
338	FRSTFLXA	63.40	337
339	PMPKFLMA	62.45	338
340	OKHLFLMA	61.92	339
341	LKCYFLMA	61.17	340
342	ARCDFLXA	58.00	341
343	GENVFLMA	57.06	342
344	DNLNFLWM	57.05	343
345	SSPRFLXA	56.30	344
346	GVLDFLXA	54.34	345
347	UMTLFLXA	54.33	346
348	FTMDFLXA	53.82	347
349	LKWLFLXE	51.27	348
350	TLHSFLXG	50.28	349
351	DFSPFLXA	46.85	350
352	BLDWFLMA	45.05	351
353	WCHLFLXA	44.46	352
354	ARCHFLMA	43.78	353
355	PKCYFLXA	41.88	354
356	WSTVFLXA	41.52	355
357	WELKFLMA	41.20	356
358	SGBHFLXA	40.95	357
359	BSHNFLXA	40.81	358
360	MXVLFLMA	40.77	359
361	ELFDFLXA	40.00	360
362	BWLGFLXA	39.19	361
363	SNDSFLXA	38.98	362
364	SBSTFLFE	37.18	363
365	LBLLFLXA	37.02	364
366	MRHNFLXA	36.44	365
367	BNFYFLXA	36.32	366
368	SNANFLXA	36.21	367
369	CHPLFLJA	35.47	368
370	NWBYFLMA	34.82	369
371	ALTRFLXA	34.02	370
372	PANCFLXA	31.48	371
373	CFLDFLMA	30.45	372
374	HWTHFLMA	30.31	373
375	CFVLFLXA	29.53	374
376	WLSTFLXA	29.28	375
377	BNNLFLMA	28.04	376
378	YNTWFLMA	27.10	377
379	LWTYFLXA	26.73	378
380	PRSNFLFD	26.36	379
381	BRSNFLMA	25.65	380
382	GCVLFLMA	24.46	381
383	TRENFLMA	23.83	382
384	INLKFLXA	23.04	383
385	MNTIFLXA	22.86	384
386	EVRGFLXA	22.76	385
387	OLTWFLLN	21.13	386
388	CTDLFLXA	20.95	387
389	GDRGFLXA	20.10	388
390	YNFNFLMA	19.45	389
391	MCNPFLMA	19.22	390
392	STMKFLXA	18.99	391
393	CSCYFLBA	18.94	392
394	BRJTFLXA	18.48	393
395	FRPTFLXA	18.05	394
396	CDKYFLMA	17.27	395
397	KGLKFLXA	16.84	396
398	PRSHFLXA	16.33	397
399	JAY_FLMA	15.95	398
400	BYSHFLXA	15.85	399
401	BAKRFLXA	15.25	400
402	ALFRFLXA	14.07	401
403	MALNFLXA	13.57	402
404	VERNFLMA	11.85	403
405	ZLSPFLXA	11.65	404
406	SPCPFLXA	11.42	405
407	GNWDFLXA	11.14	406
408	CHLKFLXA	10.91	407
409	RYHLFLXA	10.66	408
410	MYCYFLXA	10.58	409
411	SYHSFLCC	9.57	410
412	PNLNFLXA	9.26	411
413	LEE_FLXA	8.06	412
414	GLDLFLXA	8.04	413
415	GNVLFLXA	6.67	414
416	KNVLFLXA	6.47	415
417	MNSNFLMA	5.54	416

from Combined Data tab in Section 7

Index	clli	Ent+SA %	
1	JCVLFLJT	0.971	4
2	CCBHFLAF	0.956	3
3	MTLDFLTC	0.941	2
4	MIAMFLPL	0.929	1
5	MIAMFLGR	0.876	-
6	FTLDFLSG	0.873	1
7	MIAMFLAP	0.831	2
8	BHPKFLXA	0.828	3
9	FHSDFLXA	0.812	4
10	TAMPFLXX	0.799	5
11	MRDCFLXA	0.787	6
12	JCVLFLIA	0.723	7
13	TAMPFLXE	0.715	8
14	YBCTFLXA	0.703	9
15	ORLDFLMA	0.696	10
16	JCVLFLCL	0.665	11
17	BCRTFLBT	0.662	12
18	TLHSFLXA	0.658	13
19	WSSDFLXA	0.643	14
20	ELFDFLXA	0.642	15
21	JCVLFLSM	0.628	16
22	WNPKFLXA	0.627	17
23	WPBHFLAN	0.612	18
24	FTMYFLXA	0.611	19
25	ALVAFLXA	0.594	20
26	FTLDFLCY	0.594	21
27	MIAMFLME	0.586	22
28	LKMRFLMA	0.578	23
29	ORLDFLSA	0.559	24
30	MIAMFLPB	0.557	25
31	KSSMFLXB	0.552	26
32	HYPKFLXA	0.550	27
33	CYLKFLXB	0.540	28
34	FTMYFLXC	0.537	29
35	SRSTFLXA	0.532	30
36	FTWBFLXA	0.531	31
37	ORLDFLPC	0.528	32
38	MIAMFLRR	0.528	33
39	MIAMFLBC	0.526	34
40	JCVLFLSJ	0.526	35
41	FTLDFLMR	0.520	36
42	MIAMFLAE	0.516	37
43	MIAMFLAL	0.516	38
44	MIAMFLWM	0.514	39
45	ORLDFLCL	0.508	40
46	SPBGFLXA	0.508	41
47	PNLSFLXA	0.508	42
48	ALSPFLXA	0.508	43
49	CLTNFLXA	0.506	44
50	CLWRFLXA	0.496	45
51	BCRTFLMA	0.496	46
52	NPLSFLXD	0.492	47
53	WPBHFLRB	0.490	48
54	WNGRFLXA	0.490	49
55	BARTFLXA	0.489	50
56	FTWBFLXB	0.487	51
57	OLDSFLXA	0.482	52
58	MIAMFLOL	0.481	53
59	PNSCFLBL	0.480	54
60	UNVRFLXA	0.480	55
61	TLHSFLXD	0.477	56
62	SWTHFLXA	0.475	57
63	MRNNFLXA	0.472	58
64	STRKFLXA	0.466	59
65	MNDRFLAV	0.465	60
66	WPBHFLHH	0.464	61
67	FTLDFLCR	0.460	62
68	LKLDFLXA	0.459	63
69	DYBHFLMA	0.459	64
70	OCALFLXA	0.452	65
71	BRTNFLXX	0.451	66
72	SARKFLXA	0.448	67
73	STAGFLMA	0.446	68
74	JCVLFLNO	0.442	69
75	BAYUFLXA	0.437	70
76	MIAMFLSH	0.437	71

77	FTLDFLPL	0.436	72
78	TLHSFLXB	0.435	73
79	MLBYFLXA	0.433	74
80	CYLKFLXA	0.431	75
81	MDSNFLXA	0.430	76
82	MIAMFLBR	0.430	77
83	CRVWFLXA	0.428	78
84	ORLDFLPH	0.427	79
85	TLHSFLXC	0.426	80
86	NDADFLOL	0.425	81
87	MIAMFLBA	0.425	82
88	PMBHFLFE	0.422	83
89	MIAMFLNS	0.421	84
90	PNCYFLMA	0.420	85
91	SKWYFLXA	0.419	86
92	LKBRFLXA	0.418	87
93	KSSMFLXA	0.417	88
94	DRBHFLMA	0.416	89
95	CNSDFLXA	0.416	90
96	MIAMFLHL	0.412	91
97	BYSHFLXA	0.412	92
98	SGBEFLXA	0.411	93
99	PSDNFLXA	0.411	94
100	NDADFLGG	0.404	95
101	SLSPFLXA	0.403	96
102	GNDYFLXA	0.403	97
103	DLBHFLMA	0.403	98
104	PRRNFLMA	0.403	99
105	BLGLFLMA	0.401	100
106	KYWSFLMA	0.401	101
107	STRTFLMA	0.400	102
108	CRRVFLXA	0.399	103
109	GLRDFLXA	0.396	104
110	PNSCFLFP	0.395	105
111	WPBHFLGR	0.393	106
112	APPKFLXA	0.393	107
113	JCVLFLRV	0.393	108
114	JCVLFLAR	0.389	109
115	SSDSFLXA	0.389	110
116	LKWLFLXA	0.388	111
117	OCALFLXB	0.386	112
118	MIAMFLSO	0.384	113
119	SNRSFLXA	0.383	114
120	HLWDFLMA	0.381	115
121	JCVLFLOW	0.381	116
122	PMBHFLMA	0.380	117
123	MIAMFLFL	0.378	118
124	DELDFLMA	0.378	119
125	LKLDFLXE	0.378	120
126	NRSDFLXA	0.375	121
127	PTCYFLXA	0.375	122
128	MIAMFLKE	0.374	123
129	NNPLFLXA	0.373	124
130	WNHNFLXC	0.371	125
131	ABDLFLXA	0.369	126
132	WCHLFLXA	0.368	127
133	OKCBFLXA	0.366	128
134	CRWDFLXA	0.365	129
135	MIAMFLNM	0.364	130
136	IMKLFLXA	0.364	131
137	NDADFLBR	0.363	132
138	SHLMFLXA	0.362	133
139	HLWDFLWH	0.361	134
140	JPTRFLMA	0.361	135
141	PMBHFLCS	0.360	136
142	HMSTFLNA	0.358	137
143	ORCYFLXA	0.358	138
144	LRGOFLXA	0.357	139
145	CPCRFLXB	0.356	140
146	PNGRFLXA	0.355	141
147	HMSTFLHM	0.351	142
148	FTLDFLOA	0.351	143
149	TLHSFLXF	0.350	144
150	VLPRFLXA	0.350	145
151	NDADFLAC	0.350	146
152	MLBRFLMA	0.350	147
153	GSVLFLMA	0.349	148
154	GSVLFLNW	0.349	149
155	PCBHFLNT	0.348	150
156	SMNLFLXA	0.347	151
157	DDCYFLXA	0.347	152
158	KYLRFLLS	0.346	153
159	COCOFLME	0.344	154
160	ESTSFLXA	0.344	155
161	DFSPFLXA	0.344	156
162	TMTRFLXA	0.344	157

163	PTSLFLSO	0.343	158
164	LGBKFLXA	0.340	159
165	STGRFLXA	0.338	160
166	SNISFLXA	0.338	161
167	LSBGFLXA	0.337	162
168	ISLMFLMA	0.336	163
169	DYBHFLFN	0.335	164
170	FTPRFLMA	0.334	165
171	JCBHFLSP	0.333	166
172	JCVLFLBW	0.332	167
173	SPRGFLXA	0.330	168
174	WPBHFLLE	0.330	169
175	FTLDFLJA	0.329	170
176	BRNDFLXA	0.328	171
177	CLMTFLXA	0.328	172
178	VRBHFLMA	0.327	173
179	MNDRFLLO	0.326	174
180	LUTZFLXA	0.326	175
181	NGBHFLXA	0.324	176
182	CCBHFLMA	0.324	177
183	HLWDFLHA	0.322	178
184	LNLKFLXA	0.322	179
185	CNTMFLLE	0.321	180
186	HGLDFLXA	0.319	181
187	NKLRFLMA	0.319	182
188	BNFYFLXA	0.318	183
189	ORPKFLMA	0.318	184
190	EGLLFLBG	0.316	185
191	TRSPFLXA	0.316	186
192	DYBHFLOB	0.315	187
193	WLCHFLXA	0.315	188
194	FTWBFLXC	0.313	189
195	SGBHFLXA	0.313	190
196	SNFRFLMA	0.313	191
197	LLMNFLXA	0.313	192
198	TTVLFLMA	0.312	193
199	JCBHFLMA	0.312	194
200	COCOFLMA	0.311	195
201	TVRSFLXA	0.311	196
202	AVPKFLXA	0.310	197
203	VENCFLXA	0.310	198
204	WPBHFLRP	0.309	199
205	WNDRFLXA	0.309	200
206	MRTHFLVE	0.308	201
207	BRBAFLXA	0.308	202
208	ARCDFLXA	0.307	203
209	BKVLFLJF	0.307	204
210	NPRCFLXA	0.306	205
211	PRSNFLFD	0.305	206
212	WLCRFLXA	0.304	207
213	GLBRFLMC	0.303	208
214	SLHLFLXA	0.302	209
215	BYBHFLMA	0.302	210
216	FTLDFLSU	0.301	211
217	FRBHFLFP	0.299	212
218	THNTFLXA	0.296	213
219	MLTNFLRA	0.296	214
220	FTMYFLXB	0.294	215
221	DNDNFLXA	0.294	216
222	SBSTFLFE	0.294	217
223	STAGFLSH	0.294	218
224	FTLDFLWN	0.293	219
225	HLWDFLPE	0.292	220
226	GCSPFLCN	0.292	221
227	PAHKFLMA	0.289	222
228	MTDRFLXA	0.288	223
229	MOISFLXA	0.288	224
230	FTMDFLXA	0.286	225
231	STCDFLXA	0.285	226
232	SBNGFLXA	0.280	227
233	BNSPFLXA	0.279	228
234	KYLRFLMA	0.278	229
235	RSKNFLXA	0.277	230
236	NPLSFLXC	0.275	231
237	ALFAFLXA	0.275	232
238	OSPRFLXA	0.275	233
239	CPCRFLXA	0.273	234
240	WPBHFLGA	0.272	235
241	HTISFLMA	0.272	236
242	PLMTFLXA	0.267	237
243	CYGRFLXA	0.267	238
244	LKPCFLXA	0.266	239
245	INVRFLXA	0.264	240
246	PLSLFLXA	0.264	241
247	VRBHFLBE	0.264	242
248	PKCYFLXA	0.264	243

249	OCALFLXC	0.263	244
250	JCVLFLLF	0.262	245
251	HLNVFLMA	0.261	246
252	ENWDFLXA	0.261	247
253	MNTIFLXA	0.258	248
254	ORLDFLAP	0.257	249
255	MIAMFLIC	0.257	250
256	LBLLFLXA	0.254	251
257	NSBHFLMA	0.253	252
258	WLSTFLXA	0.253	253
259	HOWYFLXA	0.253	254
260	MIAMFLCA	0.253	255
261	HDSNFLXA	0.251	256
262	FTMBFLXA	0.250	257
263	GVLDFLXA	0.250	258
264	OVIDFLCA	0.248	259
265	HNCYFLXA	0.248	260
266	SPBGFLXS	0.247	261
267	INRKFLXX	0.245	262
268	SVSPFLXA	0.245	263
269	JCVLFLFC	0.244	264
270	EGLLFLJH	0.243	265
271	PNVDFLMA	0.241	266
272	SNANFLXA	0.241	267
273	LKALFLXA	0.238	268
274	LKLDFLXN	0.238	269
275	GLGCFLXA	0.236	270
276	SCPKFLXA	0.235	271
277	LYHNFLOH	0.235	272
278	BCRTFLSA	0.234	273
279	NFMYFLXA	0.233	274
280	CSLBFLXA	0.232	275
281	FRSTFLXA	0.231	276
282	JCVLFLWC	0.230	277
283	SVSSFLXA	0.230	278
284	WWSPFLHI	0.229	279
285	LKHLFLXA	0.226	280
286	LKCYFLMA	0.226	281
287	PMBHFLTA	0.225	282
288	WIMMFLXA	0.224	283
289	PLTKFLMA	0.224	284
290	PRSHFLXA	0.220	285
291	BLDWFLMA	0.219	286
292	EORNFLMA	0.218	287
293	DLBHFLKP	0.218	288
294	ORPKFLRW	0.217	289
295	KYSTFLXA	0.216	290
296	NFMYFLXB	0.215	291
297	PNSCFLHC	0.215	292
298	DYBHFLPO	0.214	293
299	PNSCFLWA	0.212	294
300	BVHLFLXA	0.212	295
301	LHACFLXA	0.212	296
302	PNCRFLXA	0.210	297
303	SEKYFLXA	0.210	298
304	CHPLFLJA	0.205	299
305	DUNDFLXA	0.205	300
306	ANMRFLXA	0.203	301
307	BLVWFLXA	0.201	302
308	VENCFLXS	0.201	303
309	BAKRFLXA	0.200	304
310	PLCSFLMA	0.200	305
311	PACEFLPV	0.199	306
312	STAGFLBS	0.199	307
313	MXVLFLMA	0.198	308
314	DBRYFLMA	0.197	309
315	HBSDFLMA	0.197	310
316	MALNFLXA	0.196	311
317	YNTWFLMA	0.196	312
318	IONAFLXA	0.195	313
319	SBSTFLMA	0.195	314
320	PTSLFLMA	0.195	315
321	BSHNFLXA	0.195	316
322	MIAMFLWD	0.193	317
323	PNISFLXA	0.192	318
324	GDRGFLXA	0.192	319
325	HMSPFLXA	0.191	320
326	KNVLFLXA	0.185	321
327	MTVRFLXA	0.183	322
328	KSSMFLXD	0.183	323
329	MNLKFLXA	0.182	324
330	TRENFLMA	0.180	325
331	PNSCFLPB	0.180	326
332	DLSPFLMA	0.180	327
333	UMTLFLXA	0.180	328
334	CFLDFLMA	0.179	329

335	HRFDFLXA	0.178	330
336	WLWDFLXA	0.177	331
337	INLKFLXA	0.176	332
338	FLBHFLMA	0.175	333
339	SNDSFLXA	0.173	334
340	SNSPFLXA	0.173	335
341	BBPKFLXA	0.169	336
342	MYCYFLXA	0.169	337
343	MNDRFLLW	0.168	338
344	DNLNFLWM	0.162	339
345	WWSPFLSH	0.161	340
346	ASTRFLXA	0.159	341
347	MRHNFLXA	0.158	342
348	OCALFLXJ	0.155	343
349	GENVFLMA	0.155	344
350	DBRYFLDL	0.154	345
351	BNNLFLMA	0.154	346
352	JAY_FLMA	0.151	347
353	JCBHFLAB	0.151	348
354	ORCYFLXC	0.149	349
355	ALFRFLXA	0.148	350
356	ARCHFLMA	0.146	351
357	OKLWFLXA	0.146	352
358	MDBGFLPM	0.141	353
359	KYHGFLMA	0.139	354
360	MNSNFLMA	0.138	355
361	GNWDFLXA	0.137	356
362	TLCHFLXA	0.136	357
363	LDLKFLXA	0.131	358
364	MICCFLBB	0.124	359
365	FRPTFLXA	0.122	360
366	NRPTFLXA	0.121	361
367	CDKYFLMA	0.121	362
368	CPHZFLXA	0.120	363
369	DYBHFLOS	0.119	364
370	OCNFFLXA	0.116	365
371	TLHSFLXG	0.116	366
372	SSPRFLXA	0.116	367
373	GCVLFLMA	0.114	368
374	CTDLFLXA	0.113	369
375	YNFNFLMA	0.110	370
376	PNCYFLCA	0.104	371
377	CHSWFLXA	0.104	372
378	OKHLFLMA	0.103	373
379	HAVNFLMA	0.095	374
380	LKWLFLXE	0.095	375
381	EVRGFLXA	0.087	376
382	HNCYFLXN	0.086	377
383	BRJTFLXA	0.079	378
384	DESTFLXA	0.070	379
385	ALTRFLXA	0.067	380
386	NWBYFLMA	0.066	381
387	TLHSFLXH	0.060	382
388	BRSNFLMA	0.054	383
389	BWLGFLXA	0.053	384
390	SYHSFLCC	0.051	385
391	HWTHFLMA	0.050	386
392	YULEFLMA	0.038	387
393	GNVLFLXA	0.036	388
394	GLDLFLXA	0.035	389
395	CFVLFLXA	0.034	390
396	MCNPFLMA	0.029	391
397	POINFLXA	0.028	392
398	FTGRFLMA	0.017	393
399	KGLKFLXA	0.017	394
400	BGPIFLMA	0.013	395
401	ZLSPFLXA	0.011	396
402	SGKYFLMA	0.009	397
403	RYHLFLXA	0.005	398
404	PANCFLXA	0.004	399
405	CSCYFLBA	0.000	400
406	OLTWFLLN	0.000	401
407	PMPKFLMA	0.000	402
408	VERNFLMA	0.000	403
409	WELKFLMA	0.000	404
410	CHLKFLXA	0.000	405
411	LEE_FLXA	0.000	406
412	LWTYFLXA	0.000	407
413	PNLNFLXA	0.000	408
414	SPCPFLXA	0.000	409
415	STMKFLXA	0.000	410
416	WSTVFLXA	0.000	411
417	BCGRFLXA	0.000	412

from Combined Data tab in Section 7

Index	cll	total lines	
1	MIAMFLHL	157,037	29
2	ORLDFLPH	140,928	28
3	HLWDFLWH	123,975	27
4	WPBHFLGA	121,489	26
5	MLBRFLMA	120,856	25
6	MIAMFLCA	119,427	24
7	HLWDFLPE	113,121	23
8	FTLDFLMR	112,251	22
9	PRRNFLMA	112,119	21
10	ORLDFLAP	111,726	20
11	GSVLFLMA	111,024	19
12	PMBHFLMA	109,195	18
13	WPBHFLHH	105,514	17
14	PMBHFLFE	102,773	16
15	ORLDFLPC	100,942	15
16	ORLDFLMA	99,171	14
17	MIAMFLPL	96,854	13
18	BCRTFLMA	95,932	12
19	MIAMFLAE	95,775	11
20	FTLDFLOA	87,844	10
21	FTLDFLPL	87,802	9
22	FTLDFLJA	84,806	8
23	PMBHFLCS	81,618	7
24	MIAMFLSO	81,526	6
25	BYBHFLMA	81,273	5
26	MIAMFLRR	79,895	4
27	BRNDFLXA	79,512	3
28	CRWDFLXA	79,387	2
29	ALSPFLXA	78,533	1
30	MIAMFLGR	78,130	-
31	PNLSFLXA	76,442	1
32	JCVLFLSJ	76,016	2
33	WPBHFLGR	75,761	3
34	WNPKFLXA	75,498	4
35	JCVLFLCL	75,150	5
36	OCALFLXA	74,754	6
37	CLWRFLXA	74,732	7
38	NPLSFLXD	74,017	8
39	DRBHFLMA	73,600	9
40	FTPRFLMA	73,260	10
41	PNSCFLFP	73,181	11
42	CNSDFLXA	72,486	12
43	BCRTFLSA	72,118	13
44	STRTFLMA	70,947	14
45	SWTHFLXA	68,701	15
46	GLRDFLXA	68,238	16
47	WPBHFLRB	68,213	17
48	FTLDFLCY	67,867	18
49	BRBAFLXA	66,565	19
50	FTLDFLCR	66,537	20
51	NPRCFLXA	66,442	21
52	MIAMFLWD	66,210	22
53	HLWDFLMA	66,144	23
54	NGBHFLXA	65,883	24
55	DYBHFLPO	65,669	25
56	SPBGFLXA	65,528	26
57	DYBHFLMA	65,484	27
58	TAMPFLXE	65,358	28
59	COCOFLMA	65,342	29
60	PNCYFLMA	65,275	30
61	FTLDFLSU	65,223	31
62	WSSDFLXA	64,495	32
63	SRSTFLXA	64,380	33
64	PNSCFLBL	64,278	34
65	TLHSFLXD	64,106	35
66	MIAMFLBR	64,051	36
67	STGRFLXA	63,718	37
68	SNFRFLMA	63,461	38
69	MIAMFLSH	62,659	39
70	MIAMFLPB	62,333	40
71	JPTRFLMA	61,692	41
72	WPBHFLLE	61,485	42
73	NDADFLAC	60,961	43
74	SSDSFLXA	60,868	44
75	LKLDFLXA	60,499	45

76	EGLLFLBG	59,577	46
77	LKBRFLXA	59,418	47
78	LLMNFLXA	59,140	48
79	KSSMFLXA	59,071	49
80	VRBHFLMA	58,580	50
81	MIAMFLWM	58,124	51
82	WPBHFLRP	56,831	52
83	NDADFLBR	56,669	53
84	TRSPFLXA	56,176	54
85	BAYUFLXA	54,938	55
86	WPBHFLAN	54,805	56
87	DLBHFLMA	53,638	57
88	WLCRFLXA	53,629	58
89	LRGOFLXA	53,150	59
90	ORLDFLCL	52,378	60
91	ORLDFLSA	52,294	61
92	HDSNFLXA	52,048	62
93	MIAMFLOL	51,984	63
94	SLSPFLXA	51,846	64
95	BRTNFLXX	51,141	65
96	PSDNFLXA	51,127	66
97	MIAMFLAL	49,959	67
98	TLHSFLXA	49,879	68
99	FTMYFLXC	49,686	69
100	MNDRFLLO	49,467	70
101	DLBHFLKP	49,407	71
102	PMBHFLTA	49,305	72
103	TTVLFLMA	49,021	73
104	UNVRFLXA	48,846	74
105	JCVLFLNO	48,448	75
106	TMTRFLXA	48,230	76
107	NDADFLGG	48,121	77
108	MIAMFLNS	48,092	78
109	JCVLFLWC	47,544	79
110	JCVLFLRV	46,657	80
111	CYLKFLXA	46,650	81
112	LSBGFLXA	46,288	82
113	MIAMFLBA	46,170	83
114	APPKFLXA	46,146	84
115	MIAMFLIC	46,065	85
116	DYBHFLOB	45,650	86
117	NSBHFLMA	45,596	87
118	JCVLFLLF	45,409	88
119	WNHNFLXC	45,190	89
120	MIAMFLFL	44,734	90
121	NDADFLOL	44,268	91
122	PNSCFLWA	44,264	92
123	NNPLFLXA	44,212	93
124	WWSPFLSH	43,098	94
125	JCVLFLBW	42,825	95
126	NPLSFLXC	41,228	96
127	JCBHFLMA	41,136	97
128	SKWYFLXA	41,129	98
129	PTSLFLMA	41,093	99
130	HMSTFLHM	40,805	100
131	TAMPFLXX	40,499	101
132	JCVLFLAR	40,218	102
133	PTCYFLXA	40,031	103
134	TLHSFLXC	39,756	104
135	MIAMFLNM	39,706	105
136	SPRGFLXA	39,459	106
137	DELDFLMA	38,861	107
138	BCRTFLBT	38,855	108
139	HGLDFLXA	38,809	109
140	BHPKFLXA	38,276	110
141	CPCRFLXA	36,870	111
142	VENCFLXA	36,220	112
143	FTMYFLXA	35,615	113
144	INVRFLXA	35,532	114
145	JCVLFLSM	35,437	115
146	FHSDFLXA	35,437	116
147	FTWBFLXA	34,482	117
148	HYPKFLXA	34,247	118
149	CPCRFLXB	34,105	119
150	BKVLFLJF	33,973	120
151	KYWSFLMA	33,928	121
152	MIAMFLME	33,647	122
153	GNDYFLXA	33,517	123
154	DNDNFLXA	33,423	124
155	STAGFLMA	33,179	125
156	PLSLFLXA	33,119	126
157	ORPKFLMA	33,054	127
158	BNSPFLXA	33,024	128
159	COCOFLME	32,918	129
160	HLWDFLHA	32,443	130
161	TLHSFLXB	32,233	131

162	NRSDFLXA	32,075	132
163	WNGRFLXA	32,056	133
164	LKLDFLXN	31,383	134
165	SBNGFLXA	31,066	135
166	OCALFLXB	30,908	136
167	PNGRFLXA	30,397	137
168	FTWBFLXB	29,733	138
169	PCBHFLNT	29,309	139
170	TLHSFLXF	28,949	140
171	OVIDFLCA	28,499	141
172	SMNLFLXA	28,382	142
173	EGLLFLIH	27,470	143
174	ENWDFLXA	27,301	144
175	CSLBFLXA	27,216	145
176	SPBGFLXS	26,949	146
177	PLMTFLXA	26,755	147
178	GLGCFLXA	26,628	148
179	YBCTFLXA	25,995	149
180	JCVLFLFC	25,831	150
181	STCDFLXA	25,676	151
182	VENCFLXS	25,429	152
183	MLTNFLRA	25,385	153
184	CCBHFLMA	25,289	154
185	JCVLFLOW	25,169	155
186	INRKFLXX	25,098	156
187	LKCYFLMA	24,993	157
188	KSSMFLXB	24,806	158
189	OKCBFLXA	24,400	159
190	BLVWFLXA	24,195	160
191	MIAMFLBC	23,374	161
192	LKLDFLXE	23,308	162
193	GLBRFLMC	23,118	163
194	NFMYFLXA	23,030	164
195	VLPRFLXA	21,987	165
196	SGBEFLXA	21,928	166
197	FTMYFLXB	21,641	167
198	PLTKFLMA	21,248	168
199	NFMYFLXB	21,015	169
200	CRVWFLXA	20,923	170
201	MOISFLXA	20,758	171
202	LHACFLXA	20,523	172
203	ESTSFLXA	20,093	173
204	ABDLFLXA	19,829	174
205	ORPKFLRW	19,595	175
206	FRBHFLFP	19,513	176
207	CRRVFLXA	19,299	177
208	PLCSFLMA	19,275	178
209	PTSLFLSO	19,241	179
210	WWSPFLHI	19,105	180
211	ALFAFLXA	18,659	181
212	MTDRFLXA	18,606	182
213	DBRYFLDL	18,543	183
214	PNVDFLMA	18,543	184
215	LDLKFLXA	18,258	185
216	BARTFLXA	17,940	186
217	SNSPFLXA	17,891	187
218	FTLDFLWN	17,890	188
219	TVRSFLXA	17,802	189
220	NRPTFLXA	17,714	190
221	ORCYFLXC	17,614	191
222	OLDSFLXA	17,510	192
223	RSKNFLXA	17,139	193
224	LKWLFLXA	16,412	194
225	MRNNFLXA	16,209	195
226	IONAFLXA	16,114	196
227	SBSTFLMA	15,926	197
228	STAGFLSH	15,887	198
229	GSVLFLNW	15,567	199
230	ORCYFLXA	15,473	200
231	DDCYFLXA	15,469	201
232	CYGRFLXA	15,059	202
233	ARCDFLXA	15,011	203
234	MDBGFLPM	15,008	204
235	LUTZFLXA	14,941	205
236	AVPKFLXA	14,849	206
237	HNCYFLXA	14,766	207
238	LYHNFLOH	14,739	208
239	CLMTFLXA	14,415	209
240	PACEFLPV	14,282	210
241	LKPCFLXA	14,232	211
242	VRBHFLBE	14,117	212
243	KSSMFLXD	14,107	213
244	WIMMFLXA	14,064	214
245	BVHLFLXA	13,987	215
246	HTISFLMA	13,878	216
247	WLCHFLXA	13,664	217

248	BLGLFLMA	13,383	218
249	FTMBFLXA	13,357	219
250	SCPKFLXA	13,252	220
251	SEKYFLXA	13,240	221
252	HLNVFLMA	12,869	222
253	KYSTFLXA	12,605	223
254	JCBHFLAB	12,518	224
255	CYLKFLXB	12,502	225
256	DNLNFLWM	12,275	226
257	CLTNFLXA	12,035	227
258	MRTHFLVE	11,924	228
259	PNSCFLHC	11,805	229
260	SHLMFLXA	11,393	230
261	CNTMFLLE	11,276	231
262	HBSDFLMA	11,228	232
263	SNISFLXA	11,211	233
264	LKMRFLMA	10,949	234
265	HMSPFLXA	10,733	235
266	MNDRFLAV	10,689	236
267	CPHZFLXA	10,552	237
268	MIAMFLAP	10,517	238
269	GCSPFLCN	10,322	239
270	WLWDFLXA	10,191	240
271	LNLKFLXA	9,989	241
272	PNCYFLCA	9,954	242
273	MIAMFLKE	9,928	243
274	HMSTFLNA	9,913	244
275	STRKFLXA	9,889	245
276	UMTLFLXA	9,775	246
277	STAGFLBS	9,628	247
278	TLHSFLXH	9,543	248
279	DYBHFLOS	9,528	249
280	OCALFLXC	9,507	250
281	MLBYFLXA	9,362	251
282	DFSPFLXA	9,326	252
283	OSPRFLXA	8,855	253
284	SVSSFLXA	8,849	254
285	DBRYFLMA	8,832	255
286	BSHNFLXA	8,736	256
287	PNISFLXA	8,701	257
288	THNTFLXA	8,650	258
289	KYLRFLMA	8,629	259
290	KYLRFLLS	8,623	260
291	FTLDFLSG	8,607	261
292	MICCFLBB	8,572	262
293	MNLKFLXA	8,432	263
294	WCHLFLXA	8,385	264
295	WNDRFLXA	8,281	265
296	DESTFLXA	8,217	266
297	LGBKFLXA	8,183	267
298	LBLLFLXA	7,975	268
299	ANMRFLXA	7,585	269
300	BNFYFLXA	7,535	270
301	SNRSFLXA	7,489	271
302	EORNFLMA	7,103	272
303	SVSPFLXA	7,066	273
304	IMKLFLXA	7,031	274
305	MNTIFLXA	7,020	275
306	PNSCFLPB	6,922	276
307	JCVLFLJT	6,834	277
308	DUNDFLXA	6,744	278
309	KYHGFLMA	6,580	279
310	OCNFFLXA	6,431	280
311	WLSTFLXA	6,392	281
312	CHPLFLJA	6,373	282
313	SLHLFLXA	6,232	283
314	GVLDFLXA	5,886	284
315	JCBHFLSP	5,835	285
316	HAVNFLMA	5,800	286
317	CFLDFLMA	5,758	287
318	MDSNFLXA	5,606	288
319	MNDRFLLW	5,157	289
320	PNCRFLXA	5,119	290
321	FRSTFLXA	5,105	291
322	OCALFLXJ	5,041	292
323	TRENFLMA	4,887	293
324	BNNLFLMA	4,681	294
325	HWTHFLMA	4,639	295
326	LKWLFLXE	4,516	296
327	TLCHFLXA	4,507	297
328	PAHKFLMA	4,472	298
329	FLBHFLMA	4,312	299
330	CFVLFLXA	4,292	300
331	FTMDFLXA	4,276	301
332	MRDCFLXA	4,245	302
333	LKALFLXA	4,233	303

334	TLHSFLXG	4,144	304
335	SARKFLXA	4,080	305
336	CHSWFLXA	4,078	306
337	HNCYFLXN	4,074	307
338	BGPIFLMA	3,958	308
339	PKCYFLXA	3,927	309
340	FTWBFLXC	3,779	310
341	GCVLFLMA	3,677	311
342	YULEFLMA	3,560	312
343	JAY_FLMA	3,445	313
344	ISLMFLMA	3,429	314
345	ARCHFLMA	3,375	315
346	BBPKFLXA	3,354	316
347	MTLDFLTC	3,307	317
348	NWBYFLMA	3,242	318
349	DLSPFLMA	3,232	319
350	PRSNFLFD	3,076	320
351	OKLWFLXA	3,003	321
352	SGKYFLMA	2,979	322
353	YNFNFLMA	2,947	323
354	SNANFLXA	2,929	324
355	OKHLFLMA	2,714	325
356	DYBHFLFN	2,683	326
357	BAKRFLXA	2,664	327
358	ALVAFLXA	2,660	328
359	GENVFLMA	2,645	329
360	YNTWFLMA	2,639	330
361	BRSNFLMA	2,629	331
362	PRSHFLXA	2,590	332
363	OLTWFLLN	2,499	333
364	WELKFLMA	2,398	334
365	PMPKFLMA	2,353	335
366	MXVLFLMA	2,316	336
367	FRPTFLXA	2,297	337
368	BLDWFLMA	2,151	338
369	HOWYFLXA	2,094	339
370	ALTRFLXA	2,058	340
371	LKHLFLXA	2,036	341
372	ELFDFLXA	1,943	342
373	CSCYFLBA	1,936	343
374	SNDSFLXA	1,770	344
375	VERNFLMA	1,762	345
376	MCNPFLMA	1,747	346
377	POINFLXA	1,722	347
378	NKLRFLMA	1,651	348
379	MRHNFLXA	1,605	349
380	ALFRFLXA	1,580	350
381	GDRGFLXA	1,556	351
382	SBSTFLFE	1,549	352
383	SGBHFLXA	1,530	353
384	CHLKFLXA	1,474	354
385	ZLSPFLXA	1,411	355
386	MTVRFLXA	1,408	356
387	SSPRFLXA	1,399	357
388	GNWDFLXA	1,367	358
389	BWLGFLXA	1,325	359
390	ASTRFLXA	1,295	360
391	SYHSFLCC	1,268	361
392	MYCYFLXA	1,257	362
393	MALNFLXA	1,209	363
394	LWTYFLXA	1,177	364
395	INLKFLXA	1,158	365
396	CTDLFLXA	1,128	366
397	PANCFLXA	1,098	367
398	GNVLFLXA	1,060	368
399	CCBHFLAF	1,055	369
400	LEE_FLXA	926	370
401	JCVLFLIA	924	371
402	PNLNFLXA	907	372
403	RYHLFLXA	885	373
404	CDKYFLMA	777	374
405	EVRGFLXA	751	375
406	SPCPFLXA	725	376
407	BRJTFLXA	643	377
408	GLDLFLXA	607	378
409	MNSNFLMA	586	379
410	FTGRFLMA	517	380
411	KNVLFLXA	416	381
412	BCGRFLXA	406	382
413	STMKFLXA	380	383
414	HRFDFLXA	321	384
415	KGLKFLXA	242	385
416	WSTVFLXA	122	386
417	BYSHFLXA	34	387

5 Market Development

PMBHFLTA	8276	588

clli	V Coord	H Coord	Airline Distance
BCRTFLBT	8225	582	17
BCRTFLMA	8234	573	15
BCRTFLSA	8240	594	12
BLGLFLMA	8231	709	41
BYBHFLMA	8197	589	25
DLBHFLKP	8219	594	19
DLBHFLMA	8210	583	21
DRBHFLMA	8242	572	12
FTLDFLCR	8270	558	10
FTLDFLCY	8267	564	9
FTLDFLJA	8296	581	7
FTLDFLMR	8281	558	10
FTLDFLOA	8280	573	5
FTLDFLPL	8288	568	8
FTLDFLSG	8299	591	8
FTLDFLSU	8285	584	4
FTLDFLWN	8309	596	11
HLWDFLHA	8306	541	18
HLWDFLMA	8301	546	16
HLWDFLPE	8316	567	15
HLWDFLWH	8310	557	15
HMSTFLHM	8438	542	54
HMSTFLNA	8423	539	49
JPTRFLMA	8123	641	52
MIAMFLAE	8362	536	32
MIAMFLAL	8349	539	28
MIAMFLAP	8354	546	29
MIAMFLBA	8358	530	32
MIAMFLBC	8347	532	29
MIAMFLBR	8343	520	31
MIAMFLCA	8374	552	34
MIAMFLFL	8356	533	31
MIAMFLGR	8351	528	31
MIAMFLHL	8343	559	24
MIAMFLIC	8329	524	27
MIAMFLKE	8365	513	37
MIAMFLME	8350	534	29
MIAMFLNM	8327	537	23
MIAMFLNS	8343	543	26
MIAMFLOL	8333	550	22
MIAMFLPB	8352	548	28
MIAMFLPL	8361	557	29
MIAMFLRR	8372	537	35
MIAMFLSH	8337	536	26
MIAMFLSO	8386	547	38
MIAMFLWD	8394	558	39
MIAMFLWM	8364	545	31
NDADFLAC	8319	538	21
NDADFLBR	8326	555	19
NDADFLGG	8319	546	20
NDADFLOL	8313	540	20
PAHKFLMA	8203	723	49
PMBHFLCS	8267	591	3
PMBHFLFE	8254	565	11
PMBHFLMA	8264	580	5
PMBHFLTA	8276	588	0
PRRNFLMA	8397	536	42
WPBHFLAN	8162	608	37
WPBHFLGA	8185	608	30
WPBHFLGR	8142	629	45
WPBHFLHH	8171	618	35
WPBHFLLE	8179	598	31
WPBHFLRB	8147	618	42
WPBHFLRP	8185	632	32

MIAMFLGR 0

0

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MIAMFLGR	31	0	0	1	Y
MIAMFLBC	29	83	83	1	
MIAMFLME	29	82	82	1	
MIAMFLBA	32	60	60	1	
MIAMFLFL	31	70	70	1	
MIAMFLAL	28	72	72	2	
MIAMFLBR	31	41	41	1	
MIAMFLAE	32	18	18	1	
MIAMFLAP	29	104	104	1	
MIAMFLNS	26	84	84	2	
MIAMFLSH	26	63	63	2	
MIAMFLKE	37	158	158	1	
MIAMFLPB	28	29	29	1	
MIAMFLWM	31	32	32	1	
MIAMFLIC	27	120	120	1	
MIAMFLRR	35	31	31	2	
MIAMFLNM	23	87	87	1	
MIAMFLOL	22	76	76	2	
MIAMFLPL	29	20	20	1	
MIAMFLCA	34	95	95	2	
MIAMFLHL	24	43	43	2	
NDADFLAC	21	73	73	1	
NDADFLBR	19	86	86	2	
NDADFLGG	20	62	62	2	
MIAMFLSO	38	56	56	2	
NDADFLOL	20	63	63	1	
HLWDFLHA	18	112	112	1	
PRRNFLMA	42	79	79	2	
HLWDFLWH	15	52	52	2	
HLWDFLMA	16	52	52	1	
HLWDFLPE	15	92	92	2	
MIAMFLWD	39	116	116	1	
FTLDFLPL	8	41	41	2	
HMSTFLNA	49	222	222	3	
FTLDFLJA	7	76	76	2	
FTLDFLMR	10	20	20	1	
FTLDFLSG	8	168	168	1	
FTLDFLWN	11	169	169	2	
FTLDFLOA	5	50	50	1	
FTLDFLCR	10	33	33	1	
FTLDFLSU	4	93	93	1	
HMSTFLHM	54	178	178	3	
FTLDFLCY	9	17	17	1	
PMBHFLTA	0	130	130	1	
PMBHFLFE	11	37	37	2	
PMBHFLMA	5	50	50	2	
PMBHFLCS	3	75	75	2	
DRBHFLMA	12	52	52	2	
BCRTFLMA	15	24	24	1	
BCRTFLSA	12	114	114	2	
BCRTFLBT	17	52	52	1	
DLBHFLKP	19	145	145	2	
DLBHFLMA	21	73	73	2	
BYBHFLMA	25	97	97	2	
WPBHFLGA	30	97	97	2	
WPBHFLLE	31	91	91	2	
WPBHFLRP	32	144	144	3	
WPBHFLHH	35	42	42	2	
WPBHFLAN	37	32	32	1	
BLGLFLMA	41	214	214	2	
WPBHFLRB	42	43	43	2	
WPBHFLGR	45	72	72	2	
PAHKFLMA	49	270	270	2	
JPTRFLMA	52	106	106	2	

FTLDFLCY 17

17

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
FTLDFLCY	9	17	0	1	Y
FTLDFLCR	10	33	16	1	
FTLDFLMR	10	20	3	1	
FTLDFLOA	5	50	33	1	
PMBHFLFE	11	37	20	2	
PMBHFLMA	5	50	33	2	
FTLDFLPL	8	41	24	2	
FTLDFLSU	4	93	76	1	
PMBHFLTA	0	130	113	1	
PMBHFLCS	3	75	58	2	
DRBHFLMA	12	52	35	2	
FTLDFLJA	7	76	59	2	
BCRTFLMA	15	24	7	1	
HLWDFLMA	16	52	35	1	
BCRTFLSA	12	114	97	2	
HLWDFLWH	15	52	35	2	
FTLDFLSG	8	168	151	1	
HLWDFLHA	18	112	95	1	
BCRTFLBT	17	52	35	1	
HLWDFLPE	15	92	75	2	
NDADFLOL	20	63	46	1	
FTLDFLWN	11	169	152	2	
NDADFLGG	20	62	45	2	
DLBHFLKP	19	145	128	2	
NDADFLAC	21	73	56	1	
NDADFLBR	19	86	69	2	
DLBHFLMA	21	73	56	2	
MIAMFLNM	23	87	70	1	
MIAMFLOL	22	76	59	2	
MIAMFLSH	26	63	46	2	
MIAMFLIC	27	120	103	1	
BYBHFLMA	25	97	80	2	
MIAMFLNS	26	84	67	2	
MIAMFLHL	24	43	26	2	
MIAMFLBC	29	83	66	1	
MIAMFLME	29	82	65	1	
MIAMFLAL	28	72	55	2	
MIAMFLBR	31	41	24	1	
MIAMFLPB	28	29	12	1	
MIAMFLAP	29	104	87	1	
MIAMFLFL	31	70	53	1	
MIAMFLPL	29	20	3	1	
WPBHFLGA	30	97	80	2	
WPBHFLLE	31	91	74	2	
MIAMFLBA	32	60	43	1	
MIAMFLAE	32	18	1	1	
MIAMFLWM	31	32	15	1	
WPBHFLRP	32	144	127	3	
MIAMFLKE	37	158	141	1	
MIAMFLRR	35	31	14	2	
MIAMFLCA	34	95	78	2	
WPBHFLHH	35	42	25	2	
WPBHFLAN	37	32	15	1	
MIAMFLSO	38	56	39	2	
MIAMFLWD	39	116	99	1	
WPBHFLRB	42	43	26	2	
PRRNFLMA	42	79	62	2	
WPBHFLGR	45	72	55	2	
BLGLFLMA	41	214	197	2	
HMSTFLNA	49	222	205	3	
JPTRFLMA	52	106	89	2	
HMSTFLHM	54	178	161	3	
PAHKFLMA	49	270	253	2	

MIAMFLAE 17.75

18

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MIAMFLAE	32	18	0	1	Y
MIAMFLFL	31	70	53	1	
MIAMFLBA	32	60	42	1	
MIAMFLWM	31	32	14	1	
MIAMFLME	29	82	64	1	
MIAMFLRR	35	31	13	2	
MIAMFLBC	29	83	65	1	
MIAMFLAL	28	72	54	2	
MIAMFLPB	28	29	11	1	
MIAMFLAP	29	104	87	1	
MIAMFLNS	26	84	66	2	
MIAMFLPL	29	20	2	1	
MIAMFLCA	34	95	77	2	
MIAMFLSH	26	63	46	2	
MIAMFLBR	31	41	23	1	
MIAMFLKE	37	158	140	1	
MIAMFLSO	38	56	38	2	
MIAMFLHL	24	43	25	2	
MIAMFLOL	22	76	58	2	
MIAMFLNM	23	87	69	1	
MIAMFLIC	27	120	102	1	
PRRNFLMA	42	79	62	2	
NDADFLBR	19	86	68	2	
MIAMFLWD	39	116	99	1	
NDADFLGG	20	62	44	2	
NDADFLAC	21	73	55	1	
NDADFLOL	20	63	45	1	
HLWDFLWH	15	52	34	2	
HLWDFLHA	18	112	94	1	
HLWDFLPE	15	92	74	2	
HLWDFLMA	16	52	34	1	
HMSTFLNA	49	222	205	3	
HMSTFLHM	54	178	161	3	
FTLDFLPL	8	41	24	2	
FTLDFLJA	7	76	58	2	
FTLDFLWN	11	169	151	2	
FTLDFLMR	10	20	2	1	
FTLDFLSG	8	168	151	1	
FTLDFLOA	5	50	32	1	
FTLDFLSU	4	93	75	1	
FTLDFLCR	10	33	16	1	
PMBHFLTA	0	130	113	1	
PMBHFLMA	5	50	32	2	
PMBHFLCS	3	75	57	2	
PMBHFLFE	11	37	19	2	
DRBHFLMA	12	52	34	2	
BCRTFLMA	15	24	6	1	
BCRTFLSA	12	114	96	2	
BCRTFLBT	17	52	34	1	
DLBHFLKP	19	145	128	2	
DLBHFLMA	21	73	55	2	
BYBHFLMA	25	97	80	2	
WPBHFLGA	30	97	80	2	
WPBHFLLE	31	91	73	2	
WPBHFLRP	32	144	126	3	
WPBHFLHH	35	42	25	2	
WPBHFLAN	37	32	14	1	
BLGLFLMA	41	214	197	2	
WPBHFLRB	42	43	25	2	
WPBHFLGR	45	72	54	2	
PAHKFLMA	49	270	252	2	
JPTRFLMA	52	106	88	2	

FTLDFLMR 20

20

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
FTLDFLMR	10	20	0	1	Y
FTLDFLPL	8	41	21	2	Y
FTLDFLCR	10	33	13	1	Y
FTLDFLOA	5	50	30	1	
HLWDFLMA	16	52	32	1	
FTLDFLJA	7	76	56	2	
FTLDFLSU	4	93	73	1	
PMBHFLMA	5	50	30	2	
PMBHFLFE	11	37	17	2	
HLWDFLWH	15	52	32	2	
HLWDFLHA	18	112	92	1	
PMBHFLTA	0	130	110	1	
NDADFLOL	20	63	43	1	
HLWDFLPE	15	92	72	2	
FTLDFLSG	8	168	148	1	
PMBHFLCS	3	75	55	2	
NDADFLGG	20	62	42	2	
NDADFLAC	21	73	53	1	
DRBHFLMA	12	52	32	2	
NDADFLBR	19	86	66	2	
FTLDFLWN	11	169	149	2	
MIAMFLNM	23	87	67	1	
BCRTFLMA	15	24	4	1	
MIAMFLOL	22	76	56	2	
BCRTFLSA	12	114	94	2	
MIAMFLIC	27	120	100	1	
MIAMFLSH	26	63	43	2	
MIAMFLHL	24	43	23	2	
BCRTFLBT	17	52	32	1	
MIAMFLNS	26	84	64	2	
MIAMFLBC	29	83	63	1	
MIAMFLAL	28	72	52	2	
MIAMFLPB	28	29	9	1	
MIAMFLBR	31	41	21	1	
DLBHFLKP	19	145	125	2	
MIAMFLME	29	82	62	1	
MIAMFLAP	29	104	84	1	
DLBHFLMA	21	73	53	2	
MIAMFLFL	31	70	50	1	
MIAMFLBA	32	60	40	1	
MIAMFLPL	29	20	-1	1	
MIAMFLWM	31	32	12	1	
BYBHFLMA	25	97	77	2	
MIAMFLRR	35	31	11	2	
MIAMFLCA	34	95	75	2	
MIAMFLKE	37	158	138	1	
MIAMFLSO	38	56	36	2	
WPBHFLGA	30	97	77	2	
WPBHFLLE	31	91	71	2	
MIAMFLWD	39	116	96	1	
PRRNFLMA	42	79	59	2	
WPBHFLRP	32	144	124	3	
WPBHFLHH	35	42	22	2	
WPBHFLAN	37	32	12	1	
HMSTFLNA	49	222	202	3	
WPBHFLRB	42	43	23	2	
HMSTFLHM	54	178	158	3	
WPBHFLGR	45	72	52	2	
BLGLFLMA	41	214	194	2	
JPTRFLMA	52	106	86	2	
PAHKFLMA	49	270	250	2	

MIAMFLPL 19.5

20

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MIAMFLPL	29	20	0	1	Y
MIAMFLWM	31	32	12	1	Y
MIAMFLPB	28	29	9	1	Y
MIAMFLAP	29	104	85	1	
MIAMFLCA	34	95	75	2	
MIAMFLHL	24	43	23	2	Y
MIAMFLAL	28	72	52	2	
MIAMFLNS	26	84	64	2	
MIAMFLFL	31	70	51	1	
MIAMFLRR	35	31	12	2	Y
MIAMFLME	29	82	62	1	
MIAMFLBA	32	60	41	1	
MIAMFLSO	38	56	36	2	
MIAMFLOL	22	76	57	2	
MIAMFLBC	29	83	64	1	
MIAMFLSH	26	63	44	2	
MIAMFLWD	39	116	97	1	
NDADFLBR	19	86	67	2	
MIAMFLNM	23	87	68	1	
NDADFLGG	20	62	43	2	
MIAMFLBR	31	41	21	1	
MIAMFLKE	37	158	139	1	
PRRNFLMA	42	79	60	2	
HLWDFLPE	15	92	73	2	
NDADFLAC	21	73	53	1	
MIAMFLIC	27	120	100	1	
HLWDFLWH	15	52	32	2	
NDADFLOL	20	63	43	1	
HLWDFLHA	18	112	92	1	
HLWDFLMA	16	52	32	1	
FTLDFLWN	11	169	149	2	
HMSTFLNA	49	222	203	3	
FTLDFLJA	7	76	56	2	
FTLDFLSG	8	168	149	1	
HMSTFLHM	54	178	159	3	
FTLDFLSU	4	93	73	1	
FTLDFLOA	5	50	31	1	
PMBHFLTA	0	130	111	1	
PMBHFLMA	5	50	30	2	
PMBHFLCS	3	75	55	2	
PMBHFLFE	11	37	17	2	
DRBHFLMA	12	52	33	2	
BCRTFLMA	15	24	4	1	
BCRTFLSA	12	114	95	2	
BCRTFLBT	17	52	32	1	
DLBHFLKP	19	145	126	2	
DLBHFLMA	21	73	53	2	
BYBHFLMA	25	97	78	2	
WPBHFLGA	30	97	78	2	
WPBHFLLE	31	91	71	2	
WPBHFLRP	32	144	124	3	
WPBHFLHH	35	42	23	2	
BLGLFLMA	41	214	195	2	
WPBHFLAN	37	32	12	1	
WPBHFLRB	42	43	24	2	
WPBHFLGR	45	72	53	2	
PAHKFLMA	49	270	250	2	
JPTRFLMA	52	106	86	2	

BCRTFLMA 23.5

24

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
BCRTFLMA	15	24	0	1	Y
DRBHFLMA	12	52	29	2	
BCRTFLBT	17	52	28	1	
PMBHFLFE	11	37	13	2	
BCRTFLSA	12	114	91	2	
DLBHFLKP	19	145	122	2	
DLBHFLMA	21	73	49	2	
PMBHFLMA	5	50	26	2	
PMBHFLCS	3	75	51	2	
BYBHFLMA	25	97	74	2	
FTLDFLOA	5	50	27	1	
PMBHFLTA	0	130	107	1	
FTLDFLSU	4	93	69	1	
FTLDFLJA	7	76	52	2	
WPBHFLGA	30	97	74	2	
WPBHFLLE	31	91	67	2	
FTLDFLSG	8	168	145	1	
HLWDFLMA	16	52	28	1	
HLWDFLWH	15	52	28	2	
HLWDFLHA	18	112	88	1	
FTLDFLWN	11	169	145	2	
WPBHFLRP	32	144	120	3	
WPBHFLHH	35	42	19	2	
HLWDFLPE	15	92	69	2	
WPBHFLAN	37	32	8	1	
NDADFLOL	20	63	39	1	
NDADFLGG	20	62	39	2	
NDADFLBR	19	86	63	2	
NDADFLAC	21	73	49	1	
WPBHFLRB	42	43	20	2	
MIAMFLNM	23	87	64	1	
MIAMFLOL	22	76	53	2	
MIAMFLIC	27	120	96	1	
MIAMFLSH	26	63	40	2	
WPBHFLGR	45	72	49	2	
MIAMFLNS	26	84	60	2	
MIAMFLAL	28	72	48	2	
MIAMFLAP	29	104	81	1	
MIAMFLME	29	82	58	1	
MIAMFLBC	29	83	60	1	
MIAMFLBR	31	41	17	1	
MIAMFLFL	31	70	47	1	
MIAMFLBA	32	60	37	1	
JPTRFLMA	52	106	82	2	
BLGLFLMA	41	214	191	2	
MIAMFLCA	34	95	71	2	
MIAMFLKE	37	158	135	1	
MIAMFLSO	38	56	32	2	
PAHKFLMA	49	270	246	2	
MIAMFLWD	39	116	93	1	
PRRNFLMA	42	79	56	2	
HMSTFLNA	49	222	199	3	
HMSTFLHM	54	178	155	3	

WPBHFLAN 31.5

32

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
WPBHFLAN	37	32	0	1	Y
WPBHFLHH	35	42	11	2	Y
WPBHFLRB	42	43	12	2	Y
WPBHFLLE	31	91	59	2	
WPBHFLGA	30	97	66	2	
WPBHFLGR	45	72	41	2	
WPBHFLRP	32	144	112	3	
BYBHFLMA	25	97	66	2	
JPTRFLMA	52	106	74	2	
DLBHFLMA	21	73	41	2	
DLBHFLKP	19	145	114	2	
BCRTFLBT	17	52	20	1	
BCRTFLSA	12	114	83	2	
DRBHFLMA	12	52	21	2	
PMBHFLFE	11	37	5	2	
PMBHFLMA	5	50	18	2	
PMBHFLCS	3	75	43	2	
PMBHFLTA	0	130	99	1	
FTLDFLOA	5	50	19	1	
BLGLFLMA	41	214	183	2	
PAHKFLMA	49	270	238	2	
FTLDFLSU	4	93	61	1	
FTLDFLJA	7	76	44	2	
FTLDFLSG	8	168	137	1	
FTLDFLWN	11	169	137	2	
HLWDFLMA	16	52	20	1	
HLWDFLWH	15	52	20	2	
HLWDFLHA	18	112	80	1	
HLWDFLPE	15	92	61	2	
NDADFLOL	20	63	31	1	
NDADFLGG	20	62	31	2	
NDADFLBR	19	86	55	2	
NDADFLAC	21	73	41	1	
MIAMFLNM	23	87	56	1	
MIAMFLOL	22	76	45	2	
MIAMFLIC	27	120	88	1	
MIAMFLSH	26	63	32	2	
MIAMFLNS	26	84	52	2	
MIAMFLAL	28	72	40	2	
MIAMFLAP	29	104	73	1	
MIAMFLME	29	82	50	1	
MIAMFLBC	29	83	52	1	
MIAMFLBR	31	41	9	1	
MIAMFLFL	31	70	39	1	
MIAMFLBA	32	60	29	1	
MIAMFLCA	34	95	63	2	
MIAMFLKE	37	158	127	1	
MIAMFLSO	38	56	24	2	
MIAMFLWD	39	116	85	1	
PRRNFLMA	42	79	48	2	
HMSTFLNA	49	222	191	3	
HMSTFLHM	54	178	147	3	

PMBHFLFE 36.75

37

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
PMBHFLFE	11	37	0	2	Y
DRBHFLMA	12	52	15	2	Y
PMBHFLMA	5	50	13	2	Y
FTLDFLOA	5	50	13	1	Y
PMBHFLCS	3	75	38	2	
BCRTFLBT	17	52	15	1	
BCRTFLSA	12	114	77	2	
PMBHFLTA	0	130	94	1	
FTLDFLSU	4	93	56	1	
DLBHFLKP	19	145	109	2	
FTLDFLJA	7	76	39	2	
DLBHFLMA	21	73	36	2	
FTLDFLSG	8	168	132	1	
HLWDFLMA	16	52	15	1	
HLWDFLWH	15	52	15	2	
HLWDFLHA	18	112	75	1	
BYBHFLMA	25	97	61	2	
FTLDFLWN	11	169	132	2	
HLWDFLPE	15	92	55	2	
NDADFLOL	20	63	26	1	
NDADFLGG	20	62	25	2	
NDADFLBR	19	86	49	2	
NDADFLAC	21	73	36	1	
MIAMFLNM	23	87	50	1	
WPBHFLLE	31	91	54	2	
WPBHFLGA	30	97	61	2	
MIAMFLOL	22	76	39	2	
MIAMFLIC	27	120	83	1	
MIAMFLSH	26	63	27	2	
MIAMFLNS	26	84	47	2	
WPBHFLRP	32	144	107	3	
MIAMFLAL	28	72	35	2	
MIAMFLME	29	82	45	1	
MIAMFLBC	29	83	46	1	
MIAMFLBR	31	41	4	1	
MIAMFLAP	29	104	68	1	
MIAMFLFL	31	70	34	1	
MIAMFLBA	32	60	23	1	
MIAMFLCA	34	95	58	2	
MIAMFLKE	37	158	121	1	
WPBHFLGR	45	72	35	2	
MIAMFLSO	38	56	19	2	
MIAMFLWD	39	116	80	1	
BLGLFLMA	41	214	178	2	
PRRNFLMA	42	79	43	2	
JPTRFLMA	52	106	69	2	
PAHKFLMA	49	270	233	2	
HMSTFLNA	49	222	186	3	
HMSTFLHM	54	178	142	3	

MIAMFLBR 40.75

41

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MIAMFLBR	31	41	0	1	Y
MIAMFLBC	29	83	42	1	
MIAMFLIC	27	120	79	1	
MIAMFLME	29	82	41	1	
MIAMFLSH	26	63	23	2	
MIAMFLFL	31	70	30	1	
MIAMFLBA	32	60	19	1	
MIAMFLAL	28	72	31	2	
MIAMFLNM	23	87	46	1	
MIAMFLNS	26	84	43	2	
MIAMFLKE	37	158	117	1	
MIAMFLAP	29	104	64	1	
NDADFLAC	21	73	32	1	
MIAMFLOL	22	76	35	2	
NDADFLOL	20	63	22	1	
NDADFLGG	20	62	21	2	
NDADFLBR	19	86	45	2	
HLWDFLHA	18	112	71	1	
MIAMFLCA	34	95	54	2	
HLWDFLMA	16	52	11	1	
HLWDFLWH	15	52	11	2	
MIAMFLSO	38	56	15	2	
HLWDFLPE	15	92	51	2	
PRRNFLMA	42	79	39	2	
MIAMFLWD	39	116	76	1	
FTLDFLJA	7	76	35	2	
FTLDFLSG	8	168	128	1	
FTLDFLWN	11	169	128	2	
HMSTFLNA	49	222	182	3	
FTLDFLSU	4	93	52	1	
PMBHFLTA	0	130	90	1	
HMSTFLHM	54	178	138	3	
PMBHFLCS	3	75	34	2	
BCRTFLSA	12	114	73	2	
BCRTFLBT	17	52	11	1	
DLBHFLKP	19	145	105	2	
DLBHFLMA	21	73	32	2	
BYBHFLMA	25	97	57	2	
WPBHFLLE	31	91	50	2	
WPBHFLGA	30	97	57	2	
WPBHFLRP	32	144	103	3	
BLGLFLMA	41	214	174	2	
WPBHFLGR	45	72	31	2	
PAHKFLMA	49	270	229	2	
JPTRFLMA	52	106	65	2	

HLWDFLWH 51.75

52

dli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
HLWDFLWH	15	52	0	2	Y
HLWDFLPE	15	92	40	2	
NDADFLGG	20	62	10	2	Y
HLWDFLMA	16	52	0	1	Y
NDADFLOL	20	63	11	1	Y
NDADFLBR	19	86	34	2	
HLWDFLHA	18	112	60	1	
NDADFLAC	21	73	21	1	
MIAMFLOL	22	76	24	2	
MIAMFLNM	23	87	35	1	
FTLDFLJA	7	76	24	2	
MIAMFLSH	26	63	12	2	
MIAMFLNS	26	84	32	2	
FTLDFLSG	8	168	117	1	
FTLDFLSU	4	93	41	1	
MIAMFLIC	27	120	68	1	
FTLDFLWN	11	169	117	2	
MIAMFLAL	28	72	20	2	
MIAMFLBC	29	83	31	1	
MIAMFLME	29	82	30	1	
MIAMFLAP	29	104	53	1	
PMBHFLTA	0	130	79	1	
MIAMFLFL	31	70	19	1	
MIAMFLBA	32	60	8	1	
PMBHFLCS	3	75	23	2	
MIAMFLCA	34	95	43	2	
MIAMFLKE	37	158	106	1	
MIAMFLSO	38	56	4	2	
BCRTFLSA	12	114	62	2	
MIAMFLWD	39	116	65	1	
PRRNFLMA	42	79	28	2	
BCRTFLBT	17	52	0	1	
DLBHFLKP	19	145	94	2	
DLBHFLMA	21	73	21	2	
HMSTFLNA	49	222	171	3	
BYBHFLMA	25	97	46	2	
HMSTFLHM	54	178	127	3	
WPBHFLGA	30	97	46	2	
WPBHFLLE	31	91	39	2	
WPBHFLRP	32	144	92	3	
BLGLFLMA	41	214	163	2	
WPBHFLGR	45	72	20	2	
PAHKFLMA	49	270	218	2	
JPTRFLMA	52	106	54	2	

BCRTFLBT 51.5

52

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
BCRTFLBT	17	52	0	1	Y
DLBHFLKP	19	145	94	2	
DLBHFLMA	21	73	21	2	Y
BCRTFLSA	12	114	63	2	
BYBHFLMA	25	97	46	2	
PMBHFLCS	3	75	23	2	
WPBHFLGA	30	97	46	2	
WPBHFLLE	31	91	39	2	
PMBHFLTA	0	130	79	1	
FTLDFLSU	4	93	41	1	
WPBHFLRP	32	144	92	3	
FTLDFLJA	7	76	24	2	
FTLDFLSG	8	168	117	1	
FTLDFLWN	11	169	117	2	
HLWDFLHA	18	112	60	1	
HLWDFLPE	15	92	41	2	
WPBHFLGR	45	72	21	2	
NDADFLAC	21	73	21	1	
NDADFLBR	19	86	35	2	
MIAMFLOL	22	76	25	2	
MIAMFLNM	23	87	36	1	
MIAMFLIC	27	120	68	1	
JPTRFLMA	52	106	54	2	
MIAMFLSH	26	63	12	2	
MIAMFLNS	26	84	32	2	
BLGLFLMA	41	214	163	2	
MIAMFLAL	28	72	20	2	
MIAMFLBC	29	83	32	1	
MIAMFLME	29	82	30	1	
MIAMFLAP	29	104	53	1	
MIAMFLFL	31	70	19	1	
MIAMFLBA	32	60	9	1	
PAHKFLMA	49	270	218	2	
MIAMFLCA	34	95	43	2	
MIAMFLKE	37	158	107	1	
MIAMFLSO	38	56	4	2	
MIAMFLWD	39	116	65	1	
PRRNFLMA	42	79	28	2	
HMSTFLNA	49	222	171	3	
HMSTFLHM	54	178	127	3	

MIAMFLSO 55.5

56

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MIAMFLSO	38	56	0	2	Y
MIAMFLCA	34	95	39	2	Y
MIAMFLWD	39	116	61	1	Y
PRRNFLMA	42	79	24	2	Y
MIAMFLAP	29	104	49	1	
MIAMFLFL	31	70	15	1	
MIAMFLBA	32	60	5	1	
MIAMFLAL	28	72	16	2	
HMSTFLNA	49	222	167	3	
MIAMFLME	29	82	26	1	
MIAMFLKE	37	158	103	1	
MIAMFLNS	26	84	28	2	
MIAMFLBC	29	83	28	1	
MIAMFLSH	26	63	8	2	
MIAMFLOL	22	76	21	2	
HMSTFLHM	54	178	123	3	
MIAMFLNM	23	87	32	1	
NDADFLBR	19	86	31	2	
MIAMFLIC	27	120	64	1	
NDADFLAC	21	73	17	1	
HLWDFLPE	15	92	37	2	
HLWDFLHA	18	112	56	1	
FTLDFLWN	11	169	113	2	
FTLDFLJA	7	76	20	2	
FTLDFLSG	8	168	113	1	
FTLDFLSU	4	93	37	1	
PMBHFLTA	0	130	75	1	
PMBHFLCS	3	75	19	2	
BCRTFLSA	12	114	59	2	
DLBHFLKP	19	145	90	2	
BYBHFLMA	25	97	42	2	
WPBHFLGA	30	97	42	2	
WPBHFLLE	31	91	35	2	
WPBHFLRP	32	144	88	3	
BLGLFLMA	41	214	159	2	
PAHKFLMA	49	270	214	2	
WPBHFLGR	45	72	17	2	
JPTRFLMA	52	106	50	2	

MIAMFLBA 60

60

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MIAMFLBA	32	60	0	1	Y
MIAMFLFL	31	70	10	1	Y
MIAMFLME	29	82	22	1	Y
MIAMFLBC	29	83	23	1	Y
MIAMFLAL	28	72	12	2	Y
MIAMFLAP	29	104	44	1	Y
MIAMFLKE	37	158	98	1	Y
MIAMFLNS	26	84	24	2	Y
MIAMFLSH	26	63	3	2	Y
MIAMFLIC	27	120	60	1	Y
MIAMFLOL	22	76	16	2	Y
MIAMFLNM	23	87	27	1	Y
NDADFLBR	19	86	26	2	Y
NDADFLAC	21	73	13	1	Y
HLWDFLHA	18	112	52	1	
HLWDFLPE	15	92	32	2	
HMSTFLNA	49	222	162	3	
HMSTFLHM	54	178	118	3	
FTLDFLWN	11	169	109	2	
FTLDFLJA	7	76	16	2	
FTLDFLSG	8	168	108	1	
FTLDFLSU	4	93	33	1	
PMBHFLTA	0	130	70	1	
PMBHFLCS	3	75	15	2	
BCRTFLSA	12	114	54	2	
DLBHFLKP	19	145	85	2	
BYBHFLMA	25	97	37	2	
WPBHFLGA	30	97	37	2	
WPBHFLLE	31	91	31	2	
WPBHFLRP	32	144	84	3	
BLGLFLMA	41	214	154	2	
WPBHFLGR	45	72	12	2	
PAHKFLMA	49	270	210	2	
JPTRFLMA	52	106	46	2	

WPBHFLGR 72

72

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
WPBHFLGR	45	72	0	2	Y
JPTRFLMA	52	106	34	2	
WPBHFLRP	32	144	72	3	
WPBHFLGA	30	97	25	2	
WPBHFLLE	31	91	19	2	
BYBHFLMA	25	97	25	2	
DLBHFLKP	19	145	73	2	
BCRTFLSA	12	114	42	2	
PAHKFLMA	49	270	198	2	
BLGLFLMA	41	214	142	2	
PMBHFLCS	3	75	3	2	
PMBHFLTA	0	130	58	1	
FTLDFLSU	4	93	21	1	
FTLDFLJA	7	76	4	2	
FTLDFLSG	8	168	96	1	
FTLDFLWN	11	169	97	2	
HLWDFLHA	18	112	40	1	
HLWDFLPE	15	92	20	2	
HMSTFLNA	49	222	150	3	
HMSTFLHM	54	178	106	3	

FTLDFLJA 75.75

75

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
FTLDFLJA	7	76	0	2	Y
FTLDFLSU	4	93	17	1	Y
FTLDFLSG	8	168	93	1	
PMBHFLTA	0	130	55	1	
FTLDFLWN	11	169	93	2	
HLWDFLPE	15	92	16	2	Y
PMBHFLCS	3	75	-1	2	
HLWDFLHA	18	112	36	1	
BCRTFLSA	12	114	38	2	
DLBHFLKP	19	145	70	2	
BYBHFLMA	25	97	22	2	
WPBHFLGA	30	97	22	2	
WPBHFLLE	31	91	15	2	
WPBHFLRP	32	144	68	3	
HMSTFLNA	49	222	147	3	
BLGLFLMA	41	214	139	2	
HMSTFLHM	54	178	103	3	
PAHKFLMA	49	270	194	2	
JPTRFLMA	52	106	30	2	

PMBHFLCS 74.75

75

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
PMBHFLCS	3	75	0	2	Y
PMBHFLTA	0	130	56	1	
BCRTFLSA	12	114	39	2	
FTLDFLSG	8	168	94	1	
FTLDFLWN	11	169	94	2	
DLBHFLKP	19	145	71	2	
HLWDFLHA	18	112	37	1	
BYBHFLMA	25	97	23	2	
WPBHFLGA	30	97	23	2	
WPBHFLLE	31	91	16	2	
WPBHFLRP	32	144	69	3	
BLGLFLMA	41	214	140	2	
PAHKFLMA	49	270	195	2	
JPTRFLMA	52	106	31	2	
HMSTFLNA	49	222	148	3	
HMSTFLHM	54	178	104	3	

WPBHFLGA 97.25

91

CBI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
WPBHFLGA	30	97	0	2	Y
WPBHFLLE	31	91	-7	2	Y
BYBHFLMA	25	97	0	2	Y
WPBHFLRP	32	144	47	3	
DLBHFLKP	19	145	48	2	
BCRTFLSA	12	114	17	2	
JPTRFLMA	52	106	8	2	
PMBHFLTA	0	130	33	1	
BLGLFLMA	41	214	117	2	
FTLDFLSG	8	168	71	1	
PAHKFLMA	49	270	173	2	
FTLDFLWN	11	169	71	2	
HLWDFLHA	18	112	14	1	
HMSTFLNA	49	222	125	3	
HMSTFLHM	54	178	81	3	

JPTRFLMA 105.5

106

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JPTRFLMA	52	106	0	2	Y
WPBHFLRP	32	144	38	3	Y
DLBHFLKP	19	145	40	2	Y
PAHKFLMA	49	270	164	2	
BCRTFLSA	12	114	9	2	Y
BLGLFLMA	41	214	109	2	
PMBHFLTA	0	130	25	1	
FTLDFLSG	8	168	63	1	
FTLDFLWN	11	169	63	2	
HLWDFLHA	18	112	6	1	
HMSTFLNA	49	222	117	3	
HMSTFLHM	54	178	73	3	

HLWDFLHA 111.5

112

cli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
HLWDFLHA	18	112	0	1	Y
FTLDFLSG	8	168	57	1	
PMBHFLTA	0	130	19	1	
FTLDFLWN	11	169	57	2	
HMSTFLNA	49	222	111	3	
HMSTFLHM	54	178	67	3	
BLGLFLMA	41	214	103	2	
PAHKFLMA	49	270	158	2	

PMBHFLTA 130.25

130

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
PMBHFLTA	0	130	0	1	Y
FTLDFLSG	8	168	38	1	Y
FTLDFLWN	11	169	38	2	Y
BLGLFLMA	41	214	84	2	Y
HMSTFLNA	49	222	92	3	
PAHKFLMA	49	270	140	2	Y
HMSTFLHM	54	178	48	3	

PMBHFLTA 130.25

178

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
HMSTFLNA	49	222	92	3	Y
HMSTFLHM	54	178	48	3	Y

ORPKFLRW	7692	1271

CLLI	V Coord	H Coord	Airline Distance
BLDWFLMA	7684	1324	17
FRBHFLFP	7569	1278	39
FTGRFLMA	7614	1247	26
GCSPFLCN	7712	1242	12
JCBHFLAB	7628	1240	23
JCBHFLMA	7626	1230	25
JCBHFLSP	7635	1236	22
JCVLFLAR	7642	1261	17
JCVLFLBW	7642	1249	18
JCVLFLCL	7648	1276	15
JCVLFLFC	7634	1268	19
JCVLFLIA	7618	1292	25
JCVLFLJT	7656	1256	13
JCVLFLLF	7638	1286	18
JCVLFLNO	7661	1288	12
JCVLFLOW	7623	1285	23
JCVLFLRV	7658	1278	11
JCVLFLSJ	7658	1262	12
JCVLFLSM	7652	1272	13
JCVLFLWC	7672	1281	8
KYHGFLMA	7786	1276	30
MDBGFLPM	7716	1280	9
MNDRFLAV	7661	1245	13
MNDRFLLO	7673	1248	10
MNDRFLLW	7684	1246	9
MXVLFLMA	7706	1318	16
ORPKFLMA	7682	1264	4
ORPKFLRW	7692	1271	0
PNVDFLMA	7642	1218	24
STAGFLBS	7707	1153	38
STAGFLMA	7695	1171	32
STAGFLSH	7712	1163	35
YULEFLMA	7586	1295	35

JCVLFLCL 13.5

14

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JCVLFLCL	15	14	0	1	Y
JCVLFLSM	13	44	30	1	
JCVLFLRV	11	84	71	2	
JCVLFLLF	18	166	152	3	
JCVLFLAR	17	89	75	2	
JCVLFLFC	19	160	147	1	
JCVLFLNO	12	101	87	2	
JCVLFLSJ	12	26	13	2	
JCVLFLJT	13	119	106	1	
JCVLFLWC	8	156	143	2	
JCVLFLBW	18	116	102	2	
JCVLFLOW	23	175	161	3	
JCVLFLIA	25	232	219	2	
MNDRFLAV	13	100	87	2	
MNDRFLLO	10	110	97	2	
ORPKFLMA	4	131	118	2	
JCBHFLAB	23	253	239	2	
JCBHFLSP	22	234	220	1	
FTGRFLMA	26	349	336	3	
MNDRFLLW	9	304	290	3	
ORPKFLRW	0	195	182	2	
JCBHFLMA	25	112	98	2	
BLDWFLMA	17	316	302	3	
PNVDFLMA	24	205	192	2	
YULEFLMA	35	327	313	3	
MDBGFLPM	9	284	271	3	
GCSPFLCN	12	268	255	3	
MXVLFLMA	16	323	309	3	
FRBHFLFP	39	206	193	2	
STAGFLMA	32	136	122	3	
STAGFLSH	35	225	212	2	
KYHGFLMA	30	310	296	3	
STAGFLBS	38	246	232	2	

JCVLFLSJ 26.25

26

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JCVLFLSJ	12	26	0	2	Y
JCVLFLJT	13	119	93	1	
JCVLFLSM	13	44	18	1	Y
JCVLFLRV	11	84	58	2	
JCVLFLAR	17	89	62	2	
MNDRFLAV	13	100	74	2	
JCVLFLBW	18	116	90	2	
MNDRFLLO	10	110	84	2	
JCVLFLFC	19	160	134	1	
JCVLFLWC	8	156	130	2	
ORPKFLMA	4	131	105	2	
JCVLFLNO	12	101	75	2	
JCVLFLLF	18	166	140	3	
MNDRFLLW	9	304	278	3	
JCBHFLSP	22	234	208	1	
JCBHFLAB	23	253	227	2	
ORPKFLRW	0	195	169	2	
JCVLFLOW	23	175	148	3	
FTGRFLMA	26	349	323	3	
JCBHFLMA	25	112	85	2	
PNVDFLMA	24	205	179	2	
JCVLFLIA	25	232	206	2	
GCSPFLCN	12	268	242	3	
MDBGFLPM	9	284	258	3	
BLDWFLMA	17	316	289	3	
MXVLFLMA	16	323	296	3	
YULEFLMA	35	327	301	3	
FRBHFLFP	39	206	180	2	
STAGFLMA	32	136	109	3	
STAGFLSH	35	225	199	2	
STAGFLBS	38	246	219	2	
KYHGFLMA	30	310	283	3	

JCVLFLRV 84

84

cll	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JCVLFLRV	11	84	0	2	Y
JCVLFLNO	12	101	17	2	Y
JCVLFLWC	8	156	72	2	
JCVLFLJT	13	119	35	1	
JCVLFLLF	18	166	82	3	
JCVLFLAR	17	89	5	2	
JCVLFLFC	19	160	76	1	
ORPKFLMA	4	131	47	2	
MNDRFLAV	13	100	16	2	
JCVLFLBW	18	116	32	2	
MNDRFLLO	10	110	26	2	
ORPKFLRW	0	195	111	2	
JCVLFLOW	23	175	91	3	
MNDRFLLW	9	304	220	3	
JCVLFLIA	25	232	148	2	
JCBHFLSP	22	234	150	1	
JCBHFLAB	23	253	169	2	
BLDWFLMA	17	316	232	3	
FTGRFLMA	26	349	265	3	
JCBHFLMA	25	112	28	2	
MDBGFLPM	9	284	200	3	
PNVDFLMA	24	205	121	2	
MXVLFLMA	16	323	239	3	
GCSPFLCN	12	268	184	3	
YULEFLMA	35	327	243	3	
FRBHFLFP	39	206	122	2	
STAGFLMA	32	136	52	3	
STAGFLSH	35	225	141	2	
KYHGFLMA	30	310	226	3	
STAGFLBS	38	246	162	2	

JCVLFLAR 88.5

89

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JCVLFLAR	17	89	0	2	Y
JCVLFLFC	19	160	72	1	
JCVLFLBW	18	116	27	2	Y
JCVLFLJT	13	119	31	1	Y
MNDRFLAV	13	100	12	2	Y
JCBHFLAB	23	253	164	2	
JCVLFLLF	18	166	77	3	
JCBHFLSP	22	234	145	1	
JCVLFLOW	23	175	86	3	
FTGRFLMA	26	349	261	3	
MNDRFLLO	10	110	22	2	
JCVLFLWC	8	156	68	2	
JCBHFLMA	25	112	23	2	
ORPKFLMA	4	131	43	2	
JCVLFLIA	25	232	144	2	
PNVDFLMA	24	205	117	2	
MNDRFLLW	9	304	215	3	
ORPKFLRW	0	195	107	2	
YULEFLMA	35	327	238	3	
GCSPFLCN	12	268	180	3	
BLDWFLMA	17	316	227	3	
FRBHFLFP	39	206	118	2	
MDBGFLPM	9	284	196	3	
MXVLFLMA	16	323	234	3	
STAGFLMA	32	136	47	3	
STAGFLSH	35	225	137	2	
STAGFLBS	38	246	157	2	
KYHGFLMA	30	310	221	3	

MNDRFLLO 110

110

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
MNDRFLLO	10	110	0	2	Y
MNDRFLLW	9	304	194	3	
ORPKFLMA	4	131	21	2	Y
ORPKFLRW	0	195	85	2	
JCVLFLWC	8	156	46	2	Y
JCBHFLSP	22	234	124	1	
GCSPFLCN	12	268	158	3	
JCVLFLFC	19	160	50	1	
PNVDFLMA	24	205	95	2	
JCBHFLAB	23	253	143	2	
JCBHFLMA	25	112	2	2	
JCVLFLLF	18	166	56	3	
MDBGFLPM	9	284	174	3	
FTGRFLMA	26	349	239	3	
JCVLFLOW	23	175	65	3	
JCVLFLIA	25	232	122	2	
BLDWFLMA	17	316	206	3	
MXVLFLMA	16	323	213	3	
STAGFLMA	32	136	26	3	
STAGFLSH	35	225	115	2	
YULEFLMA	35	327	217	3	
STAGFLBS	38	246	136	2	
FRBHFLFP	39	206	96	2	
KYHGFLMA	30	310	200	3	

JCBHFLMA 111.5

112

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JCBHFLMA	25	112	0	2	Y
JCBHFLSP	22	234	122	1	
JCBHFLAB	23	253	141	2	
PNVDFLMA	24	205	94	2	
FTGRFLMA	26	349	238	3	
JCVLFLFC	19	160	49	1	
JCVLFLOW	23	175	63	3	
JCVLFLLF	18	166	54	3	
MNDRFLLW	9	304	192	3	
JCVLFLIA	25	232	121	2	
FRBHFLFP	39	206	95	2	
ORPKFLRW	0	195	84	2	
YULEFLMA	35	327	215	3	
GCSPFLCN	12	268	157	3	
STAGFLMA	32	136	24	3	
MDBGFLPM	9	284	173	3	
BLDWFLMA	17	316	204	3	
STAGFLSH	35	225	114	2	
STAGFLBS	38	246	134	2	
MXVLFLMA	16	323	211	3	
KYHGFLMA	30	310	198	3	

STAGFLMA

135.5

136

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
STAGFLMA	32	136	0	3	Y
STAGFLSH	35	225	90	2	
STAGFLBS	38	246	110	2	
PNVDFLMA	24	205	70	2	
MNDRFLLW	9	304	168	3	
GCSPFLCN	12	268	133	3	
JCBHFLSP	22	234	98	1	
JCBHFLAB	23	253	117	2	
ORPKFLRW	0	195	60	2	
FTGRFLMA	26	349	214	3	
MDBGFLPM	9	284	149	3	
JCVLFLFC	19	160	25	1	
JCVLFLLF	18	166	30	3	
JCVLFLOW	23	175	39	3	
KYHGFLMA	30	310	174	3	
JCVLFLIA	25	232	97	2	
MXVLFLMA	16	323	187	3	
BLDWFLMA	17	316	180	3	
FRBHFLFP	39	206	71	2	
YULEFLMA	35	327	191	3	

JCVLFLFC 160.25

160

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
JCVLFLFC	19	160	0	1	Y
JCVLFLLF	18	166	6	3	Y
JCVLFLOW	23	175	14	3	Y
JCBHFLAB	23	253	93	2	Y
FTGRFLMA	26	349	189	3	Y
JCVLFLIA	25	232	72	2	Y
JCBHFLSP	22	234	74	1	Y
PNVDFLMA	24	205	45	2	
MNDRFLLW	9	304	144	3	
YULEFLMA	35	327	167	3	Y
ORPKFLRW	0	195	35	2	
FRBHFLFP	39	206	46	2	Y
BLDWFLMA	17	316	155	3	
GCSPFLCN	12	268	108	3	
MDBGFLPM	9	284	124	3	
MXVLFLMA	16	323	162	3	
STAGFLSH	35	225	65	2	
STAGFLBS	38	246	85	2	
KYHGFLMA	30	310	149	3	

ORPKFLRW 195

195

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
ORPKFLRW	0	195	0	2	Y
MNDRFLLW	9	304	109	3	Y
MDBGFLPM	9	284	89	3	Y
GCSPFLCN	12	268	73	3	Y
MXVLFLMA	16	323	128	3	Y
BLDWFLMA	17	316	121	3	Y
PNVDFLMA	24	205	10	2	
KYHGFLMA	30	310	115	3	Y
STAGFLSH	35	225	30	2	
STAGFLBS	38	246	51	2	

ORPKFLRW 195

205

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
PNVDFLMA	24	205	10	2	Y
STAGFLSH	35	225	30	2	
STAGFLBS	38	246	51	2	

ORPKFLRW 195

225

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
STAGFLSH	35	225	30	2	Y
STAGFLBS	38	246	51	2	Y

HDSNFLXA 8118 1231

clli	V Coord	H Coord	Airline Distance
WWSPFLHI	8077	1228	13
WWSPFLSH	8090	1223	10
ALFAFLXA	8183	1122	41
BAYUFLXA	8220	1180	37
BHPKFLXA	8180	1157	31
BRNDFLXA	8157	1116	39
BYSHFLXA	8194	1140	38
CLWRFLXA	8202	1203	28
CNSDFLXA	8191	1196	26
CRWDFLXA	8151	1169	23
DNDNFLXA	8191	1210	25
FHSDFLXA	8205	1178	33
GNDYFLXA	8209	1169	35
HDSNFLXA	8118	1231	0
HYPKFLXA	8175	1148	32
INRKFLXX	8223	1203	35
KYSTFLXA	8154	1185	19
LLMNFLXA	8217	1167	38
LNLKFLXA	8116	1183	16
LRGOFLXA	8213	1201	32
LUTZFLXA	8134	1169	21
MNLKFLXA	8114	1213	6
NGBHFLXA	8226	1191	37
NPRCFLXA	8135	1225	6
OLDSFLXA	8175	1186	23
PNCRFLXA	8152	1085	48
PNLSFLXA	8206	1190	31
PSDNFLXA	8230	1169	41
PTCYFLXA	8128	1098	43
RSKNFLXA	8214	1118	47
SGBEFLXA	8241	1174	43
SKWYFLXA	8230	1165	42
SLSPFLXA	8159	1156	28
SMNLFLXA	8164	1152	29
SNSPFLXA	8144	1207	12
SPBGFLXA	8225	1159	41
SPBGFLXS	8238	1159	45
STGRFLXA	8178	1208	21
SWTHFLXA	8174	1170	27
TAMPFLXE	8160	1135	34
TAMPFLXX	8172	1147	32
THNTFLXA	8136	1132	32
TMTRFLXA	8150	1145	30
TRSPFLXA	8164	1216	16
UNVRFLXA	8150	1153	27
WIMMFLXA	8205	1101	50
WLCHFLXA	8110	1159	23
WLCRFLXA	8185	1148	34
WSSDFLXA	8175	1156	30
YBCTFLXA	8169	1145	32
DDCYFLXA	8068	1147	31
SNANFLXA	8080	1159	26
TLCHFLXA	8049	1157	32

WSSDFLXA 22.25

22

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
WSSDFLXA	30	22	0	1	Y
BHPKFLXA	31	43	21	1	
HYPKFLXA	32	66	44	1	
TAMPFLXX	32	48	25	1	
SMNLFLXA	29	141	119	2	
YBCTFLXA	32	97	75	2	
SWTHFLXA	27	46	24	1	
WLCRFLXA	34	133	110	1	
SLSPFLXA	28	90	68	1	
BYSHFLXA	38	291	269	1	
UNVRFLXA	27	83	61	1	
CRWDFLXA	23	83	61	1	
TAMPFLXE	34	50	28	2	
TMTRFLXA	30	118	96	1	
OLDSFLXA	23	153	131	1	
ALFAFLXA	41	233	211	2	
FHSDFLXA	33	77	55	1	
GNDYFLXA	35	117	95	1	
KYSTFLXA	19	266	244	2	
BRNDFLXA	39	111	89	2	
CNSDFLXA	26	61	39	1	
LLMNFLXA	38	119	96	1	
LUTZFLXA	21	224	202	2	
PNLSFLXA	31	40	18	1	
THNTFLXA	32	262	239	3	
SPBGFLXA	41	46	24	1	
BAYUFLXA	37	84	62	1	
STGRFLXA	21	109	86	1	
CLWRFLXA	28	34	11	1	
DNDNFLXA	25	168	146	1	
PSDNFLXA	41	92	70	1	
RSKNFLXA	47	233	211	3	
SKWYFLXA	42	108	86	2	
LRGOFLXA	32	114	92	1	
SNSPFLXA	12	228	206	1	
NGBHFLXA	37	110	88	1	
SPBGFLXS	45	199	177	1	
TRSPFLXA	16	148	126	2	
WIMMFLXA	50	271	249	3	
LNLKFLXA	16	252	230	3	
WLCHFLXA	23	240	217	2	
INRKFLXX	35	200	178	1	
SGBEFLXA	43	148	126	1	
PNCRFLXA	48	301	279	3	
PTCYFLXA	43	179	157	3	
NPRCFLXA	6	134	111	2	
MNLKFLXA	6	285	263	2	
HDSNFLXA	0	171	149	2	
SNANFLXA	26	300	278	0	
DDCYFLXA	31	199	177	0	
WWSPFLSH	10	217	195	2	
WWSPFLHI	13	249	227	3	
TLCHFLXA	32	305	283	0	

CLWRFLXA 33.5

34

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
CLWRFLXA	28	34	0	1	Y
LRGOFLXA	32	114	81	1	
CNSDFLXA	26	61	28	1	Y
PNLSFLXA	31	40	6	1	Y
DNDNFLXA	25	168	135	1	
INRKFLXX	35	200	166	1	
FHSDFLXA	33	77	43	1	
STGRFLXA	21	109	75	1	
NGBHFLXA	37	110	77	1	
BAYUFLXA	37	84	51	1	
OLDSFLXA	23	153	120	1	
GNDYFLXA	35	117	84	1	
LLMNFLXA	38	119	85	1	
TRSPFLXA	16	148	115	2	
SWTHFLXA	27	46	12	1	
PSDNFLXA	41	92	58	1	
SKWYFLXA	42	108	74	2	
SPBGFLXA	41	46	13	1	
SGBEFLXA	43	148	115	1	
BHPKFLXA	31	43	10	1	
KYSTFLXA	19	266	233	2	
SPBGFLXS	45	199	166	1	
WLCRFLXA	34	133	99	1	
SNSPFLXA	12	228	195	1	
HYPKFLXA	32	66	33	1	
CRWDFLXA	23	83	50	1	
TAMPFLXX	32	48	14	1	
SMNLFLXA	29	141	108	2	
SLSPFLXA	28	90	56	1	
BYSHFLXA	38	291	258	1	
YBCTFLXA	32	97	64	2	
UNVRFLXA	27	83	50	1	
NPRCFLXA	6	134	100	2	
TMTRFLXA	30	118	85	1	
LUTZFLXA	21	224	191	2	
TAMPFLXE	34	50	17	2	
ALFAFLXA	41	233	200	2	
RSKNFLXA	47	233	200	3	
LNLKFLXA	16	252	219	3	
HDSNFLXA	0	171	138	2	
MNLKFLXA	6	285	252	2	
BRNDFLXA	39	111	78	2	
THNTFLXA	32	262	228	3	
WIMMFLXA	50	271	237	3	
WLCHFLXA	23	240	206	2	
WWSPFLSH	10	217	183	2	
PNCRFLXA	48	301	267	3	
PTCYFLXA	43	179	145	3	
WWSPFLHI	13	249	215	3	
SNANFLXA	26	300	267	0	
DDCYFLXA	31	199	166	0	
TLCHFLXA	32	305	271	0	

BHPKFLXA 43.25

43

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
BHPKFLXA	31	43	0	1	Y
WLCRFLXA	34	133	89	1	
HYPKFLXA	32	66	23	1	Y
SWTHFLXA	27	46	3	1	Y
TAMPFLXX	32	48	4	1	Y
SMNLFLXA	29	141	98	2	
YBCTFLXA	32	97	54	2	
SLSPFLXA	28	90	47	1	
BYSHFLXA	38	291	248	1	
OLDSFLXA	23	153	110	1	
GNDYFLXA	35	117	74	1	
CRWDFLXA	23	83	40	1	
UNVRFLXA	27	83	40	1	
TAMPFLXE	34	50	7	2	
FHSDFLXA	33	77	34	1	
TMTRFLXA	30	118	75	1	
ALFAFLXA	41	233	190	2	
LLMNFLXA	38	119	75	1	
KYSTFLXA	19	266	223	2	
BAYUFLXA	37	84	41	1	
SPBGFLXA	41	46	3	1	
BRNDFLXA	39	111	68	2	
LUTZFLXA	21	224	181	2	
STGRFLXA	21	109	65	1	
PSDNFLXA	41	92	49	1	
SKWYFLXA	42	108	65	2	
RSKNFLXA	47	233	190	3	
THNTFLXA	32	262	218	3	
LRGOFLXA	32	114	71	1	
DNDNFLXA	25	168	125	1	
NGBHFLXA	37	110	67	1	
SPBGFLXS	45	199	156	1	
INRKFLXX	35	200	157	1	
TRSPFLXA	16	148	105	2	
SNSPFLXA	12	228	185	1	
WIMMFLXA	50	271	228	3	
SGBEFLXA	43	148	105	1	
LNLKFLXA	16	252	209	3	
WLCHFLXA	23	240	196	2	
PNCRFLXA	48	301	258	3	
PTCYFLXA	43	179	136	3	
NPRCFLXA	6	134	90	2	
MNLKFLXA	6	285	242	2	
HDSNFLXA	0	171	128	2	
SNANFLXA	26	300	257	0	
WWSPFLSH	10	217	174	2	
DDCYFLXA	31	199	156	0	
WWSPFLHI	13	249	206	3	
TLCHFLXA	32	305	262	0	

SPBGFLXA 46

46

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
SPBGFLXA	41	46	0	1	Y
SKWYFLXA	42	108	62	2	
LLMNFLXA	38	119	73	1	
PSDNFLXA	41	92	46	1	
SPBGFLXS	45	199	153	1	
GNDYFLXA	35	117	71	1	
BAYUFLXA	37	84	38	1	
SGBEFLXA	43	148	102	1	
FHSDFLXA	33	77	31	1	
NGBHFLXA	37	110	64	1	
BYSHFLXA	38	291	245	1	
WLCRFLXA	34	133	87	1	
RSKNFLXA	47	233	187	3	
LRGOFLXA	32	114	68	1	
INRKFLXX	35	200	154	1	
OLDSFLXA	23	153	107	1	
ALFAFLXA	41	233	187	2	
YBCTFLXA	32	97	51	2	
SMNLFLXA	29	141	95	2	
DNDNFLXA	25	168	122	1	
WIMMFLXA	50	271	225	3	
SLSPFLXA	28	90	44	1	
TAMPFLXE	34	50	4	2	
STGRFLXA	21	109	63	1	
CRWDFLXA	23	83	37	1	
UNVRFLXA	27	83	37	1	
KYSTFLXA	19	266	220	2	
TMTRFLXA	30	118	72	1	
BRNDFLXA	39	111	65	2	
TRSPFLXA	16	148	102	2	
LUTZFLXA	21	224	178	2	
THNTFLXA	32	262	216	3	
SNSPFLXA	12	228	182	1	
PNCRFLXA	48	301	255	3	
LNLKFLXA	16	252	206	3	
NPRCFLXA	6	134	88	2	
WLCHFLXA	23	240	194	2	
PTCYFLXA	43	179	133	3	
MNLKFLXA	6	285	239	2	
HDSNFLXA	0	171	125	2	
SNANFLXA	26	300	254	0	
WWSPFLSH	10	217	171	2	
DDCYFLXA	31	199	153	0	
WWSPFLHI	13	249	203	3	
TLCHFLXA	32	305	259	0	

TAMPFLXE 50

50

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
TAMPFLXE	34	50	0	2	Y
YBCTFLXA	32	97	47	2	Y
TMTRFLXA	30	118	68	1	
SMNLFLXA	29	141	91	2	
SLSPFLXA	28	90	40	1	
UNVRFLXA	27	83	33	1	
BRNDFLXA	39	111	61	2	
THNTFLXA	32	262	212	3	
WLCRFLXA	34	133	83	1	
ALFAFLXA	41	233	183	2	
BYSHFLXA	38	291	241	1	
CRWDFLXA	23	83	33	1	
LUTZFLXA	21	224	174	2	
KYSTFLXA	19	266	216	2	
PTCYFLXA	43	179	129	3	
OLDSFLXA	23	153	103	1	
PNCRFLXA	48	301	251	3	
RSKNFLXA	47	233	183	3	
WIMMFLXA	50	271	221	3	
WLCHFLXA	23	240	190	2	
GNDYFLXA	35	117	67	1	
FHSDFLXA	33	77	27	1	
LLMNFLXA	38	119	69	1	
LNLKFLXA	16	252	202	3	
BAYUFLXA	37	84	34	1	
STGRFLXA	21	109	59	1	
SNSPFLXA	12	228	178	1	
SKWYFLXA	42	108	58	2	
PSDNFLXA	41	92	42	1	
SPBGFLXS	45	199	149	1	
DNDNFLXA	25	168	118	1	
TRSPFLXA	16	148	98	2	
LRGOFLXA	32	114	64	1	
SNANFLXA	26	300	250	0	
NGBHFLXA	37	110	60	1	
SGBEFLXA	43	148	98	1	
MNLKFLXA	6	285	235	2	
INRKFLXX	35	200	150	1	
NPRCFLXA	6	134	84	2	
DDCYFLXA	31	199	149	0	
HDSNFLXA	0	171	121	2	
WWSPFLSH	10	217	167	2	
TLCHFLXA	32	305	255	0	
WWSPFLHI	13	249	199	3	

FHSDFLXA 76.75

77

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
FHSDFLXA	33	77	0	1	Y
GNDYFLXA	35	117	41	1	
BAYUFLXA	37	84	7	1	Y
LLMNFLXA	38	119	42	1	
LRGOFLXA	32	114	37	1	
NGBHFLXA	37	110	34	1	
SKWYFLXA	42	108	31	2	
PSDNFLXA	41	92	15	1	
OLDSFLXA	23	153	77	1	
INRKFLXX	35	200	123	1	
WLCRFLXA	34	133	56	1	
DNDNFLXA	25	168	91	1	
SGBEFLXA	43	148	72	1	
BYSHFLXA	38	291	215	1	
STGRFLXA	21	109	32	1	
SPBGFLXS	45	199	123	1	
SMNLFLXA	29	141	65	2	
SLSPFLXA	28	90	13	1	
KYSTFLXA	19	266	189	2	
CRWDFLXA	23	83	7	1	
TRSPFLXA	16	148	71	2	
UNVRFLXA	27	83	6	1	
ALFAFLXA	41	233	156	2	
RSKNFLXA	47	233	156	3	
TMTRFLXA	30	118	42	1	
SNSPFLXA	12	228	151	1	
LUTZFLXA	21	224	148	2	
BRNDFLXA	39	111	34	2	
WIMMFLXA	50	271	194	3	
THNTFLXA	32	262	185	3	
NPRCFLXA	6	134	57	2	
LNLKFLXA	16	252	176	3	
WLCHFLXA	23	240	163	2	
MNLKFLXA	6	285	209	2	
HDSNFLXA	0	171	95	2	
PNCRFLXA	48	301	224	3	
PTCYFLXA	43	179	102	3	
SNANFLXA	26	300	224	0	
WWSPFLSH	10	217	140	2	
WWSPFLHI	13	249	172	3	
DDCYFLXA	31	199	123	0	
TLCHFLXA	32	305	228	0	

CRWDFLXA 83.25

83

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
CRWDFLXA	23	83	0	1	Y
SLSPFLXA	28	90	7	1	Y
KYSTFLXA	19	266	183	2	
UNVRFLXA	27	83	0	1	Y
LUTZFLXA	21	224	141	2	
SMNLFLXA	29	141	58	2	Y
TMTRFLXA	30	118	35	1	Y
OLDSFLXA	23	153	70	1	
LNLKFLXA	16	252	169	3	
WLCRFLXA	34	133	49	1	
SNSPFLXA	12	228	145	1	
THNTFLXA	32	262	178	3	
WLCHFLXA	23	240	156	2	
STGRFLXA	21	109	25	1	
TRSPFLXA	16	148	65	2	
BYSHFLXA	38	291	208	1	
BRNDFLXA	39	111	28	2	
ALFAFLXA	41	233	150	2	
GNDYFLXA	35	117	34	1	
DNDNFLXA	25	168	85	1	
NPRCFLXA	6	134	50	2	
MNLKFLXA	6	285	202	2	
LLMNFLXA	38	119	35	1	
LRGOFLXA	32	114	31	1	
HDSNFLXA	0	171	88	2	
SNANFLXA	26	300	217	0	
PTCYFLXA	43	179	96	3	
NGBHFLXA	37	110	27	1	
PSDNFLXA	41	92	9	1	
SKWYFLXA	42	108	25	2	
INRKFLXX	35	200	117	1	
RSKNFLXA	47	233	150	3	
WWSPFLSH	10	217	134	2	
PNCRFLXA	48	301	218	3	
SPBGFLXS	45	199	116	1	
WIMMFLXA	50	271	188	3	
DDCYFLXA	31	199	116	0	
SGBEFLXA	43	148	65	1	
WWSPFLHI	13	249	166	3	
TLCHFLXA	32	305	222	0	

PSDNFLXA 91.75

92

dlt	Airline Distance	Raw Score	Diff	UNE Zone	Include?
PSDNFLXA	41	92	0	1	Y
SKWYFLXA	42	108	16	2	Y
SGBEFLXA	43	148	57	1	Y
LLMNFLXA	38	119	27	1	Y
SPBGFLXS	45	199	108	1	Y
GNDYFLXA	35	117	26	1	Y
NGBHFLXA	37	110	19	1	Y
INRKFLXX	35	200	108	1	Y
LRGOFLXA	32	114	22	1	Y
BYSHFLXA	38	291	200	1	
WLCRFLXA	34	133	41	1	
RSKNFLXA	47	233	141	3	
DNDNFLXA	25	168	76	1	
OLDSFLXA	23	153	62	1	
STGRFLXA	21	109	17	1	
ALFAFLXA	41	233	141	2	
WIMMFLXA	50	271	179	3	
KYSTFLXA	19	266	174	2	
TRSPFLXA	16	148	56	2	
BRNDFLXA	39	111	19	2	
SNSPFLXA	12	228	136	1	
LUTZFLXA	21	224	133	2	
THNTFLXA	32	262	170	3	
NPRCFLXA	6	134	42	2	
LNLKFLXA	16	252	161	3	
PNCRFLXA	48	301	209	3	
WLCHFLXA	23	240	148	2	
MNLKFLXA	6	285	194	2	
PTCYFLXA	43	179	87	3	
HDSNFLXA	0	171	80	2	
SNANFLXA	26	300	209	0	
WWSPFLSH	10	217	125	2	
DDCYFLXA	31	199	108	0	
WWSPFLHI	13	249	157	3	
TLCHFLXA	32	305	213	0	

STGRFLXA 108.5

109

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
STGRFLXA	21	109	0	1	Y
DNDNFLXA	25	168	60	1	Y
TRSPFLXA	16	148	40	2	Y
OLDSFLXA	23	153	45	1	Y
KYSTFLXA	19	266	158	2	
SNSPFLXA	12	228	120	1	
NPRCFLXA	6	134	25	2	Y
LUTZFLXA	21	224	116	2	
WLCRFLXA	34	133	24	1	
MNLKFLXA	6	285	177	2	
HDSNFLXA	0	171	63	2	
LNLKFLXA	16	252	144	3	
BYSHFLXA	38	291	183	1	
WLCHFLXA	23	240	131	2	
ALFAFLXA	41	233	125	2	
THNTFLXA	32	262	153	3	
WWSPFLSH	10	217	108	2	
BRNDFLXA	39	111	3	2	
RSKNFLXA	47	233	125	3	
WWSPFLHI	13	249	140	3	
WIMMFLXA	50	271	162	3	
SNANFLXA	26	300	192	0	
PTCYFLXA	43	179	70	3	
PNCRFLXA	48	301	192	3	
DDCYFLXA	31	199	91	0	
TLCHFLXA	32	305	196	0	

BRNDFLXA 111

111

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
BRNDFLXA	39	111	0	2	Y
ALFAFLXA	41	233	122	2	
THNTFLXA	32	262	151	3	
PNCRFLXA	48	301	190	3	
PTCYFLXA	43	179	68	3	Y
WLCRFLXA	34	133	22	1	
BYSHFLXA	38	291	180	1	
WIMMFLXA	50	271	160	3	
LUTZFLXA	21	224	113	2	
RSKNFLXA	47	233	122	3	
WLCHFLXA	23	240	129	2	
KYSTFLXA	19	266	155	2	
LNLKFLXA	16	252	141	3	
SNANFLXA	26	300	189	0	
SNSPFLXA	12	228	117	1	
DDCYFLXA	31	199	88	0	
MNLKFLXA	6	285	174	2	
TLCHFLXA	32	305	194	0	
HDSNFLXA	0	171	60	2	
WWSPFLSH	10	217	106	2	
WWSPFLHI	13	249	138	3	

WLCRFLXA 132.5

133

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
WLCRFLXA	34	133	0	1	Y
BYSHFLXA	38	291	159	1	Y
ALFAFLXA	41	233	101	2	
RSKNFLXA	47	233	101	3	
KYSTFLXA	19	266	134	2	
THNTFLXA	32	262	129	3	
WIMMFLXA	50	271	138	3	
LUTZFLXA	21	224	92	2	
PNCRFLXA	48	301	168	3	
SNSPFLXA	12	228	96	1	
WLCHFLXA	23	240	107	2	
LNLKFLXA	16	252	120	3	
MNLKFLXA	6	285	153	2	
SNANFLXA	26	300	168	0	
HDSNFLXA	0	171	39	2	
DDCYFLXA	31	199	67	0	
WWSPFLSH	10	217	84	2	
WWSPFLHI	13	249	116	3	
TLCHFLXA	32	305	172	0	

HDSNFLXA 171.25

171

CLLI	Airline Distance	Raw Score	Diff	UNE Zone	Include?
HDSNFLXA	0	171	0	2	Y
MNLKFLXA	6	285	114	2	Y
WWSPFLSH	10	217	46	2	Y
SNSPFLXA	12	228	57	1	Y
WWSPFLHI	13	249	78	3	Y
LNLKFLXA	16	252	81	3	Y
KYSTFLXA	19	266	95	2	Y
LUTZFLXA	21	224	53	2	Y
WLCHFLXA	23	240	68	2	Y
SNANFLXA	26	300	129	0	Y
DDCYFLXA	31	199	28	0	Y
THNTFLXA	32	262	90	3	Y
TLCHFLXA	32	305	134	0	Y
ALFAFLXA	41	233	62	2	
RSKNFLXA	47	233	62	3	
PNCRFLXA	48	301	130	3	
WIMMFLXA	50	271	100	3	

HDSNFLXA 171.25

233

clli	Airline Distance	Raw Score	Diff	UNE Zone	Include?
ALFAFLXA	41	233	62	2	Y
RSKNFLXA	47	233	62	3	Y
PNCRFLXA	48	301	130	3	Y
WIMMFLXA	50	271	100	3	Y

6 Trigger Analysis

BellSouth Estimates

clli	Count	CLEC										
ARCHFLMA												
BCRTFLBT	5	1	2		4	5	6					
BCRTFLMA	5	1	2		4	5						
BCRTFLSA	3	1		3		5						
BGPIFLMA				3		5						
BKVLFLJF												
BLDWFLMA												
BLGLFLMA												
BNNLFLMA												
BRSNFLMA												
BYBHFLMA	2	1	2									
CCBHFLAF												
CCBHFLMA												
CDKYFLMA												
CFLDFLMA												
CHPLFLJA												
CNTMFLLE												
COCOFLMA												
COCOFLME												
CSCYFLBA												
DBRYFLDL												
DBRYFLMA												
DELDFLMA												
DLBHFLKP	2	1										
DLBHFLMA	3	1	2			5						
DLSPFLMA						5						
DNLNFLWM												
DRBHFLMA	4	1	2	3								
DYBHFLFN							6					
DYBHFLMA												
DYBHFLOB												
DYBHFLOS												
DYBHFLPO												
EGLLFLBG												
EGLLFLIH												
EORNFLMA												
FLBHFLMA												
FRBHFLFP												
FTGRFLMA	1	1										
FTLDFLCR	4	1	2		4	5						
FTLDFLCY	6	1	2	3	4							
FTLDFLJA	6	1	2	3	4		6	7				
FTLDFLMR	5		2	3	4		6					11
FTLDFLOA	7	1	2	3	4	5	6					
FTLDFLPL	10	1	2	3	4	5	6	7				
FTLDFLSG	2	1			4	5	6	7	8	9	10	
FTLDFLSU	4	1	2				6					
FTLDFLWN	3	1	2		4		6					
FTPRFLMA							6					
GCSPFLCN	1	1										
GCVLFLMA												
GENVFLMA												
GLBRFLMC												
GSVLFLMA												
GSVLFLNW												
HAVNFLMA												
HBSDFLMA												
HLNVFLMA												
HLWDFLHA	2		2				6					
HLWDFLMA	3		2	3			6					
HLWDFLPE	7		2	3	4		6	7	8	9		
HLWDFLWH	7		2	3	4	5	6	7		9		
HMSTFLHM												
HMSTFLNA												
HTISFLMA												
HWTHFLMA												
ISLMFLMA												
JAY_FLMA												
JCBHFLAB	1	1										
JCBHFLMA	6	1	2		4		6	7	8			
JCBHFLSP	2	1				5						
JCVLFLAR	4	1	2	3	4							
JCVLFLBW	4	1	2	3	4							
JCVLFLCL	6	1	2	3	4	5	6					
JCVLFLFC	2	1	2									
JCVLFLIA	1	1										
JCVLFLJT	1		2									
JCVLFLLF	2	1	2									
JCVLFLNO	3	1	2	3								
JCVLFLOW	2	1	2									
JCVLFLRV	5	1	2	3	4							
JCVLFLSJ	7	1	2	3	4	5	6			9		
JCVLFLSM	5	1	2	3		5	6			9		

JCVLFLWC	5		1	2	3			6	7			
JPTRFLMA	3		1	2			5					
KYHGFLMA												
KYLRFLLS												
KYLRFLMA												
KYWSFLMA												
LKCYFLMA												
LKMRFLMA												
LYHNFLOH												
MCNPFLMA												
MDBGFLPM	1		1									
MIAMFLAE	8		1	2	3	4	5	6	7	8		
MIAMFLAL	2			2	3							
MIAMFLAP	2			2	3							
MIAMFLBA	5		1			4	5	6		8		
MIAMFLBC	2		1					6				
MIAMFLBR	6		1		3	4	5	6			9	
MIAMFLCA	7		1	2	3	4	5	6	7			
MIAMFLFL	2		1			4						
MIAMFLGR	7		1		3	4	5	6	7	8		
MIAMFLHL	7		1	2	3	4	5	6	7			
MIAMFLIC	5		1		3	4	5	6				
MIAMFLKE	2			2			5					
MIAMFLME								6			9	
MIAMFLNM	3		1						7			
MIAMFLNS	5		1	2	3		5		7			
MIAMFLOL	4		1	2	3							
MIAMFLPB	6		1		3	4	5	6	7			
MIAMFLPL	6		1	2	3		5	6		8		
MIAMFLRR	7		1	2	3	4	5	6	7			
MIAMFLSH	2			2	3							
MIAMFLSO	6			2	3	4	5	6	7			
MIAMFLWD	4		1	2					7		9	
MIAMFLWM	7		1	2	3	4	5	6	7			
MICCFLBB												
MLBRFLMA												
MLTNFLRA												
MNDRFLAV	3		1	2	3							
MNDRFLLO	8		1	2	3	4	5	6	7	8		
MNDRFLLW	2		1		3							
MNSNFLMA												
MRTHFLVE												
MXVLFLMA												
NDADFLAC	3		1			4					9	
NDADFLBR	2			2					7			
NDADFLGG	2							6	7			
NDADFLOL	5		1		3	4	5		7			
NKLRFLMA												
NSBHFLMA												
NWBYFLMA												
OKHLFLMA												
OLTWFLLN												
ORLDFLAP												
ORLDFLCL												
ORLDFLMA												
ORLDFLPC												
ORLDFLPH												
ORLDFLSA												
ORPKFLMA	4		1	2		4		6				
ORPKFLRW	2		1					6				
OVIDFLCA												
PACEFLPV												
PAHKFLMA												
PCBHFLNT												
PLCSFLMA												
PLTKFLMA												
PMBHFLCS	4		1	2				6				11
PMBHFLFE	7		1	2	3	4	5	6				11
PMBHFLMA	8		1	2	3	4	5	6			10	11
PMBHFLTA	4		1	2				6	7			
PMPKFLMA												
PNCYFLCA												
PNCYFLMA												
PNSCFLBL												
PNSCFLFP												
PNSCFLHC												
PNSCFLPB												
PNSCFLWA												
PNVDFLMA	2		1					6				
PRRNFLMA	5			2	3	4		6	7			
PRSNFLFD												
PTSLFLMA												
PTSLFLSO												
SBSTFLFE												
SBSTFLMA												
SGKYFLMA												

SNFRFLMA							
STAGFLBS							
STAGFLMA	2	1	2				
STAGFLSH							
STRTFLMA							
SYHSFLCC							
TRENFLMA							
TTVLFLMA							
VERNFLMA							
VRBHFLBE							
VRBHFLMA							
WELKFLMA							
WPBHFLAN	6	1	2	3	4	5	6
WPBHFLGA	6	1	2	3	4	5	6
WPBHFLGR	3	1			4	5	
WPBHFLHH	5	1	2	3	4	5	
WPBHFLLE	3	1	2	3			
WPBHFLRB	4	1	2		4	5	
WPBHFLRP							
WWSPFLHI							
WWSPFLSH							
YNFNFLMA							
YNTWFLMA							
YULEFLMA							

Adjusted BellSouth Estimates

clli	Count	CLEC					
ARCHFLMA							
BCRTFLBT	2	1	2				
BCRTFLMA	3	1	2	3			
BCRTFLSA	1	1					
BGPIFLMA							
BKVLFLJF							
BLDWFLMA							
BLGLFLMA							
BNNLFLMA							
BRSNFLMA							
BYBHFLMA	2	1	2				
CCBHFLAF							
CCBHFLMA							
CDKYFLMA							
CFLDFLMA							
CHPLFLJA							
CNTMFLLE							
COCOFLMA							
COCOFLME							
CSCYFLBA							
DBRYFLDL							
DBRYFLMA							
DELDFLMA							
DLBHFLKP	1	1					
DLBHFLMA	1	1					
DLSPFLMA							
DNLNFLWM							
DRBHFLMA	3	1	2	3			
DYBHFLFN							
DYBHFLMA							
DYBHFLOB							
DYBHFLOS							
DYBHFLPO							
EGLLFLBG							
EGLLFLIH							
EORNFLMA							
FLBHFLMA							
FRBHFLFP							
FTGRFLMA	1	1					
FTLDFLCR	4	1	2		4	5	
FTLDFLCY	4	1	2	3	4		
FTLDFLJA	4	1	2	3	4		
FTLDFLMR	4		2	3	4	5	
FTLDFLOA	5	1	2	3	4	5	
FTLDFLPL	5	1	2	3	4	5	
FTLDFLSG	1	1					
FTLDFLSU	2	1	2				
FTLDFLWN	3	1	2				
FTPRFLMA							6
GCSPFLCN	1	1					
GCVLFLMA							
GENVFLMA							
GLBRFLMC							
GSVLFLMA							
GSVLFLNW							
HAVNFLMA							
HBSDFLMA							

HLNVFLMA									
HLWDFLHA	1		2						
HLWDFLMA	2		2	3					
HLWDFLPE	3		2	3	4				
HLWDFLWH	5		2	3	4	5	6		
HMSTFLHM									
HMSTFLNA									
HTISFLMA									
HWTHFLMA									
ISLMFLMA									
JAY_FLMA									
JCBHFLAB	1	1							
JCBHFLMA	2	1	2						
JCBHFLSP	1	1							
JCVLFLAR	4	1	2	3	4				
JCVLFLBW	4	1	2	3	4				
JCVLFLCL	4	1	2	3	4				
JCVLFLFC	2	1	2						
JCVLFLIA	1	1							
JCVLFLJT	1		2						
JCVLFLLF	2	1	2						
JCVLFLNO	3	1	2	3					
JCVLFLOW	2	1	2						
JCVLFLRV	4	1	2	3	4				
JCVLFLSJ	4	1	2	3		5			
JCVLFLSM	3	1	2	3					
JCVLFLWC	3	1	2	3					
JPTRFLMA	1	1							
KYHGFLMA									
KYLRFLLS									
KYLRFLMA									
KYWSFLMA									
LKCYFLMA									
LKMRFLMA									
LYHNFLOH									
MCNPFLMA									
MDBGFLPM	1	1							
MIAMFLAE	7	1	2	3	4	5		7	8
MIAMFLAL	2		2	3					
MIAMFLAP	1		2						
MIAMFLBA	2	1			4				
MIAMFLBC	1	1							
MIAMFLBR	4	1			4	5	6		
MIAMFLCA	6	1	2	3	4	5	6		
MIAMFLFL	2	1			4				
MIAMFLGR	7	1		3	4	5	6	7	8
MIAMFLHL	6	1	2	3	4	5	6		
MIAMFLIC	2	1			4				
MIAMFLKE	0								
MIAMFLME									
MIAMFLNM	1	1							
MIAMFLNS	3	1	2	3					
MIAMFLOL	3	1	2	3					
MIAMFLPB	4	1		3	4	5			
MIAMFLPL	6	1	2	3		5	6		8
MIAMFLRR	6	1	2	3	4	5	6		
MIAMFLSH	2		2	3					
MIAMFLSO	4		2	3	4		6		
MIAMFLWD	1	1							
MIAMFLWM	5	1	2	3	4			7	
MICCFLBB									
MLBRFLMA									
MLTNFLRA									
MNDRFLAV	3	1	2	3					
MNDRFLLO	3	1	2	3					
MNDRFLLW	1	1							
MNSNFLMA									
MRTHFLVE									
MXVLFLMA									
NDADFLAC	2	1			4				
NDADFLBR	1		2						
NDADFLGG	0								
NDADFLOL	3	1			4			7	
NKLRFLMA									
NSBHFLMA									
NWBYFLMA									
OKHLFLMA									
OLTWFLLN									
ORLDFLAP									
ORLDFLCL									
ORLDFLMA									
ORLDFLPC									
ORLDFLPH									
ORLDFLSA									
ORPKFLMA	2	1	2						
ORPKFLRW	1	1							

OVIDFLCA							
PACEFLPV							
PAHKFLMA							
PCBHFLNT							
PLCSFLMA							
PLTKFLMA							
PMBHFLCS	1		2				
PMBHFLFE	4	1	2		4	5	
PMBHFLMA	5	1	2	3	4		6
PMBHFLTA	2	1	2				
PMPKFLMA							
PNCYFLCA							
PNCYFLMA							
PNSCFLBL							
PNSCFLFP							
PNSCFLHC							
PNSCFLPB							
PNSCFLWA							
PNVDFLMA	1	1					
PRRNFLMA	4		2	3	4		6
PRSNFLFD							
PTSLFLMA							
PTSLFLSO							
SBSTFLFE							
SBSTFLMA							
SGKYFLMA							
SNFRFLMA							
STAGFLBS							
STAGFLMA	2	1	2				
STAGFLSH							
STRTFLMA							
SYHSFLCC							
TRENFLMA							
TTVLFLMA							
VERNFLMA							
VRBHFLBE							
VRBHFLMA							
WELKFLMA							
WPBHFLAN	4	1	2	3	4		
WPBHFLGA	3	1	2		4		
WPBHFLGR	2	1			4		
WPBHFLHH	4	1	2	3	4		
WPBHFLLE	2	1	2				
WPBHFLRB	3	1	2		4		
WPBHFLRP							
WWSPFLHI							
WWSPFLSH							
YNFNFLMA							
YNTWFLMA							
YULEFLMA							

Verizon Estimates

clli	Count
ABDLFLXA	
ALFAFLXA	2
ALTRFLXA	
ANMRFLXA	
BARTFLXA	
BAYUFLXA	5
BBPKFLXA	
BHPKFLXA	9
BRBAFLXA	
BRJTFLXA	
BRNDFLXA	7
BRTNFLXX	
BYSHFLXA	2
CLWRFLXA	9
CNSDFLXA	7
CRWDFLXA	7
CYGRFLXA	
DNDNFLXA	4
DUNDFLXA	
ENWDFLXA	
FHSDFLXA	5
FRSTFLXA	
GNDYFLXA	5
HDSNFLXA	2
HGLDFLXA	
HNCYFLXA	
HNCYFLXN	
HYPKFLXA	6
INLKFLXA	
INRKFLXX	3
KYSTFLXA	4
LGBKFLXA	
LKALFLXA	
LKLDFLXA	
LKLDFLXE	
LKLDFLXN	
LKWLFLXA	
LKWLFLXE	
LLMNFLXA	6
LNLKFLXA	
LRGOFLXA	5
LUTZFLXA	4
MLBYFLXA	
MNLKFLXA	1
MYCYFLXA	
NGBHFLXA	5
NPRCFLXA	5
NRPTFLXA	
NRSDFLXA	
OLDSFLXA	5
OSPRFLXA	
PKCYFLXA	
PLMTFLXA	
PLSLFLXA	
PNCRFLXA	
PNLSFLXA	8
POINFLXA	
PRSHFLXA	
PSDNFLXA	5
PTCYFLXA	
RSKNFLXA	
SARKFLXA	
SEKYFLXA	
SGBEFLXA	3
SKWYFLXA	6
SLSPFLXA	6
SMNLFLXA	5
SNSPFLXA	3
SPBGFLXA	6
SPBGFLXS	3
SPRGFLXA	
SRSTFLXA	
SSDSFLXA	
STGRFLXA	6
SWTHFLXA	9
TAMPFLXE	8
TAMPFLXX	9
THNTFLXA	
TMTRFLXA	5
TRSPFLXA	5
UNVRFLXA	6
VENCFLXA	
VENCFLXS	

WIMMFLXA	
WLCHFLXA	4
WLCRFLXA	5
WNHNFLXC	
WSSDFLXA	9
YBCTFLXA	5

Adjusted Verizon Estimates

clli	CLEC
ABDLFLXA	
ALFAFLXA	0
ALTRFLXA	
ANMRFLXA	
BARTFLXA	
BAYUFLXA	3
BBPKFLXA	
BHPKFLXA	5
BRBAFLXA	
BRJTFLXA	
BRNDFLXA	5
BRTNFLXX	
BYSHFLXA	0
CLWRFLXA	7
CNSDFLXA	5
CRWDFLXA	4
CYGRFLXA	
DNDNFLXA	1
DUNDFLXA	
ENWDFLXA	
FHSDFLXA	4
FRSTFLXA	
GNDYFLXA	3
HDSNFLXA	0
HGLDFLXA	
HNCYFLXA	
HNCYFLXN	
HYPKFLXA	4
INLKFLXA	
INRKFLXX	1
KYSTFLXA	2
LGBKFLXA	
LKALFLXA	
LKLDFLXA	
LKLDFLXE	
LKLDFLXN	
LKWLFLXA	
LKWLFLXE	
LLMNFLXA	4
LNLKFLXA	
LRGOFLXA	3
LUTZFLXA	2
MLBYFLXA	
MNLKFLXA	0
MYCYFLXA	
NGBHFLXA	4
NPRCFLXA	2
NRPTFLXA	
NRSDFLXA	
OLDSFLXA	3
OSPRFLXA	
PKCYFLXA	
PLMTFLXA	
PLSLFLXA	
PNCRFLXA	
PNLSFLXA	6
POINFLXA	
PRSHFLXA	
PSDNFLXA	2
PTCYFLXA	
RSKNFLXA	
SARKFLXA	
SEKYFLXA	
SGBEFLXA	1
SKWYFLXA	4
SLSPFLXA	4
SMNLFLXA	3
SNSPFLXA	1
SPBGFLXA	4
SPBGFLXS	1
SPRGFLXA	
SRSTFLXA	
SSDSFLXA	
STGRFLXA	3
SWTHFLXA	7

TAMPFLXE	6
TAMPFLXX	7
THNTFLXA	
TMTRFLXA	3
TRSPFLXA	2
UNVRFLXA	4
VENCFLXA	
VENCFLXS	
WIMMFLXA	
WLCHFLXA	2
WLCRFLXA	3
WNHNFLXC	
WSSDFLXA	7
YBCTFLXA	3

7 Foundation Data

cli	Carrier	Total Lines	Business Lines	Residential Lines	Special Access Lines	Public Lines	Single Line Business Lines	Households	Total Monthly Cost per Line	Area	% Business Lines	% Enterprise Lines	% Special Access Lines	Enterprise + Special Access Lines	% Enterprise and Special Access Lines	Total Line Density	Special Access Line Density	Household Density	MSA	UNE Zone	V Coord	H Coord	# of Collocators
ARCHFLMA	BellSouth	3,375	335	2,853	287	-	50	2,563	$ 43.00	77.0686	0.099	0.064	0.091	462	0.146	43.78	2.09	33.25		3	7891	1329	0
BORTRLBT	BellSouth	36,855	16,215	12,836	10,004	-	515	10,878	$ 17.49	14.787	0.417	0.404	0.257	25,704	0.882	2620.87	676.09	714.87	Miami	1	8226	882	19
BORTRLMA	BellSouth	95,932	30,474	46,991	18,787	-	1,736	39,312	$ 19.15	24.7802	0.316	0.300	0.186	47,536	0.496	3071.32	758.55	1686.43	Miami	1	8234	573	22
BORTRLBA	BellSouth	72,118	10,997	54,362	6,760	-	840	46,590	$ 21.32	42.884	0.152	0.140	0.094	16,899	0.234	1680.37	158.88	1007.64	Miami	2	8240	884	11
BGPRFLMA	BellSouth	3,958	36	3,802	21	-	8	3,363	$ 38.81	37.148	0.009	0.007	0.005	59	0.013	146.78	0.77	123.88		3	8880	609	0
BKVLFLJF	BellSouth	33,979	6,818	22,848	4,206	-	601	21,088	$ 30.32	305.8864	0.201	0.185	0.124	10,429	0.307	111.06	13.75	68.53		3	8052	1201	2
BLDWFLJM	BellSouth	2,151	308	1,653	190	-	28	1,541	$ 39.19	47.7491	0.143	0.131	0.088	472	0.219	45.05	3.98	32.27	Jax	3	7884	1324	0
BLOLFLMA	BellSouth	13,383	3,488	7,744	2,151	-	298	7,854	$ 26.26	49.4023	0.261	0.241	0.161	6,373	0.401	270.90	43.54	154.93	Miami	2	8231	708	0
BNNLFLMA	BellSouth	4,881	472	3,818	281	-	44	3,747	$ 30.42	166.8445	0.101	0.091	0.062	718	0.154	26.04	1.74	22.44		3	7788	1114	0
BRSNFLMA	BellSouth	2,829	88	2,470	61	-	18	2,315	$ 66.63	102.4763	0.057	0.031	0.023	143	0.054	25.65	0.80	22.89		3	7908	1338	0
BYBHFLMA	BellSouth	81,273	15,834	55,998	9,771	-	1,078	47,458	$ 20.32	52.5134	0.195	0.182	0.120	24,528	0.302	1547.66	186.07	903.71	Miami	2	8197	886	11
CDBHFLAF	BellSouth	1,056	952	-	403	-	48	-	$ 21.06	1.5457	0.818	0.574	0.382	1,009	0.956	682.54	260.72	0.00		2	7903	891	0
CDBHFLMA	BellSouth	25,288	9,954	10,832	3,303	-	471	14,872	$ 18.97	10.3646	0.212	0.193	0.131	8,188	0.324	2432.90	317.76	1411.50		2	7812	886	4
CDKYFLMA	BellSouth	777	84	673	40	-	10	650	$ 66.70	44.8971	0.042	0.009	0.051	84	0.121	17.27	0.88	14.45		3	8005	1371	0
CRLDFLMA	BellSouth	5,758	672	4,889	417	-	80	4,386	$ 50.84	188.0865	0.117	0.106	0.072	1,029	0.179	30.45	2.21	23.24		3	7923	1379	0
CHPLFLJA	BellSouth	6,373	949	5,001	523	-	83	4,874	$ 46.43	179.8798	0.133	0.123	0.082	1,309	0.206	35.47	2.81	28.01		3	7929	1980	0
CNTMFLLE	BellSouth	11,276	2,308	7,548	1,424	-	114	9,611	$ 28.88	67.7216	0.205	0.184	0.126	3,818	0.321	169.36	24.87	114.53		3	8120	2238	0
COCOFLMA	BellSouth	66,342	13,356	43,745	9,242	-	1,270	38,388	$ 22.39	88.8386	0.204	0.186	0.128	20,327	0.311	754.19	96.13	443.08		2	7924	904	11
COCOFLME	BellSouth	32,918	7,903	20,767	4,626	-	803	18,013	$ 21.86	90.1842	0.228	0.204	0.141	11,329	0.344	868.81	82.30	356.87		2	7917	902	4
CSCYFLBA	BellSouth	1,938	-	1,938	-	-	-	1,839	$ 68.26	102.2088	0.000	0.000	0.000	-	0.000	18.94	0.00	18.88		3	7919	1438	0
DBRYFLDL	BellSouth	16,543	1,932	10,419	1,192	-	282	13,286	$ 23.84	23.281	0.104	0.080	0.064	2,862	0.154	798.49	51.20	570.64		2	7877	1047	0
DBRYFLMA	BellSouth	6,832	1,181	6,023	728	-	188	6,019	$ 25.01	19.3975	0.134	0.115	0.082	1,749	0.187	486.32	37.53	310.30		2	7884	1058	0
DELBFLMA	BellSouth	38,861	8,547	23,427	5,887	-	745	21,919	$ 22.86	93.4454	0.248	0.228	0.151	14,899	0.378	415.87	63.00	234.63		2	7857	1074	3
DLBHFLKP	BellSouth	49,407	6,504	36,344	4,259	-	418	32,248	$ 18.86	27.9048	0.140	0.131	0.086	10,747	0.218	1770.30	152.60	1156.37	Miami	2	8218	894	6
DLBHFLMA	BellSouth	53,639	13,885	31,008	6,634	-	1,004	28,898	$ 18.95	17.04	0.261	0.242	0.161	21,825	0.403	3147.77	506.89	1978.70	Miami	2	8210	883	8
DLBPFLMA	BellSouth	3,232	387	2,580	245	-	61	2,280	$ 33.09	34.9706	0.123	0.104	0.076	981	0.180	83.48	7.09	65.86		3	7843	1082	0
DNLNFLWN	BellSouth	12,275	1,373	10,051	861	-	232	8,844	$ 37.96	218.1527	0.112	0.083	0.069	1,992	0.162	57.05	3.98	41.11		3	7888	1287	0
DRBNFLMA	BellSouth	73,600	19,821	41,561	12,228	-	1,400	36,812	$ 18.95	25.0081	0.269	0.250	0.166	30,848	0.418	2836.24	467.85	1428.70	Miami	2	8242	872	12
DYSHFLFN	BellSouth	2,883	671	1,760	362	-	29	1,805	$ 20.89	3.8562	0.233	0.204	0.131	888	0.336	733.82	96.27	438.89		1	7809	1057	0
DYSHFLMA	BellSouth	66,464	19,270	34,329	11,866	-	1,067	31,638	$ 18.98	57.3648	0.294	0.276	0.181	30,668	0.469	1141.14	287.11	861.29		2	7783	1048	14
DYSHFLCB	BellSouth	46,680	8,320	30,560	6,700	-	880	28,401	$ 23.48	172.8183	0.204	0.189	0.126	14,380	0.315	284.88	35.25	182.88		2	7784	1052	0
DYSHFLOB	BellSouth	8,529	788	8,288	473	-	107	7,083	$ 23.30	7.3845	0.081	0.068	0.050	1,136	0.119	1280.27	84.05	956.48		2	7774	1095	0
DYSHFLPO	BellSouth	65,888	9,287	50,886	5,718	-	886	45,883	$ 22.60	84.1838	0.141	0.127	0.087	14,085	0.214	1212.41	106.83	811.87		2	7803	1038	7
EGLLFLBG	BellSouth	38,577	12,357	20,986	7,624	-	1,137	34,326	$ 21.77	81.1345	0.287	0.186	0.126	18,844	0.318	874.52	124.71	581.47		2	7958	888	8
EGLLFLSH	BellSouth	27,479	4,456	20,283	2,751	-	524	17,252	$ 20.81	17.9163	0.162	0.143	0.100	5,663	0.343	1533.34	153.55	962.92		2	7947	888	3
EORNFLMA	BellSouth	7,103	1,054	5,399	650	-	157	5,003	$ 35.99	77.8995	0.148	0.128	0.092	1,547	0.218	91.54	8.38	64.47		3	7926	991	0
FLSHFLMA	BellSouth	4,312	506	3,480	314	-	67	3,144	$ 28.88	15.5781	0.118	0.102	0.073	795	0.178	276.80	20.16	201.82		2	7786	1084	0
FRSHFLFP	BellSouth	19,513	3,803	13,364	2,348	-	317	11,814	$ 24.01	51.9849	0.195	0.178	0.120	6,832	0.289	975.29	45.12	228.14	Jax	2	7899	1279	2
FTGRFLMA	BellSouth	517	7	505	5	-	3	447	$ 66.16	7.9686	0.014	0.008	0.010	8	0.017	64.88	0.63	56.10	Jax	3	7814	1247	0
FTLDFLCR	BellSouth	98,537	18,829	34,477	12,231	-	1,481	30,184	$ 18.50	13.0374	0.299	0.279	0.184	30,099	0.480	5103.95	636.15	2315.85	Miami	1	8270	958	14
FTLDFLCY	BellSouth	67,887	25,881	26,328	15,848	-	1,236	22,489	$ 17.83	11.5188	0.379	0.360	0.234	40,303	0.594	5881.44	1378.74	1952.34	Miami	1	8287	984	18
FTLDFLJA	BellSouth	84,808	17,804	56,858	11,044	-	1,007	47,183	$ 20.84	42.4129	0.211	0.188	0.130	27,941	0.329	1999.83	260.39	1112.47	Miami	2	8288	981	15
FTLDFLMR	BellSouth	112,251	37,288	51,962	23,000	-	1,971	47,190	$ 18.16	23.8226	0.332	0.315	0.205	58,318	0.520	4882.28	981.44	1972.82	Miami	1	8281	958	24
FTLDFLOA	BellSouth	87,644	18,819	55,801	12,224	-	1,172	48,806	$ 19.33	21.5188	0.226	0.212	0.139	36,571	0.361	4082.58	568.11	2288.97	Miami	1	8280	973	18
FTLDFLPL	BellSouth	87,802	24,888	47,868	15,226	-	1,887	42,388	$ 19.88	34.7567	0.281	0.262	0.174	38,247	0.436	2528.04	436.34	1218.52	Miami	2	8288	988	22
FTLDFLSG	BellSouth	8,807	4,900	884	3,025	-	407	873	$ 18.72	8.2874	0.888	0.822	0.361	7,518	0.873	1388.80	480.80	91.13	Miami	1	8289	981	0
FTLDFLBU	BellSouth	65,223	12,724	44,851	7,846	-	931	37,880	$ 20.00	16.8401	0.195	0.181	0.120	18,841	0.301	3873.08	488.03	2237.82	Miami	1	8285	984	7
FTLDFLWH	BellSouth	17,880	3,398	12,481	2,089	-	149	10,442	$ 23.12	16.8843	0.187	0.178	0.116	5,280	0.293	1188.00	138.57	892.34	Miami	2	8306	988	5
FTPRFLMA	BellSouth	73,280	15,853	47,483	9,844	-	1,292	42,803	$ 24.45	256.3118	0.216	0.200	0.134	24,505	0.334	286.04	38.88	164.52		3	8053	737	7
GCBPFLCN	BellSouth	10,322	1,942	7,184	1,186	-	127	6,802	$ 35.88	138.7282	0.188	0.176	0.118	3,011	0.292	75.48	8.76	48.75	Jax	3	7712	1242	0
GCVLFLMA	BellSouth	3,677	276	3,229	172	-	29	3,057	$ 56.29	160.3287	0.075	0.067	0.047	419	0.114	24.48	1.14	20.34		3	7882	1973	0
GENVFLMA	BellSouth	2,645	276	2,194	172	-	41	1,833	$ 43.24	49.3664	0.105	0.090	0.066	410	0.166	57.09	3.71	41.70		3	7862	1010	0
GLBRFLMC	BellSouth	23,118	4,823	15,844	2,851	-	479	13,317	$ 23.30	32.0679	0.209	0.179	0.123	6,886	0.303	720.81	88.81	415.28		2	8154	2188	1
GBVLFLMA	BellSouth	111,024	24,803	70,819	15,302	-	1,374	62,875	$ 21.48	181.8427	0.223	0.211	0.138	38,731	0.349	610.85	84.18	345.77		2	7840	1310	13
GBVLFLMW	BellSouth	15,587	3,488	9,830	2,151	-	211	8,708	$ 21.89	27.7279	0.224	0.210	0.136	5,428	0.348	561.42	77.59	313.98		2	8310	557	19
HAVNFLMA	BellSouth	5,800	374	5,195	251	-	62	4,854	$ 42.22	87.3011	0.064	0.056	0.040	583	0.085	69.51	2.95	53.37		3	7868	1757	0
HBSDFLMA	BellSouth	11,228	1,485	8,826	917	-	166	7,883	$ 24.37	28.9805	0.132	0.116	0.082	2,207	0.197	436.76	35.63	288.08		2	8107	988	1
HLWDFLMA	BellSouth	12,889	2,289	9,301	1,388	-	315	7,936	$ 30.74	119.2811	0.178	0.152	0.109	3,363	0.261	107.91	11.73	68.53		3	8119	2141	0
HLWDFLHA	BellSouth	32,443	8,747	21,538	4,180	-	462	18,837	$ 18.25	8.3763	0.206	0.184	0.128	10,455	0.322	6034.46	773.77	3469.91	Miami	1	8306	841	5
HLWDFLMA	BellSouth	88,144	18,249	38,870	10,025	-	1,074	35,521	$ 18.76	18.1986	0.246	0.229	0.152	25,200	0.381	3462.23	823.23	1863.93	Miami	1	8301	846	15
HLWDFLPE	BellSouth	113,121	21,388	78,543	13,189	-	1,520	66,910	$ 21.90	76.2282	0.189	0.178	0.117	33,056	0.292	1865.79	175.32	878.13	Miami	2	8316	887	20
HLWDFLWH	BellSouth	123,975	28,856	77,316	17,801	-	1,806	67,067	$ 20.09	34.4101	0.233	0.217	0.144	44,751	0.381	3802.87	517.32	1948.85	Miami	2	8310	857	19
HMSTFLHM	BellSouth	49,805	9,348	25,882	5,785	-	771	23,116	$ 25.82	180.4867	0.229	0.210	0.141	14,342	0.351	254.28	36.52	144.04	Miami	3	8423	539	2
HMSTFLMA	BellSouth	9,813	2,304	6,186	1,421	-	172	8,873	$ 26.13	26.0307	0.232	0.215	0.143	3,953	0.358	380.82	54.99	214.89	Miami	3	8423	539	0
HTSBFLMA	BellSouth	13,878	2,498	8,643	1,539	-	264	8,443	$ 24.87	16.3267	0.180	0.161	0.111	3,771	0.272	536.53	63.11	310.81		2	8074	885	1
HWTHFLMA	BellSouth	4,629	165	4,377	99	-	28	4,134	$ 54.25	163.0365	0.036	0.029	0.021	234	0.050	30.31	0.65	27.01		3	7828	1284	0
ISLMFLMA	BellSouth	3,428	780	2,291	469	-	78	2,004	$ 28.89	8.3828	0.222	0.190	0.138	1,182	0.338	836.87	88.79	371.62		2	8565	907	0
JAY_FLMA	BellSouth	3,448	357	2,889	219	-	98	2,876	$ 66.90	215.8622	0.104	0.087	0.064	529	0.151	16.06	1.01	12.39		3	8039	2242	0
JCBHFLAB	BellSouth	12,516	1,248	10,901	788	-	132	8,864	$ 22.42	13.0072	0.100	0.088	0.061	1,885	0.151	882.38	88.12	663.61	Jax	2	7828	1249	0
JCBHFLMA	BellSouth	41,136	8,309	27,886	5,129	-	814	24,488	$ 20.23	19.4348	0.202	0.187	0.125	12,624	0.312	2117.71	264.04	1258.16	Jax	2	7828	1230	11
JCBHFLBP	BellSouth	5,835	1,241	3,828	765	-	64	3,327	$ 22.03	11.1785	0.213	0.202	0.131	1,942	0.333	521.86	68.43	297.62	Jax	1	7835	1236	0
JCVLFLAR	BellSouth	49,218	8,888	34,049	6,179	-	526	31,475	$ 18.13	18.8802	0.246	0.226	0.153	15,648	0.388	2128.04	328.62	1138.63	Jax	2	7842	1261	12
JCVLFLBW	BellSouth	42,625	9,998	28,133	5,804	-	470	24,334	$ 21.41	36.8948	0.212	0.201	0.131	14,222	0.332	1161.34	144.12	825.89	Jax	2	7842	1249	11
JCVLFLCL	BellSouth	75,150	31,389	34,365	19,380	-	834	23,199	$ 17.13	20.5336	0.418	0.407	0.258	48,841	0.686	3658.87	943.29	1125.43	Jax	1	7848	1278	26
JCVLFLFC	BellSouth	25,831	4,117	18,176	2,538	-	347	18,732	$ 18.40	12.5447	0.159	0.148	0.098	6,306	0.244	2958.12	202.32	1333.79	Jax	1	7834	1286	5
JCVLFLIA	BellSouth	824	420	345	298	-	11	297	$ 22.44	4.07	0.455	0.443	0.280	888	0.723	227.03	83.04	88.88	Jax	2	7818	1292	0
JCVLFLJT	BellSouth	8,834	4,174	85	2,575	-	112	74	$ 13.82	1.1847	0.811	0.804	0.377	6,837	0.971	5720.26	2155.35	61.94	Jax	1	7868	1256	3
JCVLFLLF	BellSouth	45,408	7,884	32,888	4,747	-	559	28,851	$ 23.42	113.8818	0.188	0.157	0.106	11,882	0.282	388.81	41.88	280.41	Jax	3	7838	1288	9
JCVLFLHO	BellSouth	46,448	13,613	26,438	8,387	-	981	23,827	$ 21.41	82.0828	0.281	0.288	0.173	21,418	0.442	980.16	102.29	287.01	Jax	2	7861	1288	10
JCVLFLOW	BellSouth	25,189	6,067	15,325	3,757	-	266	13,624	$ 24.83	86.3668	0.242	0.231	0.149	6,578	0.361	284.77	44.08	188.99	Jax	3	7823	1295	3
JCVLFLRV	BellSouth	48,857	11,852	27,484	7,311	-	645	24,773	$ 19.40	18.7857	0.254	0.238	0.157	18,323	0.368	2358.81	388.30	1251.37	Jax	2	7866	1278	11
JCVLFLSJ	BellSouth	78,018	25,313	38,082	16,811	-	949	30,134	$ 18.99	24.4288	0.333	0.321	0.206	39,978	0.526	3111.86	659.09	1233.64	Jax	2	7856	1282	18
JCVLFLSM	BellSouth	35,437	14,882	12,648	8,888	-	548	11,412	$ 17.52	9.5382	0.398	0.382	0.248	22,238	0.628	3714.86	911.81	1186.33	Jax	1	7852	1272	18
JCVLFLWC	BellSouth	47,844	7,076	36,104	4,364	-	606	32,113	$ 22.68	78.3088	0.148	0.138	0.092	10,834	0.230	607.15	65.73	410.08	Jax	2	7872	1281	8
JPTRFLMA	BellSouth	61,662	14,534	38,186	8,970	-	1,261	31,883	$ 21.86	62.5818	0.236	0.218	0.145	22,263	0.381	986.84	143.79	512.70	Miami	2	8123	841	7
KYHGFLMA	BellSouth	6,580	806	5,662	372	-	99	5,062	$ 38.76	76.9598	0.082	0.062	0.057	612	0.130	83.44	4.72	64.07	Jax	3	7788	1276	0
KYLRFLLS	BellSouth	9,823	1,867	6,458	1,207	-	179	4,861	$ 23.53	11.0408	0.227	0.208	0.140	2,866	0.348	781.01	109.32	449.33		2	8497	483	0
KYLRFLMA	BellSouth	8,629	1,805	6,033	891	-	185	6,480	$ 25.98	8.0833	0.188	0.168	0.118	2,401	0.278	1070.16	122.90	679.42		2	8519	497	0
KYWBFLMA	BellSouth	33,928	8,836	18,641	6,451	-	884	17,849	$ 20.45	13.7584	0.280	0.240	0.161	13,603	0.401	2469.39	388.74	1258.48		1	8748	888	1
LKCYFLMA	BellSouth	24,883	3,885	18,087	2,281	-	291	16,181	$ 30.53	486.5781	0.147	0.135	0.090	5,645	0.226	81.17	5.53	44.89		3	7788	1419	0
LKMRFLMA	BellSouth	10,948	3,986	4,488	2,485	-	131	3,767	$ 20.06	14.906	0.366	0.353	0.225	6,330	0.578	734.89	166.38	252.73		2	7911	1054	4
LYHNFLCH	BellSouth	14,738	2,271	11,088	1,402	-	212	9,791	$ 28.80	66.9883	0.154	0.140	0.095	3,481	0.235	172.21	16.38	114.40		3	8037	1918	1
MCNPFLMA	BellSouth	1,747	38	1,687	22	-	10	1,577	$ 67.71	80.8784	0.022	0.018	0.013	50	0.029	19.22	0.24	17.35		3	7982	1357	0
MDBGFLPM	BellSouth	15,006	1,430	12,695	883	-	204	11,026	$ 32.70	103.1663	0.095	0.082	0.059	2,109	0.141	145.48	8.98	108.88	Jax	3	7716	1280	0
MIAMFLAE	BellSouth	86,775	31,529	44,786	18,451	-	1,581	38,081	$ 17.85	14.9288	0.328	0.313	0.203	48,418	0.516	5826.48	1366.49	2786.58	Miami	1	8362	836	19
MIAMFLAL	BellSouth	49,989	16,432	23,362	10,135	-	812	21,839	$ 17.30	12.0396	0.329	0.313	0.203	28,786	0.516	4150.84	842.08	1622.84	Miami	2	8349	839	4
MIAMFLAP	BellSouth	10,517	5,823	1,586	3,406	-	187	1,363	$ 16.85	3.6795	0.525	0.507	0.324	8,744	0.831	2858.27	626.21	373.67	Miami	1	8354	845	6
MIAMFLBA	BellSouth	46,170	12,903	25,958	7,711	-	613	23,216	$ 17.95	6.8639	0.271	0.256	0.167	19,881	0.425	6728.80	1123.41	3382.33	Miami	1	8356	830	10
MIAMFLBC	BellSouth	23,374	7,857	10,870	4,847	-	406	10,373	$ 17.00	3.8422	0.336	0.319	0.207	12,298	0.528	9083.48	1261.52	2869.76	Miami	1	8347	832	5

MIAMFLBR	*BellSouth*	*64.051*	*17.682*	*35.462*	*10.907*	-	1,072	32.801	$	18.48	7.1475	0.276	0.259	0.170	27.517	0.430	8861.32	1525.99	4569.16	Miami	1	8343	520	12
MIAMFLGA	BellSouth	119,427	19.810	67,715	12,102	-	1,518	74,527	$	21.05	47.4181	0.164	0.151	0.101	30,194	0.253	*2516.60*	*256.22*	*1571.70*	Miami	2	8374	552	16
MIAMFLFL	BellSouth	44,734	10.593	27,122	6,719	-	694	24,562	$	18.28	6.2974	0.244	0.228	0.150	16,918	0.376	7114.86	1068.65	3806.54	Miami	1	8358	533	10
MIAMFLGR	BellSouth	78,130	43,084	5,469	26,577	-	1,230	7,585	$	14.52	5.1857	0.551	0.536	0.340	65,431	0.878	15066.43	5125.06	1462.86	Miami	2	8343	559	29
MIAMFLHL	BellSouth	157,037	41,429	90,048	25,560	-	2,216	77,090	$	20.32	45.2456	0.264	0.250	0.163	84,773	0.412	3470.77	564.92	1703.15	Miami	2	8343	524	18
MIAMFLIC	BellSouth	46,065	7,611	33,758	4,696	-	481	26,776	$	18.97	6.133	0.185	0.155	0.102	11,826	0.257	9883.96	677.40	3961.38	Miami	1	8329	524	5
MIAMFLKE	BellSouth	9,928	2,372	6,092	1,484	-	127	5,082	$	19.21	2.2942	0.239	0.228	0.147	3,709	0.374	4327.43	636.13	2215.15	Miami	1	8365	513	1
MIAMFLME	BellSouth	33,647	12,457	13,505	7,685	-	421	13,080	$	17.25	3.4099	0.370	0.355	0.228	19,721	0.586	9857.44	2253.73	3838.82	Miami	1	8350	534	3
MIAMFLNM	BellSouth	39,708	9,317	24,843	5,748	-	600	21,720	$	17.91	6.1688	0.235	0.220	0.145	14,463	0.364	4848.62	701.69	2852.40	Miami	1	8327	537	7
MIAMFLNS	BellSouth	*48.092*	*13.003*	*27.059*	*8.021*	-	767	25,206	$	18.45	13.8951	0.270	0.254	0.167	20,257	0.421	3461.08	577.25	1814.02	Miami	2	8343	543	5
MIAMFLOL	BellSouth	51,984	18,078	25,987	9,819	-	866	23,183	$	18.84	19.3737	0.309	0.280	0.191	25,011	0.481	2883.23	511.96	1196.62	Miami	2	8333	550	6
MIAMFLPB	BellSouth	62,333	22,186	26,456	13,691	-	1,128	23,462	$	17.89	14.7668	0.356	0.338	0.220	34,748	0.557	4221.16	927.15	1558.83	Miami	1	8352	548	15
MIAMFLPL	BellSouth	96,854	56,717	5,150	34,987	-	1,723	4,378	$	16.08	31.6292	0.586	0.568	0.361	89,961	0.929	3061.20	1105.81	138.40	Miami	1	8381	557	20
MIAMFLRR	BellSouth	79,895	26,802	36,460	16,583	-	1,324	30,868	$	18.72	29.2709	0.337	0.320	0.206	42,171	0.528	2729.50	566.88	1054.56	Miami	2	8372	537	17
MIAMFLSH	BellSouth	82,859	17,520	34,331	10,808	-	933	31,717	$	18.35	15.5873	0.280	0.265	0.172	27,385	0.437	4019.88	693.35	2034.80	Miami	2	8337	536	8
MIAMFLSO	BellSouth	81,526	20,028	49,145	12,353	-	1,056	41,365	$	19.58	27.3998	0.246	0.233	0.152	31,323	0.384	2875.42	450.84	1509.68	Miami	2	8386	547	13
MIAMFLWD	BellSouth	96,210	8,257	52,660	5,093	-	586	44,559	$	21.46	19.1854	0.125	0.116	0.077	12,784	0.193	3451.06	265.48	2322.56	Miami	1	8394	556	8
MIAMFLWM	BellSouth	58,124	19,197	27,085	11,842	-	1,170	23,350	$	17.65	12.103	0.330	0.310	0.204	29,888	0.514	4802.45	978.44	1929.27	Miami	1	8364	545	16
MICCFLBB	BellSouth	8,572	685	7,463	424	-	45	7,107	$	24.44	19.3841	0.080	0.075	0.049	1,064	0.124	442.22	21.87	366.84		2	7961	816	0
MILBRFLMA	BellSouth	120,856	27,587	76,252	17,017	-	2,310	66,176	$	22.48	*183.8713*	0.228	0.209	0.141	*42,284*	*0.350*	*737.51*	*103.84*	403.63		3	8091	2192	2
MILTNFLRA	BellSouth	25,355	4,842	17,394	3,948	-	452	16,028	$	27.37	166.9047	0.195	0.178	0.120	7,509	0.286	152.09	18.27	98.03		3	8091	2192	2
MNDRFLAV	BellSouth	19,689	3,278	5,389	2,022	-	331	4,567	$	17.95	1.7398	0.307	0.278	0.189	4,969	0.485	6148.05	1163.00	2836.33	Jax	2	7681	1245	7
MNDRFLLO	BellSouth	48,467	10,389	32,869	5,409	-	864	27,446	$	21.22	49.0825	0.210	0.197	0.130	18,134	0.326	1008.24	130.63	556.41	Jax	2	7673	1246	12
MNDRFLLW	BellSouth	5,157	581	4,218	358	-	75	3,581	$	30.85	43.7663	0.113	0.095	0.066	864	0.168	117.83	8.18	81.82	Jax	3	7684	1246	0
MNSNFLMA	BellSouth	586	53	502	31	-	3	462	$	132.96	105.7935	0.090	0.085	0.053	81	0.136	5.54	0.29	4.37		3	8033	2187	0
MRTHFLVE	BellSouth	11,924	2,434	7,990	1,500	-	285	7,135	$	28.19	16.7515	0.204	0.182	0.126	3,888	0.308	711.80	89.54	425.92		2	8632	553	0
MXVLFLMA	BellSouth	2,318	296	1,836	182	-	19	1,638	$	45.84	58.8013	0.128	0.120	0.079	459	0.198	40.77	3.20	28.84	Jax	3	7706	1316	0
NDADFLAC	BellSouth	80,861	13,888	36,628	8,444	-	795	33,494	$	18.82	13.5	0.225	0.212	0.139	21,338	0.350	4515.63	625.48	2481.04	Miami	1	8319	538	8
NDADFLBR	BellSouth	58,869	13,106	35,478	8,087	-	623	30,760	$	20.03	21.8667	0.231	0.220	0.143	23,565	0.363	*2565.66*	*369.46*	1405.89	Miami	2	8326	555	8
NDADFLGG	BellSouth	48,121	12,373	28,114	7,634	-	548	24,056	$	18.17	11.7567	0.257	0.248	0.159	19,459	0.404	4083.07	648.33	2046.32	Miami	2	8319	548	12
NDADFLOL	BellSouth	44,265	12,036	24,806	7,426	-	626	20,975	$	18.10	7.3838	0.272	0.256	0.166	18,836	0.425	6011.73	1008.47	2846.47	Miami	1	8313	540	10
NKLRFLMA	BellSouth	1,851	342	1,098	211	-	27	962	$	25.88	4.7384	0.207	0.191	0.128	526	0.319	348.36	44.52	202.98		2	8447	482	0
NSBHFLMA	BellSouth	45,596	7,657	33,214	4,725	-	826	29,351	$	23.93	119.4867	0.168	0.150	0.104	11,556	0.253	361.56	39.54	245.62		2	7818	1011	3
NWBYFLMA	BellSouth	3,242	155	2,992	95	-	38	2,671	$	49.40	93.1182	0.048	0.037	0.029	214	0.088	34.82	1.02	28.68		3	7870	1395	0
OKHLFLMA	BellSouth	2,714	199	2,393	122	-	42	2,100	$	43.25	43.8326	0.073	0.058	0.045	279	0.103	61.92	2.78	47.91		3	7842	881	0
OLTWFLLN	BellSouth	2,499	-	2,499	-	-	-	2,499	$	72.85	115.2572	0.000	0.000	0.000	-	0.000	21.13	0.00	21.12		3	7914	1411	0
ORLDFLAP	BellSouth	*111,726*	*18,633*	*81,592*	*11,499*	-	1,406	70,800	$	21.92	109.3543	0.167	0.154	0.103	28,728	0.257	1021.88	105.15	648.74		2	7948	1016	14
ORLDFLCL	BellSouth	52,378	15,896	24,894	10,488	-	886	21,886	$	18.41	16.3706	0.324	0.308	0.200	26,618	0.508	3198.52	640.66	*1337.52*		2	7952	1028	18
ORLDFLMA	BellSouth	98,171	43,683	28,574	26,934	-	1,544	26,023	$	16.36	22.0862	0.440	0.425	0.272	68,053	0.696	4490.16	1219.49	1178.25		1	7954	1032	31
ORLDFLPC	BellSouth	100,942	33,932	48,078	20,932	-	1,522	40,288	$	20.03	74.358	0.338	0.321	0.207	53,342	0.528	1357.50	281.50	541.78		2	7958	1022	21
ORLDFLPH	BellSouth	140,928	38,548	78,600	23,780	-	2,114	69,342	$	19.80	75.8854	0.274	0.259	0.168	80,214	0.427	1857.81	313.45	914.01		2	7955	1048	16
ORLDFLSA	BellSouth	52,294	18,859	22,123	11,512	-	928	18,958	$	18.72	20.9124	0.357	0.339	0.220	29,243	0.558	2500.82	560.48	906.54		2	7959	1018	17
ORPKFLMA	BellSouth	33,054	6,801	22,060	4,193	-	478	18,783	$	21.37	26.5351	0.206	0.191	0.127	10,518	0.318	1245.67	158.02	706.23	Jax	2	7882	1264	8
ORPKFLRW	BellSouth	19,595	2,788	15,096	1,721	-	254	12,811	$	21.87	16.0684	0.142	0.128	0.088	4,255	0.217	1219.47	107.10	797.28	Jax	2	7882	1271	3
OVDFLGA	BellSouth	28,498	4,725	20,860	2,914	-	569	17,770	$	24.15	58.7531	0.168	0.148	0.102	7,079	0.246	485.06	49.80	302.45		3	7928	1020	3
PACEFLPV	BellSouth	14,282	1,912	11,192	1,178	-	263	*8,816*	$	28.92	99.1846	0.134	0.116	0.082	2,837	0.198	143.98	11.88	99.00		3	8105	2206	2
PAHKFLMA	BellSouth	4,472	845	3,105	522	-	75	3,105	$	27.69	22.0527	0.188	0.172	0.117	1,292	0.258	202.79	23.87	140.80	Miami	2	*6203*	*729*	*0*
PCBHFLNT	BellSouth	29,309	6,841	16,573	4,095	-	527	16,651	$	24.02	65.9815	0.227	0.209	0.140	16,209	0.348	444.20	62.06	252.36		2	8066	1851	3
PLCSFLMA	BellSouth	18,275	2,539	15,169	1,567	-	246	12,958	$	24.21	48.6704	0.132	0.119	0.081	3,858	0.200	396.03	32.20	284.19		3	7744	1118	0
PLTKFLMA	BellSouth	21,248	3,100	18,238	1,812	-	256	15,083	$	31.25	223.5807	0.148	0.134	0.090	4,756	0.224	95.03	8.55	67.48		3	7772	1186	1
PMBHFLCB	BellSouth	81,618	18,943	50,988	11,686	-	1,285	43,100	$	19.89	38.5752	0.232	0.217	0.143	29,364	0.380	2088.48	300.80	1106.68	Miami	2	8267	581	11
PMBHFLFE	BellSouth	102,773	27,926	57,819	17,228	-	1,745	50,595	$	19.26	26.6304	0.272	0.255	0.188	43,409	0.422	3858.24	845.83	1896.90	Miami	2	8254	565	17
PMBHFLMA	BellSouth	109,195	26,556	66,256	16,380	-	1,396	56,320	$	19.56	30.5956	0.243	0.230	0.150	41,537	0.380	3534.32	530.17	1822.91	Miami	2	8264	586	15
PMBHFLTA	BellSouth	49,305	7,139	37,781	4,405	-	464	32,078	$	20.13	13.9021	0.145	0.135	0.089	11,080	0.225	3546.59	316.88	2307.42	Miami	1	8276	588	5
PMPKFLMA	BellSouth	2,353	-	2,353	-	-	-	2,314	$	90.26	*37.6903*	*0.000*	*0.000*	*0.000*	-	0.000	82.45	0.00	81.41		3	7797	1172	0
PNCYFLCA	BellSouth	9,954	709	8,507	438	-	113	7,856	$	27.16	53.5907	0.071	0.060	0.044	1,034	0.104	185.74	8.17	146.59		3	8051	1900	1
PNCYFLMA	BellSouth	65,275	17,891	36,870	10,914	-	1,173	33,341	$	21.61	81.8776	0.271	0.253	0.167	27,432	0.420	787.22	133.30	407.20		2	8058	1914	5
PNSCFLBL	BellSouth	64,278	19,857	32,172	12,249	-	1,223	29,139	$	19.21	31.3303	0.309	0.290	0.191	30,883	0.480	2051.62	390.96	930.06		2	8147	2206	15
PNSCFLFP	BellSouth	73,181	18,537	43,204	11,440	-	1,076	37,758	$	20.43	60.9801	0.253	0.239	0.156	28,901	0.395	1200.08	187.80	619.20		2	8130	2211	9
PNSCFLHC	BellSouth	11,805	1,676	9,096	1,033	-	171	7,774	$	24.95	48.0394	0.142	0.127	0.088	2,535	0.215	245.74	21.50	161.83		2	8142	2222	1
PNSCFLPB	BellSouth	5,922	828	5,083	511	-	84	4,697	$	28.01	31.0838	0.120	0.108	0.074	1,245	0.180	222.89	15.44	157.54		2	8184	2226	0
PNSCFLWA	BellSouth	44,264	8,184	34,286	3,815	-	669	30,540	$	22.26	82.6298	0.140	0.128	0.088	8,380	0.212	706.79	80.92	487.65		2	8155	2208	8
PNVDFLMA	*BellSouth*	18,543	2,905	13,841	1,794	-	236	11,848	$	23.11	40.4139	0.157	0.144	0.097	4,488	0.241	399.51	38.95	250.92	Jax	2	7642	1218	4
PRRNFLMA	BellSouth	112,119	29,185	64,933	18,001	-	2,002	55,505	$	22.29	140.8436	0.260	0.242	0.161	*45,164*	*0.403*	*787.18*	*127.99*	394.55	Miami	2	8397	536	14
PRSNFLFD	BellSouth	3,078	808	2,093	376	-	48	1,806	$	51.95	116.8983	0.188	0.183	0.122	837	0.305	28.36	3.21	18.32		3	7834	1128	0
PTSLFLMA	BellSouth	41,083	5,502	32,189	3,392	-	860	27,382	$	23.55	72.223	0.134	0.112	0.083	8,004	0.195	568.97	46.97	-379.13		3	8080	728	3
PTSLFLSO	BellSouth	19,241	4,272	12,333	2,636	-	311	10,515	$	21.20	15.0689	0.222	0.206	0.137	6,597	0.343	1276.87	174.93	697.79		2	8082	716	2
SSSTFLFE	BellSouth	1,549	301	1,062	186	-	32	1,062	$	51.82	41.9659	0.194	0.174	0.120	455	0.294	37.18	4.46	25.49		3	8019	815	0
SSSTFLMA	BellSouth	15,928	2,086	12,558	1,285	-	260	12,343	$	27.66	50.613	0.131	0.115	0.081	3,110	0.196	313.46	25.29	242.81		3	7998	801	1
SSKYFLMA	BellSouth	2,979	19	2,945	12	-	4	2,527	$	40.88	21.7739	0.006	0.005	0.004	27	0.009	136.82	0.55	116.06		3	8866	832	0
SNFRFLMA	BellSouth	83,461	13,059	42,348	8,054	-	1,258	37,179	$	22.97	123.1877	0.206	0.186	0.127	18,855	0.313	515.18	65.38	301.61		2	7895	1044	11
STAGFLBS	*BellSouth*	*8,828*	*1,275*	*7,568*	*737*	-	150	6,598	$	23.13	8.5165	0.132	0.117	0.082	1,912	0.199	1130.51	92.41	774.85	Jax	2	7707	1153	0
STAGFLMA	BellSouth	33,179	8,622	17,819	5,838	-	751	18,478	$	25.57	187.1257	0.290	0.267	0.178	14,809	0.446	177.31	*31.73*	*88.06*	Jax	3	7695	1171	10
STAGFLSH	BellSouth	15,887	3,011	11,017	1,859	-	295	9,646	$	25.42	82.3853	0.190	0.177	0.117	4,665	0.284	303.39	35.50	184.21	Jax	2	7712	1183	1
STRTFLMA	BellSouth	70,847	18,402	41,195	11,350	-	1,400	35,405	$	22.49	148.1757	0.259	0.240	0.160	28,352	0.400	478.80	76.80	238.94		2	8092	997	8
SYHSFLCC	BellSouth	1,268	43	1,199	26	-	4	1,132	$	97.77	132.5147	0.034	0.031	0.021	85	0.051	9.57	0.20	8.54		3	7977	1040	0
TRENFLMA	BellSouth	4,687	552	3,994	341	-	13	3,906	$	55.27	265.0489	0.113	0.110	0.070	880	0.180	23.83	1.88	18.57		3	7894	1387	0
TTVLFLMA	BellSouth	49,021	9,962	32,915	6,144	-	818	28,776	$	23.07	106.3481	0.203	0.187	0.125	15,280	0.312	452.44	58.71	285.72		3	7885	945	8
VERNFLMA	BellSouth	1,762	-	1,762	-	-	-	1,762	$	69.67	148.7098	0.000	0.000	0.000	-	0.000	11.85	0.00	11.85		3	7874	1372	0
VRBHFLBE	BellSouth	14,117	2,424	10,195	1,497	-	199	8,618	$	22.06	12.8005	0.172	0.158	0.108	3,722	0.284	1120.35	118.80	653.94		2	8017	785	0
VRBHFLMA	BellSouth	58,580	12,485	38,378	7,709	-	1,027	33,359	$	22.80	128.5647	0.213	0.196	0.132	19,177	0.327	462.85	60.91	263.57		2	8025	770	7
WELKFLMA	BellSouth	2,398	-	2,398	-	-	-	2,352	$	48.38	56.2011	*0.000*	*0.000*	*0.000*	-	*0.000*	*41.20*	0.00	40.41		3	7808	1183	0
WPBHFLAN	BellSouth	54,805	21,455	20,115	13,235	-	1,184	18,386	$	18.93	13.3071	0.391	0.370	0.241	33,526	0.612	4118.48	994.58	1381.82	Miami	1	8162	608	15
WPBHFLGA	BellSouth	121,489	21,586	86,590	13,313	-	1,853	73,994	$	20.86	85.38	0.178	0.162	0.110	33,048	0.272	1858.77	263.88	1132.10	Miami	2	8185	608	15
WPBHFLGR	BellSouth	75,761	18,109	44,865	11,787	-	1,092	37,485	$	20.24	89.4524	0.252	0.238	0.158	29,804	0.393	1080.83	169.71	539.72	Miami	2	8142	629	14
WPBHFLHI	BellSouth	105,514	31,217	56,048	18,251	-	1,497	47,262	$	19.40	37.5177	0.298	0.282	0.182	49,971	0.464	2964.60	511.75	1256.36	Miami	2	8171	618	15
WPBHFLLE	BellSouth	61,485	13,234	40,091	8,160	-	1,122	35,086	$	19.96	22.5046	0.215	0.197	0.133	20,272	0.330	2732.11	382.59	1586.30	Miami	2	8179	586	8
WPBHFLRB	BellSouth	68,213	21,474	33,491	13,248	-	1,268	30,186	$	19.04	22.8232	0.315	0.296	0.194	33,453	0.490	3015.18	585.59	1333.41	Miami	2	8147	618	12
WPBHFLRP	BellSouth	56,631	11,570	38,127	7,134	-	1,125	32,222	$	24.70	192.223	0.204	0.184	0.126	17,579	0.309	295.65	37.11	187.63	Miami	3	8185	632	8
WWSPFLHI	*BellSouth*	19,105	2,890	14,432	1,783	-	281	12,618	$	26.43	85.7177	0.151	0.138	0.093	4,382	0.228	278.02	25.85	183.62	Tampa	3	8077	1228	0
WWSPFLSH	BellSouth	43,096	4,895	35,508	2,895	-	663	30,668	$	23.02	72.1594	0.108	0.094	0.067	*6,927*	*0.161*	*567.26*	*40.12*	425.00	Tampa	2	8090	1223	1
YNFNFLMA	BellSouth	2,947	240	2,561	146	-	63	2,373	$	64.98	151.5053	0.081	0.080	0.050	323	0.110	19.45	0.96	15.88		3	7991	1303	0
YNTWFLMA	BellSouth	2,639	344	2,083	212	-	40	1,931	$	57.61	97.3814	0.130	0.115	0.080	516	0.198	27.10	2.16	19.83		3	7991	1303	0
YULEFLMA	BellSouth	3,566	101	3,398	63	-	27	3,141	$	37.85	44.9462	0.028	0.021	0.018	137	0.038	78.21	1.40	69.88	Jax	3	7586	1295	0
																								"Begin Proprietary"
ABDLFLXA	Verizon	19,829	4,415	12,168	3,246	-	344	11,334	$	22.17	37.7853	0.223	0.205	0.164	7,317	0.389	524.78	85.91	299.96		2	8085	1047	
ALFAFLXA	Verizon	18,858	3,159	13,177	2,323	-	350	12,376	$	25.70	56.5065	0.186	0.151	0.124	5,132	0.275	330.21	41.11	218.02	Tampa	3	8183	1122	
ALTRFLXA	Verizon	2,056	84	1,895	68	-	25	1,783	$	51.88	80.4931	0.046	0.034	0.034	138	0.087	34.02	1.14	28.47		3	8114	1014	
ANMRFLXA	Verizon	*7,585*	*983*	*5,991*	*701*	-	113	5,348	$	22.87	4.4535	0.126	0.111	0.092	1,541	0.203	1703.15	157.40	1201.08		1	8282	1142	
BARTFLXA	Verizon	17,940	5,208	8,901	3,831	-	256	8,488	$	21.89	56.8252	0.290	0.276	0.214	8,761	0.486	315.15	*67.30*	*149.07*		2	8121	1035	
BAYUFLXA	Verizon	54,938	14,408	29,937	10,595	-	996	26,808	$	18.75	17.7513	0.262	0.246	0.163	24,035	0.437	3094.87	598.88	1510.20	Tampa	1	8220	1180	
BBPKFLXA	Verizon	3,354	350	2,747	257	-	39	2,448	$	32.09	29.0793	0.104	0.093	0.077	588	0.189	115.34	8.84	84.11		3	8102	979	

SHPKFLXA	Verizon	38.278	18.580	6.031	13.665	-	545	5.323	$ 15.50	6.5547	0.485	0.471	0.357	31.700	0.828	5839.47	2064.78	812.09	Tampa	1	8189	1167	
BRBAFLXA	Verizon	66.585	12.342	45.145	9.078	-	948	40.609	$ 20.89	50.5035	0.185	0.171	0.136	20.472	0.306	1318.03	179.75	804.08		1	8282	1114	
BRJTFLXA	Verizon	843	31	589	23	-	3	565	$ 68.45	34.8026	0.048	0.044	0.036	51	0.079	18.48	0.86	16.23		3	8155	1050	
BRNDFLXA	Verizon	79.512	15.864	51.996	11.650	-	1.431	45.443	$ 21.70	111.4841	0.198	0.181	0.147	26.083	0.325	713.34	104.61	407.89	Tampa	2	8157	1118	
BRTNFLXX	Verizon	51.141	13.802	27.188	10.150	-	886	25.155	$ 20.35	87.3053	0.270	0.252	0.186	23.082	0.451	585.77	116.26	286.13		2	8269	1117	
BYSHFLXA	Verizon	34	20	-	14	-	20	-	$ 150.80	2.1454	0.588	0.000	0.412	14	0.412	15.85	6.53	0.00	Tampa	1	8184	1140	
CLWRFLXA	Verizon	74.732	22.203	36.199	16.330	-	1.484	33.077	$ 18.28	19.8037	0.297	0.277	0.219	37.049	0.496	3773.64	824.59	1670.24	Tampa	1	8282	1203	
CWSDFLXA	Verizon	72.486	17.983	41.257	13.236	-	1.066	38.265	$ 19.07	24.4455	0.234	0.183	0.183	30.183	0.416	2985.21	541.45	1483.50	Tampa	1	8191	1186	
CRWOFLXA	Verizon	79.387	17.346	49.283	12.758	-	1.119	42.537	$ 20.28	42.7383	0.218	0.204	0.161	29.985	0.365	1857.51	286.51	995.29	Tampa	1	8151	1189	
CYGRFLXA	Verizon	15.059	2.436	10.830	1.793	-	215	9.486	$ 23.90	40.8695	0.162	0.147	0.119	4.014	0.267	368.28	43.85	231.99		2	8086	1022	
DNDNFLXA	Verizon	33.423	5.995	23.019	4.409	-	550	20.260	$ 19.42	14.1648	0.178	0.162	0.132	9.824	0.294	2358.58	311.26	1430.31	Tampa	3	8191	1210	
DUNDFLXA	Verizon	6.744	832	5.301	611	-	62	5.082	$ 31.43	59.8509	0.123	0.114	0.091	1.381	0.205	112.88	10.21	84.91		3	8076	1015	
ENWDFLXA	Verizon	27.301	4.402	19.862	3.237	-	526	17.376	$ 22.92	52.6337	0.161	0.142	0.119	7.113	0.261	518.70	61.50	330.13		2	8349	1023	
FHSDFLXA	Verizon	39.457	16.832	9.227	13.378	-	433	5.400	$ 15.85	11.6963	0.475	0.463	0.349	28.777	0.812	3029.76	1086.28	481.68	Tampa	1	8205	1178	
FRSTFLXA	Verizon	5.105	725	3.848	532	-	80	3.714	$ 36.78	80.5218	0.142	0.128	0.104	1.177	0.231	63.40	8.61	46.12		3	8119	970	
GNDYFLXA	Verizon	33.517	7.983	19.645	5.879	-	355	17.299	$ 18.01	11.9938	0.238	0.228	0.175	13.517	0.403	2784.53	490.17	1442.33	Tampa	1	8209	1198	
HDSNFLXA	Verizon	52.048	7.989	38.184	5.875	-	802	34.836	$ 21.72	55.4497	0.153	0.138	0.113	13.082	0.251	838.85	105.85	624.89	Tampa	2	8118	1231	
HOLDFLXA	Verizon	38.509	7.504	25.786	5.519	-	631	22.645	$ 21.96	58.3396	0.199	0.177	0.142	12.362	0.319	695.23	84.80	388.16		2	8118	1065	
HNCYFLXA	Verizon	14.786	2.222	10.910	1.634	-	190	10.450	$ 26.42	80.262	0.150	0.136	0.111	3.866	0.248	183.83	20.35	130.17		2	8061	1025	
HNCYFLXN	Verizon	4.074	215	3.701	158	-	23	3.469	$ 39.10	80.3254	0.053	0.047	0.039	350	0.086	87.53	2.62	87.50		3	8041	1044	
HYPKFLXA	Verizon	34.247	11.145	14.964	8.186	-	522	13.525	$ 17.74	8.0865	0.325	0.310	0.239	18.521	0.550	4235.06	1013.78	1672.91	Tampa	1	8175	1149	
INLKFLXA	Verizon	1.158	121	848	88	-	6	874	$ 71.01	50.2901	0.104	0.099	0.077	204	0.178	23.04	1.77	17.38		3	8086	944	
INRKFLXX	Verizon	25.098	3.735	18.615	2.748	-	338	16.244	$ 19.26	11.422	0.149	0.135	0.109	6.145	0.245	2197.34	240.59	1422.17	Tampa	1	8223	1203	
KYSTFLXA	Verizon	12.605	1.722	8.616	1.267	-	288	8.492	$ 28.84	56.5484	0.137	0.115	0.101	2.721	0.216	222.91	22.41	150.17	Tampa	2	8154	1185	
LGBKFLXA	Verizon	8.183	1.647	5.324	1.212	-	80	4.583	$ 23.48	5.2322	0.201	0.191	0.148	2.779	0.340	1563.97	231.84	872.10		1	8297	1117	
LKALFLXA	Verizon	4.233	624	3.149	460	-	75	2.864	$ 27.15	25.7004	0.147	0.130	0.109	1.009	0.238	164.71	17.90	111.44		2	8075	1040	
LKLDFLXA	Verizon	60.489	16.517	31.837	12.145	-	880	30.260	$ 19.41	41.5273	0.273	0.258	0.201	27.762	0.459	1458.85	292.48	728.68		1	8106	1073	
LKLDFLXE	Verizon	23.308	5.303	14.104	3.901	-	403	13.549	$ 22.21	48.3206	0.228	0.210	0.167	8.801	0.376	482.30	80.72	280.38		2	8099	1082	
LKLDFLXN	Verizon	31.383	4.572	23.460	3.361	-	461	21.158	$ 25.72	108.4489	0.146	0.131	0.107	7.472	0.239	294.52	31.57	198.76		2	8093	1085	
LKWLFLXA	Verizon	16.412	3.834	9.799	2.818	-	290	9.182	$ 23.35	55.0162	0.234	0.216	0.172	6.363	0.358	288.31	51.24	186.80		2	8096	986	
LKWLFLXE	Verizon	4.516	272	4.043	201	-	48	3.956	$ 42.04	88.09	0.060	0.059	0.045	427	0.095	51.27	2.28	41.50		3	8082	967	
LUMNFLXA	Verizon	59.140	11.239	39.833	8.268	-	1.016	35.897	$ 20.09	22.9486	0.190	0.173	0.140	18.491	0.313	2577.06	380.28	1584.23	Tampa	1	8217	1167	
LNLKFLXA	Verizon	9.989	1.977	6.558	1.453	-	214	5.858	$ 31.58	86.4335	0.198	0.178	0.145	3.218	0.322	115.57	16.81	87.75	Tampa	3	8116	1153	
LRGOFLXA	Verizon	53.150	11.453	33.274	8.423	-	887	28.870	$ 18.75	19.8222	0.215	0.199	0.158	16.989	0.357	2967.86	422.79	1499.33	Tampa	1	8213	1201	
LUTZFLXA	Verizon	14.941	3.003	9.729	2.209	-	347	8.475	$ 24.87	42.5489	0.201	0.178	0.148	4.865	0.328	351.15	51.92	198.18	Tampa	2	8134	1189	
MLBYFLXA	Verizon	9.362	2.365	5.205	1.762	-	106	4.997	$ 23.01	29.1697	0.258	0.244	0.188	4.051	0.433	320.95	60.41	171.31		3	8138	1080	
MNLKFLXA	Verizon	8.432	1.005	6.688	738	-	208	6.049	$ 29.99	39.054	0.119	0.095	0.088	1.536	0.182	215.91	18.82	154.89	Tampa	2	8114	1213	
MYCYFLXA	Verizon	1.257	143	1.010	104	-	36	967	$ 99.61	116.8391	0.114	0.086	0.083	212	0.169	16.59	0.88	8.14		3	8256	1032	
NGBHFLXA	Verizon	65.883	12.850	43.466	9.567	-	1.149	38.140	$ 19.99	26.3884	0.197	0.178	0.145	21.328	0.324	2450.24	354.32	1418.48	Tampa	1	8226	1191	
NPRCFLXA	Verizon	66.442	12.361	44.955	9.106	-	1.159	40.480	$ 21.59	51.0184	0.186	0.169	0.137	20.328	0.306	1302.29	178.48	793.42	Tampa	2	8135	1225	
NRPTFLXA	Verizon	17.714	1.394	15.295	1.025	-	272	13.581	$ 25.94	58.0453	0.079	0.063	0.058	2.147	0.121	300.01	17.36	226.28		2	8322	1013	
NRSDFLXA	Verizon	32.075	7.235	19.521	5.319	-	524	17.287	$ 21.17	25.8286	0.226	0.209	0.166	12.030	0.375	1251.53	207.54	674.52		1	8290	1100	
OLDSFLXA	Verizon	17.510	5.038	8.768	3.704	-	309	7.653	$ 20.95	19.7842	0.288	0.270	0.212	8.433	0.482	585.95	187.41	388.73	Tampa	1	8175	1188	
OSPRFLXA	Verizon	8.855	1.481	6.284	1.090	-	138	5.424	$ 23.88	13.5136	0.187	0.152	0.123	2.433	0.275	655.27	80.96	401.37		1	8317	1089	
PKCYFLXA	Verizon	3.927	634	2.828	465	-	84	2.615	$ 41.23	83.7832	0.161	0.145	0.118	1.035	0.264	41.88	4.86	27.89		3	8087	1066	
PLMTFLXA	Verizon	28.755	4.337	19.227	3.191	-	378	17.427	$ 23.44	51.0457	0.162	0.148	0.119	7.152	0.267	524.14	62.51	341.40		2	8258	1121	
PLSLFLXA	Verizon	33.119	5.285	23.948	3.886	-	435	20.782	$ 21.24	18.1838	0.160	0.148	0.117	8.738	0.264	1821.37	213.71	1141.80		1	8271	1131	
PNCRFLXA	Verizon	5.119	866	3.983	490	-	78	3.884	$ 38.52	70.7808	0.130	0.115	0.098	1.077	0.210	72.32	8.92	52.19	Tampa	3	8152	1055	
PNLSFLXA	Verizon	76.442	22.931	36.544	16.867	-	956	32.879	$ 18.73	21.6376	0.300	0.287	0.221	36.812	0.508	3532.83	778.52	1510.29	Tampa	1	8206	1190	
POINFLXA	Verizon	1.722	34	1.663	25	-	10	1.548	$ 43.08	17.6574	0.020	0.014	0.015	49	0.028	97.52	1.42	87.87		3	8041	1007	
PRSHFLXA	Verizon	2.590	354	1.976	260	-	43	1.772	$ 62.58	158.8185	0.137	0.120	0.100	571	0.220	18.33	1.84	11.17		3	8240	1101	
PSDNFLXA	Verizon	51.127	12.556	29.336	9.235	-	795	25.803	$ 19.00	15.9522	0.246	0.230	0.181	20.866	0.411	3205.01	578.82	1617.52	Tampa	1	8230	1189	
PTCYFLXA	Verizon	40.031	9.002	24.409	6.620	-	609	22.655	$ 24.86	136.3223	0.225	0.210	0.165	15.013	0.375	287.33	47.52	182.61	Tampa	3	8128	1098	
RSKNFLXA	Verizon	17.139	2.880	12.140	2.119	-	245	11.025	$ 25.03	46.0602	0.168	0.154	0.124	4.754	0.277	380.36	47.03	244.67	Tampa	3	8214	1118	
SARKFLXA	Verizon	4.080	1.111	2.152	817	-	192	1.878	$ 17.33	1.8014	0.272	0.247	0.200	1.828	0.448	2264.91	453.54	1041.41		1	8303	1099	
SEKYFLXA	Verizon	13.240	1.706	10.278	1.256	-	188	8.883	$ 20.89	7.352	0.129	0.116	0.095	2.776	0.210	1800.87	170.84	1205.52		1	8310	1088	
SGBEFLXA	Verizon	21.828	5.438	12.486	3.996	-	410	11.098	$ 19.02	6.3658	0.248	0.229	0.182	9.022	0.411	3443.03	627.43	1737.53	Tampa	1	8241	1174	
SKWYFLXA	Verizon	41.126	10.421	23.043	7.665	-	843	21.568	$ 19.13	14.4855	0.253	0.233	0.186	17.243	0.419	2639.32	529.15	1485.84	Tampa	2	8230	1185	
SLSPFLXA	Verizon	51.848	12.633	29.923	9.290	-	1.008	27.125	$ 18.71	18.9158	0.244	0.224	0.179	20.917	0.403	2740.88	491.12	1435.99	Tampa	1	8159	1158	
SMNLFLXA	Verizon	29.382	6.001	17.968	4.413	-	585	16.735	$ 16.50	12.0866	0.211	0.192	0.155	9.549	0.347	2348.18	365.11	1384.57	Tampa	2	8184	1152	
SNSPFLXA	Verizon	17.891	1.892	14.807	1.392	-	196	12.719	$ 22.91	17.2329	0.106	0.095	0.078	3.088	0.173	1038.18	80.78	738.06	Tampa	1	8144	1207	
SPBGFLXA	Verizon	66.528	19.778	31.206	14.544	-	1.034	29.504	$ 18.34	18.8522	0.302	0.286	0.222	33.288	0.508	3518.82	780.58	1583.36	Tampa	1	8225	1159	
SPBGFLXB	Verizon	25.949	4.009	19.980	2.950	-	293	17.529	$ 19.65	14.2737	0.149	0.138	0.109	8.988	0.247	1687.36	206.60	1227.00	Tampa	1	8238	1159	
SPRGFLXA	Verizon	39.459	7.904	29.741	5.814	-	664	22.272	$ 22.00	58.1366	0.200	0.197	0.147	13.034	0.330	702.91	103.57	386.75		2	8290	1078	
SRSTFLXA	Verizon	64.360	20.598	28.633	15.149	-	1.481	25.777	$ 17.88	18.7879	0.320	0.297	0.235	34.256	0.532	3426.67	806.32	1372.00		1	8296	1084	
SSDSFLXA	Verizon	60.868	14.387	35.900	10.581	-	1.312	31.249	$ 21.20	62.8634	0.236	0.215	0.174	23.656	0.388	734.38	127.86	377.02		1	8306	1084	
STGRFLXA	Verizon	63.718	12.954	41.236	9.528	-	914	35.733	$ 20.16	35.57	0.203	0.189	0.150	21.568	0.338	1791.34	267.57	1004.56	Tampa	1	8178	1208	
SWTHFLXA	Verizon	66.701	19.374	35.075	14.252	-	971	31.167	$ 19.12	24.8429	0.282	0.268	0.207	32.855	0.475	2785.42	573.69	1254.56	Tampa	1	8174	1170	
TAMPFLXE	Verizon	65.358	27.365	17.835	20.138	-	783	16.888	$ 18.21	50.7923	0.419	0.407	0.308	46.730	0.715	1286.77	398.48	328.16	Tampa	2	8180	1135	
TAMPFLXX	Verizon	40.409	16.910	7.682	13.907	-	444	7.054	$ 15.29	8.4297	0.467	0.456	0.343	32.373	0.789	7458.79	2561.28	1298.15	Tampa	1	8172	1147	
THNTFLXA	Verizon	8.850	1.557	5.948	1.145	-	140	5.612	$ 30.15	57.4908	0.190	0.184	0.132	2.582	0.296	150.49	19.82	97.63	Tampa	3	8136	1132	
TMTRFLXA	Verizon	46.230	8.924	31.007	7.298	-	647	27.617	$ 18.62	19.8201	0.208	0.192	0.151	18.576	0.344	2458.19	372.02	1407.59	Tampa	1	8150	1145	
TRSPFLXA	Verizon	56.178	10.801	37.431	7.944	-	1.006	33.275	$ 21.05	47.0528	0.192	0.174	0.141	17.739	0.316	1199.89	188.83	707.18	Tampa	2	8184	1216	
UNVRFLXA	Verizon	48.848	13.807	34.881	10.158	-	812	29.830	$ 17.45	15.0372	0.283	0.272	0.208	23.453	0.480	2706.07	583.17	1310.07	Tampa	1	8150	1153	
VENCFLXA	Verizon	38.220	6.835	24.359	5.026	-	647	21.508	$ 21.19	41.833	0.189	0.171	0.139	11.214	0.310	868.95	120.72	518.51		1	8332	1053	
VENCFLXS	Verizon	25.429	3.150	19.962	2.317	-	362	17.295	$ 22.36	27.8879	0.124	0.110	0.091	5.105	0.201	911.83	83.08	620.16		2	8357	1041	
WIMMFLXA	Verizon	14.064	1.893	10.779	1.392	-	135	9.551	$ 28.78	110.9137	0.135	0.125	0.099	3.150	0.224	126.80	12.55	86.11	Tampa	3	8205	1101	
WLCHFLXA	Verizon	13.864	2.818	9.122	1.924	-	238	7.965	$ 26.95	61.6218	0.182	0.174	0.141	4.304	0.315	221.74	31.22	128.28	Tampa	2	8110	1159	
WLCRFLXA	Verizon	53.529	9.842	39.648	7.241	-	772	32.557	$ 19.37	16.8379	0.184	0.169	0.135	18.311	0.304	3223.36	435.21	1956.50	Tampa	1	8185	1148	
WNHNFLXC	Verizon	45.190	10.157	27.561	7.472	-	842	25.621	$ 20.62	56.5681	0.225	0.206	0.165	18.787	0.371	798.89	132.09	462.92		2	8087	1033	
WSSDFLXA	Verizon	64.495	24.551	21.886	18.058	-	1.159	20.118	$ 17.07	15.5222	0.381	0.363	0.280	41.450	0.843	4155.02	1183.37	1298.08	Tampa	1	8175	1156	
YBCTFLXA	Verizon	25.995	10.791	7.268	7.936	-	463	7.253	$ 16.80	13.1118	0.415	0.397	0.305	18.264	0.703	1962.57	605.28	553.17	Tampa	2	8188	1145	
																							End Proprietary
ALFRFLXA	Central Tel Co Of Florida	1.580	187	1.348	87	-	-	1.322	$ 89.78	112.2876	0.106	0.106	0.042	234	0.148	14.67	0.80	11.78			7830	1925	1
BAKRFLXA	Central Tel Co Of Florida	2.884	383	2.139	151	-	-	2.122	$ 68.64	174.8486	0.144	0.144	0.057	534	0.200	15.25	0.86	12.15			8027	2150	1
BNFYFLXA	Central Tel Co Of Florida	7.535	1.860	4.930	745	-	206	4.654	$ 44.83	207.4789	0.247	0.220	0.099	2.398	0.318	36.32	3.59	22.43			7908	1963	2
CPVLFLXA	Central Tel Co Of Florida	4.292	104	4.146	42	-	-	4.017	$ 90.30	145.3902	0.024	0.024	0.010	146	0.034	28.53	0.28	27.63			7936	1703	0
CHLKFLXA	Central Tel Co Of Florida	1.474	-	1.474	-	-	-	1.471	$ 97.77	135.0702	0.000	0.000	0.000	-	0.000	10.91	0.00	10.89			7771	1598	0
CRVWFLXA	Central Tel Co Of Florida	20.923	6.395	11.987	2.561	-	-	11.721	$ 24.65	101.338	0.308	0.308	0.122	8.996	0.428	208.47	25.27	115.66			8025	2128	5
CTDLFLXA	Central Tel Co Of Florida	1.128	92	1.000	36	-	-	1.000	$ 60.40	53.8405	0.082	0.082	0.032	128	0.113	20.95	0.67	18.57			7810	1935	0
DESTFLXA	Central Tel Co Of Florida	6.217	1.348	6.330	539	-	1.314	5.954	$ 23.38	10.4432	0.164	0.004	0.069	573	0.070	788.83	51.81	570.13			8085	2060	1
DFSPFLXA	Central Tel Co Of Florida	9.326	2.288	6.120	917	-	-	6.120	$ 40.12	198.0709	0.245	0.245	0.098	3.206	0.344	46.85	4.81	30.74			7982	2047	3
ELFDFLXA	Central Tel Co Of Florida	1.943	919	658	365	-	39	574	$ 48.38	48.5752	0.473	0.453	0.189	1.248	0.842	40.00	7.58	11.82			8078	2098	4
FRPTFLXA	Central Tel Co Of Florida	2.297	200	2.017	80	-	-	2.016	$ 93.88	127.2923	0.087	0.087	0.035	260	0.122	18.05	0.83	15.84			8035	2028	1
FTWBFLXA	Central Tel Co Of Florida	34.482	14.573	14.356	5.753	-	1.617	12.417	$ 15.02	10.7409	0.417	0.384	0.187	18.309	0.531	3210.35	535.62	1158.05			8094	2097	9
FTWBFLXB	Central Tel Co Of Florida	29.733	10.341	15.252	4.140	-	-	14.841	$ 19.23	61.4348	0.348	0.348	0.139	14.481	0.487	483.98	67.39	238.32			8090	2104	7
FTWBFLXC	Central Tel Co Of Florida	3.779	848	2.595	338	-	-	2.522	$ 22.77	7.5874	0.224	0.224	0.058	1.184	0.313	498.06	44.55	332.39			8105	2119	2
GDRGFLXA	Central Tel Co Of Florida	1.556	213	1.258	85	-	-	1.247	$ 64.21	77.4136	0.137	0.137	0.055	286	0.192	20.10	1.10	16.11			7882	1866	1
GLDLFLXA	Central Tel Co Of Florida	907	15	586	8	-	-	585	$ 111.28	75.4993	0.025	0.025	0.010	21	0.035	8.04	0.08	7.75			7995	2062	0
GNVLFLXA	Central Tel Co Of Florida	1.060	27	1.022	11	-	-	1.018	$ 114.38	158.9892	0.025	0.025	0.010	36	0.036	8.87	0.07	8.40			7810	1611	0
GNWDFLXA	Central Tel Co Of Florida	1.387	134	1.180	53	-	-	1.178	$ 80.67	122.733	0.096	0.096	0.039	167	0.137	11.14	0.43	8.60			7877	1907	1
HRFDFLXA	Central Tel Co Of Florida	321	41	264	16	-	-	247	$ 90.39	4.7338	0.126	0.126	0.050	57	0.178	97.81	3.36	52.18			8098	2115	1

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SSPRFLXA	United Tel Co Of Florida	1,399	106	1,218	75	-	19	1,072	$ 43.16	24.848	0.078	0.062	0.054	182	0.116	56.30	3.02	43.14		7636	1189	9	
STCDFLXA	United Tel Co Of Florida	26,676	4,681	17,647	3,348	-	702	15,652	$ 26.78	266.9954	0.182	0.155	0.130	7,327	0.285	96.17	12.54	58.62		8000	983	5	
SVSPFLXA	United Tel Co Of Florida	7,088	1,078	5,218	770	-	118	4,582	$ 25.45	54.3199	0.153	0.136	0.108	1,730	0.245	130.09	14.18	84.36		7695	1218	2	
SVSSFLXA	United Tel Co Of Florida	8,849	1,257	5,894	898	-	123	5,774	$ 23.80	34.7743	0.142	0.128	0.101	2,032	0.230	254.47	25.82	166.04		7913	1194	2	
TLCHFLXA	United Tel Co Of Florida	4,507	401	3,821	285	-	72	3,519	$ 34.47	57.8258	0.089	0.073	0.063	814	0.136	77.94	4.93	50.66	Tampa	8046	1157	1	
TVRSFLXA	United Tel Co Of Florida	17,892	3,479	11,851	2,451	-	420	10,343	$ 22.14	53.9476	0.195	0.171	0.139	5,531	0.311	329.89	45.89	191.72		7840	1119	4	
UMTLFLXA	United Tel Co Of Florida	9,775	1,173	7,783	839	-	257	7,088	$ 39.05	178.9065	0.120	0.094	0.068	1,755	0.180	64.33	4.66	39.40		7911	1123	2	
WCHLFLXA	United Tel Co Of Florida	8,385	1,934	5,068	1,383	-	228	4,932	$ 37.91	188.5925	0.231	0.203	0.165	3,089	0.368	44.46	7.33	28.15		8184	995	3	
WLSTFLXA	United Tel Co Of Florida	6,392	1,015	4,850	727	-	123	4,436	$ 48.18	218.3332	0.159	0.140	0.114	1,818	0.253	28.28	3.33	20.32		7901	1301	2	
WLWDFLXA	United Tel Co Of Florida	10,191	1,122	8,267	802	-	120	7,801	$ 30.03	100.658	0.110	0.098	0.079	1,804	0.177	101.85	8.02	75.87		7990	1177	2	
WNDRFLXA	United Tel Co Of Florida	8,281	1,584	5,546	1,141	-	178	4,640	$ 22.76	30.8048	0.182	0.171	0.138	2,556	0.309	289.79	37.17	151.17		7978	1053	3	
WNGRFLXA	United Tel Co Of Florida	32,056	9,572	15,636	6,846	-	709	14,105	$ 21.85	100.8791	0.299	0.277	0.214	15,718	0.490	317.77	87.86	139.82		7970	1089	7	
WNPKFLXA	United Tel Co Of Florida	75,498	28,700	28,277	20,521	-	1,879	22,702	$ 16.56	22.7254	0.380	0.356	0.272	47,342	0.627	3322.19	903.00	998.87		7942	1034	15	
ZLSPFLXA	United Tel Co Of Florida	1,411	8	1,398	6	-	-	1,387	$ 82.20	121.0796	0.008	0.006	0.004	15	0.011	11.85	0.05	11.29		8193	986	0	

Joseph Gillan
Experience and Qualifications

Education

B.A. Economics, University of Wyoming, 1978.
M.A. Economics, University of Wyoming, 1979.

Professional History

Gillan Associates, Economic Consulting (1987-Present)

In 1987, Mr. Gillan established a private consulting practice specializing in the economic evaluation of regulatory policies and business opportunities in the telecommunications industry. Since forming his consulting practice in 1987, Mr. Gillan has advised business clients as diverse as AT&T and TDS Telecom (a small entrant seeking the authority to compete in a rural area). Among other responsibilities, Mr. Gillan is the principal economic consultant to the Competitive Telecommunications Association, the national trade association representing competitive carrier interests.

Vice President, US Switch, Inc. (1985-1987)

Responsible for crafting the US Switch business plan to gain political acceptance and government approval. US Switch pioneered the concept of "centralized equal access," which positioned independent local telephone companies for a competitive long distance market. While with US Switch, Mr. Gillan was responsible for contract negotiation/marketing with independent telephone companies and project management for the company's pilot project in Indiana.

Policy Director/Market Structure - Illinois Commerce Commission (1980-1985)

Primary staff responsibility for the policy analysis of issues created by the emergence of competition in regulated markets, in particular the telecommunications industry. Mr. Gillan served on the staff subcommittee for the NARUC Communications Committee and was appointed to the Research Advisory Council overseeing NARUC's research arm, the National Regulatory Research Institute.

Mountain States Telephone Company - Demand Analyst (1979)

Performed statistical analysis of the demand for access by residential subscribers.

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 105
COMPANY/ FCCA/Gillan
WITNESS: JPG-1 thru JPG-9
DATE: 12/24-22/04

Professional Appointments

Guest Lecturer	School of Laws, University of London, 2002
Advisory Council	New Mexico State University, Center for Regulation, 1985 – Present
Faculty	Summer Program, Public Utility Research and Training Institute, University of Wyoming, 1989-1992
Contributing Editor	Telematics: The National Journal of Communications Business and Regulation, 1985 - 1989
Chairman	Policy Subcommittee, NARUC Staff Subcommittee on Communications, 1984-1985
Advisory Committee	National Regulatory Research Institute, 1985
Distinguished Alumni	University of Wyoming, 1984

Selected Publications

"The Local Exchange: Regulatory Responses to Advance Diversity", with Peter Rohrbach, Public Utilities Fortnightly, July 15, 1994.

"Reconcentration: A Consequence of Local Exchange Competition?", with Peter Rohrbach, Public Utilities Fortnightly, July 1, 1994.

"Diversity or Reconcentration?: Competition's Latent Effect", with Peter Rohrbach, Public Utilities Fortnightly, June 15, 1994.

"Consumer Sovereignty: An Proposed Approach to IntraLATA Competition", Public Utilities Fortnightly, August 16, 1990.

"Reforming State Regulation of Exchange Carriers: An Economic Framework", Third Place, University of Georgia Annual Awards Competition, 1988, Telematics: The National Journal of Communications, Business and Regulation, May, 1989.

"Regulating the Small Telephone Business: Lessons from a Paradox", Telematics: The National Journal of Communications, Business and Regulation, October, 1987.

"Market Structure Consequences of IntraLATA Compensation Plans", Telematics: The National Journal of Communications, Business and Regulation, June, 1986.

Selected Publications

"Universal Telephone Service and Competition on the Rural Scene", Public Utilities Fortnightly, May 15, 1986.

"Strategies for Deregulation: Federal and State Policies", with Sanford Levin, Proceedings, Rutgers University Advanced Workshop in Public Utility Economics, May 1985.

"Charting the Course to Competition: A Blueprint for State Telecommunications Policy", Telematics: The National Journal of Communications Business, and Regulation, with David Rudd, March, 1985.

"Detariffing and Competition: Options for State Commissions", Proceedings of the Sixteenth Annual Conference of Institute of Public Utilities, Michigan State University, held in Williamsburg, Virginia, December 1984.

Listing of Expert Testimony – Court Proceedings

Dwayne P. Smith, Trustee v. Lucent Technologies (Civil Action No. 02-0481 Eastern District of Louisiana)(Entry and CLEC Performance)

BellSouth Intellectual Property v. eXpeTel Communications (Civil Action No. 3:02CV134WS Southern District of Miss.)(Service definition, industry structure and Telecom Act of 1996)

CSX Transportation Inc. v. Qwest International, Inc. (Case No. 99-412-Civ-J-21C Middle District of Florida) (industry structure and wholesale contract arrangements).

Winn v. Simon (No. 95-18101 Hennepin Cty. Dist. Ct.)(risk factors affecting small long distance companies)

American Sharecom, Inc. v. LDB Int'l Corp. (No. 92-17922, Hennepin County District Court) (risk factors affecting small long distance companies)

World Com, Inc. et al. v. Automated Communications, Inc. et al. (No. 3:93-CV-463WS, S.D. Miss.) (damages)

International Assignments

Recovering Contribution: Lessons from the United States' Experience, Report submitted to the Canadian Radio-television and Telecommunications Commission on behalf of CallNet.

Forcing a Square Peg into a Round Hole: Applying the Universal Service Cost Model in the Cayman Islands, Analysis Presented to the Government of the Cayman Islands on behalf of Cable and Wireless.

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
Florida	Docket No. 030851-TP	Switching Impairment	FCCA
Ohio	Case 03-2040-TP-COI	Switching Impairment	AT&T
Wisconsin	05-TI-908	Switching Impairment	AT&T
Washington	UT–023003	Local Switching Rate Structure	AT&T/MCI
Arizona	T-00000A-00-0194	UNE Cost Proceeding	AT&T/WCOM
Illinois	Docket 02-0864	UNE Cost Proceeding	AT&T
North Carolina	P-55, Sub 1013 P-7, Sub 825 P-19, Sub 277	Price Cap Proceedings	CLEC Coalition
Kansas	02-GIMT-555-GIT	Price Deregulation	Birch/AT&T
Texas	Docket No. 24542	Cost Case	AT&T
North Carolina	Docket P-100, Sub 133d	UNE Cost Proceeding	CLEC Coalition
Georgia	Docket No. 11901-U	DSL Tying Arrangement	WorldCom
Tennessee	Docket No. 02-00207	UNE Availability/Unbundling	CLEC Coalition
Utah	Docket No. 01-049-85	Local Switching Costs/Price	AT&T
Tennessee	Docket No. 97-00309	Section 271 Compliance	CLEC Coalition
Illinois	Docket No. 01-0662	Section 271 Compliance	AT&T
Georgia	Docket No. 14361-U	UNE Availability/Unbundling	CLEC Coalition
Florida	Docket 020507-TL	Unlawful DSL Bundling	CLEC Coalition
Tennessee	Docket No. 02-00207	UNE Availability/Unbundling	CLEC Coalition
Georgia	Docket No. 14361-U	UNE Costs and Economics	AT&T/WorldCom
Florida	Docket 990649-TP	UNE Cost and Price Squeeze	AT&T/WorldCom
Minnesota	P-421/CI-01-1375	Local Switching Costs/Price	AT&T
Florida	Docket 000075-TP	Intercarrier Compensation	WorldCom
Texas	Docket No. 24542	Unbundling and Competition	CLEC Coalition
Illinois	Docket 00-0732	Certification	Talk America
Indiana	Cause No. 41998	Structural Separation	CLEC Coalition
Illinois	Docket 01-0614	State Law Implementation	CLEC Coalition
Florida	Docket 96-0768	Section 271 Application	SECCA

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
Kentucky	Docket 2001-105	Section 271 Application	SECCA
FCC	CC Docket 01-277	Section 271 for GA and LA	AT&T
Illinois	Docket 00-0700	Shared Transport/UNE-P	CLEC Coalition
North Carolina	Docket P-55 Sub 1022	Section 271 Application	SECCA
Georgia	Docket 6863-U	Section 271 Application	SECCA
Alabama	Docket 25835	Section 271 Application	SECCA
Michigan	Case No. U-12622	Shared Transport/UNEs	AT&T
Ohio	Case 00-942-TP-COI	Section 271 Application	AT&T
Alabama	Docket No. 25835	Structural Separation	SECCA
Alabama	Docket No. 27821	UNE Cost Proceeding	ITC^Deltacom
Louisiana	Docket U-22252	Section 271 Application	SECCA
Mississippi	Docket 97-AD-321	Section 271 Application	SECCA
South Carolina	Docket 2001-209-C	Section 271 Application	SECCA
Colorado	Docket 99A-577T	UNE Cost Proceeding	AT&T
Arizona	Case T-00000A-00-0194	UNE Cost Proceeding	AT&T
Washington	Docket UT-003013	Line Splitting and Combinations	AT&T
Ohio	Case 00-1368-TP-ATA Case 96-922-TP-UNE	Shared Transport	AT&T/PACE
North Carolina	P-100 Sub 133j	Standard Collocation Offering	CLEC Coalition
Florida	Docket 990649-TP	UNE Cost Proceeding	CLEC Coalition
Michigan	Case No. U-12320	UNE Combinations/Section 271	AT&T
Florida	Docket 00-00731	Section 251 Arbitration	AT&T
Georgia	Docket 5825-U	Universal Service Fund	CLEC Coalition
South Carolina	97-239-C	Universal Service Fund	CLEC Coalition
Texas	PUC Docket 22289/95	ETC Designation	Western Wireless
Washington	Docket UT-003013	UNE Costs and Local Competition	AT&T
New York	Docket 98-C-1357	UNE Cost Proceeding	Z-Tel
Colorado	Docket 00K-255T	ETC Designation	Western Wireless
Kansas	99-GCCZ-156-ETC	ETC Designation	Western Wireless

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
New Mexico	98-484-TC	ETC Designation	Western Wireless
Illinois	Docket 99-0535	Cost of Service Rules	AT&T/MCI
Colorado	Docket 00-B-103T	U S WEST Arbitration	ICG Comm.
North Dakota	PU-1564-98-428	ETC Designation	Western Wireless
Illinois	Docket 98-0396	Shared Transport Pricing	AT&T/Z-Tel
Florida	Docket 981834-TP	Collocation Reform	CLEC Coalition
Pennsylvania	M-00001353	Structural Separation of Verizon	CompTel/ATX
Illinois	Docket 98-0860	Competitive Classification of Ameritech's Business Services	CompTel/ AT&T
Georgia	Docket 6865-U	Complaint re: Combinations	MCIWorldcom
Virginia	Case No. PUC 990100	GTE/Bell Atlantic Merger	AT&T
Florida	Docket 990649-TP	UNE Cost and Pricing	CLEC Coalition
Nebraska	Application C-1960/PI-25	IP Telephony and Access Charges	ICG Communications
Georgia	Docket 10692-U	Pricing of UNE Combinations	CLEC Coalition
Colorado	Docket 99F-141T	IP Telephony and Access	Qwest
California	Case A. 98-12-005	GTE/Bell Atlantic Merger	AT&T/MCI
Indiana	Case No. 41255	SBC/Ameritech Merger	AT&T
Illinois	Docket 98-0866	GTE/Bell Atlantic Merger	AT&T
Ohio	Case 98-1398-TP-AMT	GTE/Bell Atlantic Merger	AT&T
Tennessee	Docket 98-00879	BellSouth BSE	SECCA
Missouri	Case TO-99-227	§ 271 Review: SBC	AT&T
Colorado	Docket 97A-540T	Stipulated Price Cap Plan/USF	CLEC Coalition
Illinois	ICC Docket 98-0555	SBC/Ameritech Merger	AT&T
Ohio	Case 98-1082-TP-AMT	SBC/Ameritech Merger	AT&T
Florida	Docket 98-1121-TP	UNE Combinations	MCI WorldCom
Georgia	6801-U	§ 251 Arbitration: BellSouth	AT&T
Florida	92-0260-TL	Rate Stabilization Plan	FIXCA
South Carolina	Docket 96-375	§ 251 Arbitration: BellSouth	AT&T
Kentucky	Docket 96-482	§ 251 Arbitration: BellSouth	AT&T

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
Wisconsin	05-TI-172/5845-NC-101	Rural Exemption	TDS Metro
Louisiana	U-22145	§ 251 Arbitration: BellSouth	AT&T
Mississippi	96-AD-0559	§ 251 Arbitration: BellSouth	AT&T
North Carolina	P-140-S-050	§ 251 Arbitration: BellSouth	AT&T
Tennessee	96-01152	§ 251 Arbitration: BellSouth	AT&T
Arizona		§ 251 Arbitration: US West	AT&T Wireless
Florida	96-0883-TP	§ 251 Arbitration: BellSouth	AT&T
Montana	D96.11.200	§ 251 Arbitration: US West	AT&T
North Dakota	PU-453-96-497	§ 251 Arbitration: US West	AT&T
Texas	Docket 16226	§ 251 Arbitration: SBC	AT&T/MCI
Alabama	Docket 25703	§ 251 Arbitration: BellSouth	AT&T
Alabama	Docket 25704	§ 251 Arbitration: GTE	AT&T
Florida	96-0847-TP	§ 251 Arbitration: GTE	AT&T
Kentucky	Docket 96-478	§ 251 Arbitration: GTE	AT&T
North Carolina	P-140-S-51	§ 251 Arbitration: GTE	AT&T
Texas	Docket 16630	§ 251 Arbitration: SBC	LoneStar Net
South Carolina	Docket 96-358	§ 251 Arbitration: GTE	AT&T
Texas	Docket 16251	§ 271 Review: SBC	AT&T
Oklahoma	97-0000560	§ 271 Review: SBC	AT&T
Kansas	97-SWBT-411-GIT	§ 271 Review: SBC	AT&T
Alabama	Docket 25835	§ 271 Review: BellSouth	AT&T
Florida	96-0786-TL	§ 271 Review: BellSouth	FCCA
Georgia	Docket 6863-U	§ 271 Review: BellSouth	AT&T
Kentucky	Docket 96-608	§ 271 Review: BellSouth	AT&T
Louisiana	Docket 22252	§ 271 Review: BellSouth	AT&T
Texas	Docket 16226	UNE Cost	AT&T/MCI
Colorado	97K-237T	Access Charges	AT&T
Mississippi	97-AD-321	§ 271 Review: BellSouth	AT&T
North Carolina	P-55 Sub 1022	§ 271 Review: BellSouth	AT&T

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
South Carolina	97-101-C	§ 271 Review: BellSouth	AT&T
Tennessee	97-00309	§ 271 Review: BellSouth	AT&T
Tennessee	96-00067	Wholesale Discount	AT&T
Tennessee	97-00888	Universal Service	AT&T
Texas	Docket 15711	GTE Certification as CLEC	AT&T
Kentucky	97-147	BellSouth BSE Certification	SECCA
Florida	97-1056-TX	BellSouth BSE Certification	FCCA
North Carolina	P691 Sub O	BellSouth BSE Certification	SECCA
Florida	98-0696-TP	Universal Service	FCCA
New York	97-C-271	§ 271 Review: Bell Atlantic	CompTel
Montana	D97.5.87	§ 271 Review: US West	AT&T
New Mexico	97-106-TC	§ 271 Review: US West	AT&T/CompTel
Nebraska	C-1830	§ 271 Review: US West	AT&T
Alabama	Docket 25980	Universal Service	AT&T
Kentucky	Admin 360	Universal Service	AT&T
North Carolina	P100-S133B	Universal Service	AT&T
North Carolina	P100-S133G	Universal Service	AT&T
Illinois	95-0458/0531	Combined Network Elements	WorldCom
Illinois	96-0486/0569	Network Element Cost/Tariff	WorldCom
Illinois	96-0404	§ 271 Review: Ameritech	CompTel
Florida	97-1140-TP	Combining Network Elements	AT&T/MCI
Pennsylvania	A-310203-F0002	Local Competition	CompTel
Georgia	6415-U/6527-U	Local Competition	CompTel
Illinois	98-NOI-1	Structural Separation	CompTel/Qwest
New York	98-C-690	Combining Network Elements	CompTel
Texas	Docket 17579	§ 251 Arbitration: SBC (2nd)	AT&T/MCI
Texas	Docket 16300	§ 251 Arbitration: GTE	AT&T
Florida	Docket 920260-TL	Price Cap Plan	IXC Coalition
Louisiana	Docket U22020	Resale Cost Study	AT&T/LDDS

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
California	Docket R.93-04-003	Rulemaking on Open Network Architecture	LDDS/WorldCom
Tennessee	Docket 96-00067	Avoidable Cost/Resale Discount	AT&T
Georgia	Docket 6537-U	Unbundled Loop Pricing	CompTel
Georgia	Docket 6352	Rules for Network Unbundling	AT&T
Pennsylvania	Docket A-310203F0002	Introducing Local Competition	CompTel
Florida	Docket 95-0984-TP	Interconnection Terms and Prices	AT&T
Kentucky	Case No. 365	Local Competition/Universal Service	WorldCom
Mississippi	Docket 95-UA-358	Introducing Local Competition	AT&T/WorldCom
Florida	Docket 95-0984-TP	Interconnection Terms and Prices	AT&T
Illinois	Docket 95-0458	Wholesale Local Services	WorldCom
California	Dockets R.95-04-043/044	Local Competition	WorldCom
Florida	Docket 95-0696-TP	Universal Service and Carrier of Last Resort Obligations	IXC Coalition
Georgia	Docket 5755-U	Removing Subsidies from Access	AT&T
South Carolina	Docket 95-720-C	Price Regulation	ACSI
Michigan	Case No. U-10860	Interconnection Agreement	WorldCom
Mississippi	Docket 95-US-313	Price Regulation Plan	WorldCom/AT&T
Missouri	Case TR-95-241	Expanded Local Calling	MCI
Washington	Docket UT-941464	Interconnection Complaint	IXC Coalition
Maryland	Case No. 8584 – Phase II	Introducing Local Competition	WorldCom
Massachusetts	DPU 94-185	Introducing IntraLATA and Local Competition	WorldCom
Wisconsin	Docket 6720-TI-111	IntraLATA Equal Access	Schneider Com.
North Carolina	Docket P-100, Sub 126	Expanded Local Calling	LDDS
Georgia	Docket 5319-U	IntraLATA Equal Access	MCI/LDDS
Mississippi	Docket 94-UA-536	Price/Incentive Regulation	LDDS

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
Georgia	Docket 5258-U	Price Regulation Plan	LDDS
Florida	Docket 93-0330-TP	IntraLATA Equal Access	IXC Coalition
Alabama	Docket 23260	Access Transport Rate Structure	LDDS
New Mexico	Docket 94-204-TC	Access Transport Rate Structure	LDDS
Kentucky	Docket 91-121	Alternative Regulation Proposal	Sprint, AT&T and LDDS
Texas	Docket 12784	Access Transport Rate Structure	IXC Coalition
Illinois	Docket 94-0096	Customer's First Proposal	LDDS
Louisiana	Docket U-17949-D	Alternative Regulation	AT&T, Sprint and LDDS
New York	Case No. 93-C-0103	Rochester Plan-Wholesale/Retail	LDDS
Illinois	Dockets 94-0043/46	Access Transport Rate Structure	IXC Coalition
Florida	Docket 92-1074-TP	Expanded Interconnection	Intermedia
Louisiana	Docket U-20800	Access Transport Rate Structure	LDDS
Tennessee	Docket 93-008865	Access Transport Rate Structure	LDDS
Ohio	Docket 93-487-TP-ALT	Alternative Regulation	Allnet/LCI/LDDS
Mississippi	Docket 93-UN-0843	Access Transport Rate Structure	LDDS
South Carolina	Docket 93-756-C	Access Transport Rate Structure	IXC Coalition
Georgia	Docket 4817-U	Access Transport Rate Structure	IXC Coalition
Louisiana	Docket U-20710	Pricing and Imputation Standards	LDDS
Ohio	Case 93-230-TP-ALT	Alternative Regulation	MCI/Allnet/LCI
New Mexico	Docket 93-218-TC	Expanded Local Calling	LDDS
Illinois	Docket 92-0048	Alternative Regulation	LDDS
Mississippi	Docket 93-UN-0038	Banded Rates for Toll Service	LDDS
Florida	Docket 92-1074-TP	Expanded Interconnection	Florida Coalition
Louisiana	Docket U-20237	Preferential Toll Pricing	LDDS, MCI and AT&T
South Carolina	Docket 93-176-C	Expanded Local Calling	LDDS & MCI
Mississippi	Case 89-UN-5453	Rate Stabilization Plan	LDDS & ATC

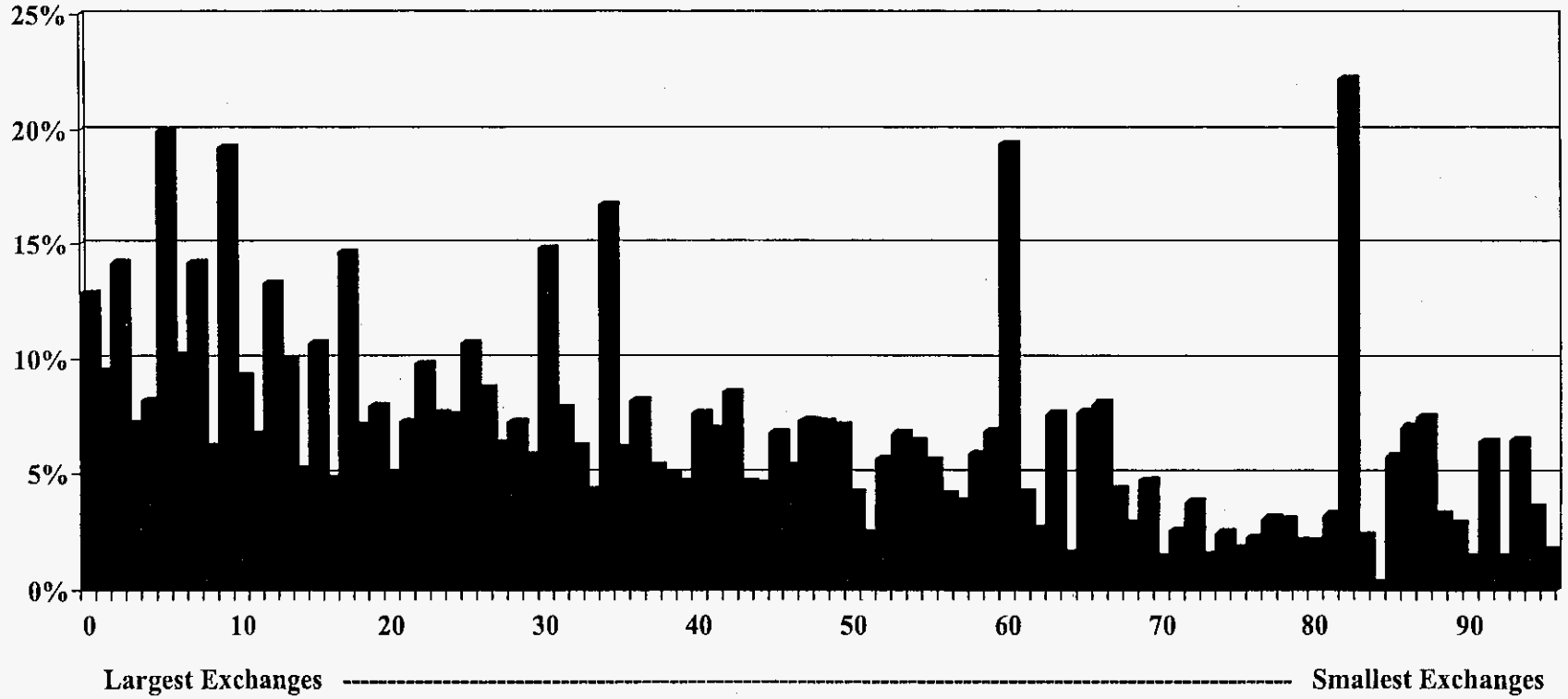
Summary of Expert Testimony and Affidavits – Regulatory Proceedings

State	Docket/Case	Topic	Sponsor(s)
Illinois	Docket 92-0398	Local Interconnection	CLEC Coalition
Louisiana	Docket U-19993	Payphone Compensation	MCI
Maryland	Docket 8525	Payphone Compensation	MCI
South Carolina	Docket 92-572-C	Payphone Compensation	MCI
Georgia	Docket 4206-U	Payphone Compensation	MCI
Delaware	Docket 91-47	Application for Rate Increase	MCI
Florida	Docket 88-0069-TL	Comprehensive Price Review	Florida Coalition
Mississippi	Case 92-UA-100	Expanded Local Calling	LDDS & ATC
Florida	Docket 92-0188-TL	GTE Rate Case	MCI & FIXCA
Wisconsin	Docket 05-TI-119	IntraLATA Competition	MCI & Schneider
Florida	Docket 92-0399-TP	Payphone Compensation	MCI & FIXCA
California	Docket I,87-11-033	Alternative Regulation	Intellical
Florida	Docket 88-0068-TL	Rate Stabilization	Public Counsel and Large Users
New York	Case 28425, Phase III	Access Transport Rate Structure	Empire Altel
Wisconsin	Docket 05-TR-103	Intrastate Access Charges	MCI & CompTel
Mississippi	Docket 90-UA-0280	IntraLATA Competition	Intellicall
Louisiana	Docket U-17949	IntraLATA Competition	Cable & Wireless
Florida	Docket 88-0069-TL	Rate Stabilization	Florida Coalition
Wisconsin	Docket 05-TR-103	Intrastate Access Charges	Wisconsin IXCs
Florida	Docket 89-0813-TP	Alternative Access Providers	Florida Coalition
Alaska	Docket R-90-1	Intrastate Toll Competition	Telephone Utilities of Alaska
Minnesota	Docket P-3007/NA-89-76	Centralized Equal Access	MCI & Telecom*USA
Florida	Docket 88-0812-TP	IntraLATA Toll Competition	Florida Coalition
Wisconsin	Docket 05-TR-102	Intrastate Access Charges	Wisconsin IXCs
Wisconsin	Docket 6655-NC-100	Centralized Equal Access	Wisconsin IXCs
Florida	Docket 88-0069-TL	Rate Stabilization	Florida Coalition
Wisconsin	Docket 05-NC-100	IntraLATA Toll Competition	Wisconsin IXCs

Summary of Expert Testimony and Affidavits – Regulatory Proceedings

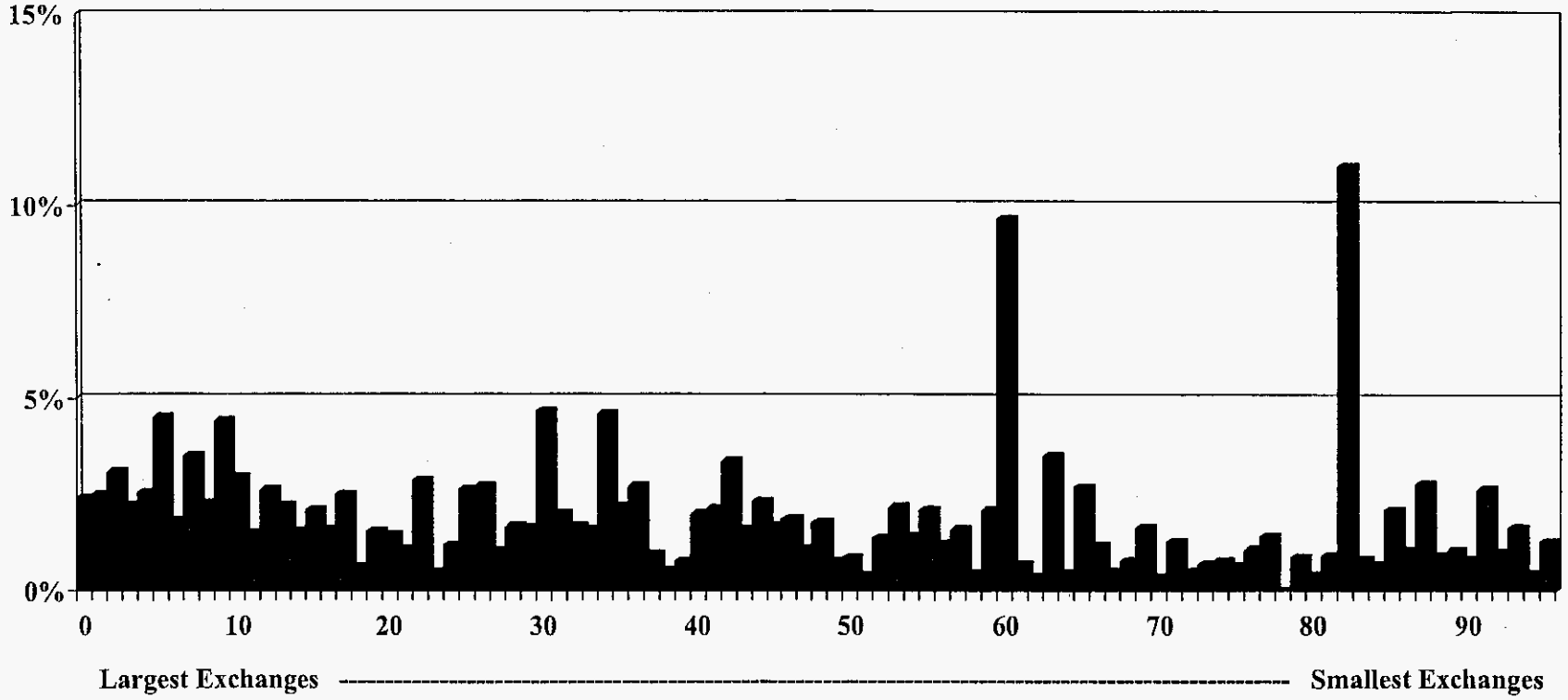
State	Docket/Case	Topic	Sponsor(s)
Florida	Docket 87-0347-TI	AT&T Regulatory Relief	Florida Coalition
Illinois	Docket 83-0142	Intrastate Access Charges	Illinois Consolidated
Texas	Docket 8218	WATS Prorate Credit	TEXALTEL
Iowa	Case RPU 88-2	Centralized Equal Access	MCI & Teleconnect
Florida	Docket 87-1254-TL	Regulatory Flexibility for LECs	Microtel
Wisconsin	Docket 05-TR-5, Part B	IntraLATA Competition and Access Charges	Wisconsin State Telephone Assc.
Florida	Docket 86-0984, Phase II	Intrastate Loop Cost Recovery	Florida Coalition

Competitive Profile of UNE-P – BellSouth Territory in Florida
(Competitive Share by Exchange – Ranked from Largest Exchange to Smallest)



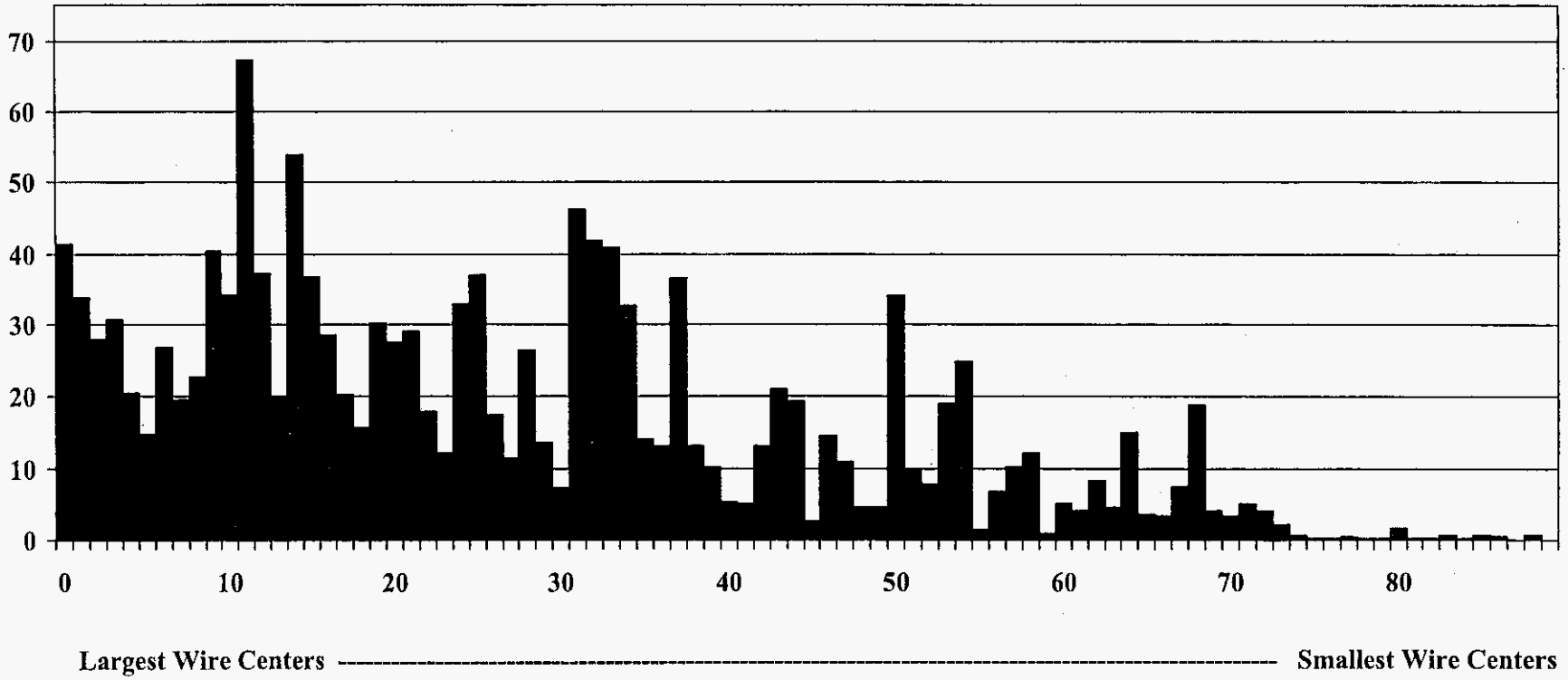
Docket No. 030851-TP
J. Gillan, Exhibit No. JPG-2 ____, Page 1 of 1
Competitive Profile of UNE-P: BellSouth

Competitive Profile of UNE-P Growth – BellSouth Florida Jan 03 – Sept 03
(Competitive Growth in UNE-P by Exchange – Ranked from Largest Exchange to Smallest)



Docket No. 030851-TP
J. Gillan, Exhibit No. JPG-3 ____, Page 1 of 1
Competitive Growth Profile of UNE-P: BellSouth

Competitive Growth Profile of UNE-P – Verizon Territory in Florida
(Average UNE-P Lines Added Per Month -- Most Recent 6 Months 2003)



Docket No. 030851-TP
J. Gillan, Exhibit No. JPG-4 ___, Page 1 of 1
Competitive Profile of UNE-P: Verizon

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Direct Testimony and Exhibits of Joseph Gillan on behalf of the Florida Competitive Carriers Association has been provided by (*) hand delivery, (**) email and U.S. Mail this 4th day of December 2003, to the following:

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Redefinition of the BEA Economic Areas

By Kenneth P. Johnson

THIS ARTICLE presents the new regional economic areas defined by the Bureau of Economic Analysis (BEA) and discusses the procedures used to arrive at this disaggregation of the Nation on an economic basis.[1] The new disaggregation has 172 economic areas, and it replaces the 183-area disaggregation that BEA first defined in 1977 and then revised slightly in 1983 (table 1 and charts 1 and 2). The redefinition was undertaken in 1993 largely to incorporate newly available information on commuting patterns.[2]

To facilitate regional economic analysis, BEA provides geographically detailed economic data by economic area, as well as by State and by local area. BEA assembles economic area data on earnings by industry, employment by industry, total personal income, population, and per capita personal income. These data may be used to analyze local area economic activity, local interindustry economic relationships, and interarea population movements. In addition, the areas are used as major units for BEA's local area economic projections.[3] Historical and projected economic area data are used by government agencies for planning public-sector projects and programs, by businesses for determining plant locations and sales territories, and by university and other research groups for doing regional economic studies.

Each economic area consists of one or more economic nodes—metropolitan areas or similar areas that serve as centers of economic activity—and the surrounding counties that are economically related to the nodes. The main factor used in determining the economic relationships among counties is commuting patterns, so each economic area includes, as far as possible, the place of work and the place of residence of its labor force. The decision to redefine the areas reflects substantial changes in the commuting patterns, as indicated by data from the 1990 Census of Population, and changes in the definitions of metropolitan areas.[4]

In general, the redefinition procedure has three major elements. The first element is the identification of nodes. The second element is the assignment of counties to relatively small economic units known as "component economic areas" (CEA's); each CEA consists of a single economic node and the surrounding counties that are economically related to the node.[5] The third element is the aggregation of the CEA's to the larger economic areas. For a diagrammatic representation of the redefinition procedure, see chart 3.

Identification of nodes

Economic nodes are metropolitan areas or similar areas that serve as centers of economic activity. Of the 3,141 counties in the Nation, 836 are metropolitan counties that make up the 310 metropolitan areas; each of these areas was identified as the node of a CEA.[6] In addition, in parts of the Nation remote from metropolitan areas, 38 nonmetropolitan counties were each identified as a node.

Identification of most of the nonmetropolitan nodes was a four-part process. First, analysis of commuting data for the Nation's 2,305 nonmetropolitan counties showed that 1,112 of these counties are not closely related to a metropolitan area. Second, of these 1,112 counties, 130

1. See "Proposed Redefinition of the BEA Economic Areas," *Federal Register* 59 (November 7, 1994): 55,416–20; and "Final Redefinition of the BEA Economic Areas," *Federal Register* 60 (March 10, 1995): 13,114–18.

2. See "Intent to Revise the Boundaries of the BEA Economic Areas," *Federal Register* 58 (March 9, 1993): 13,049–50. See also Kenneth P. Johnson and Lyle Spatz, "BEA Economic Areas: A Progress Report on Redefinition," SURVEY OF CURRENT BUSINESS 73 (November 1993): 77–79.

3. See Regional Economic Analysis Division, "BEA Economic Area Projections of Income, Employment, and Population to the Year 2000," SURVEY 70 (November 1990): 39–43.

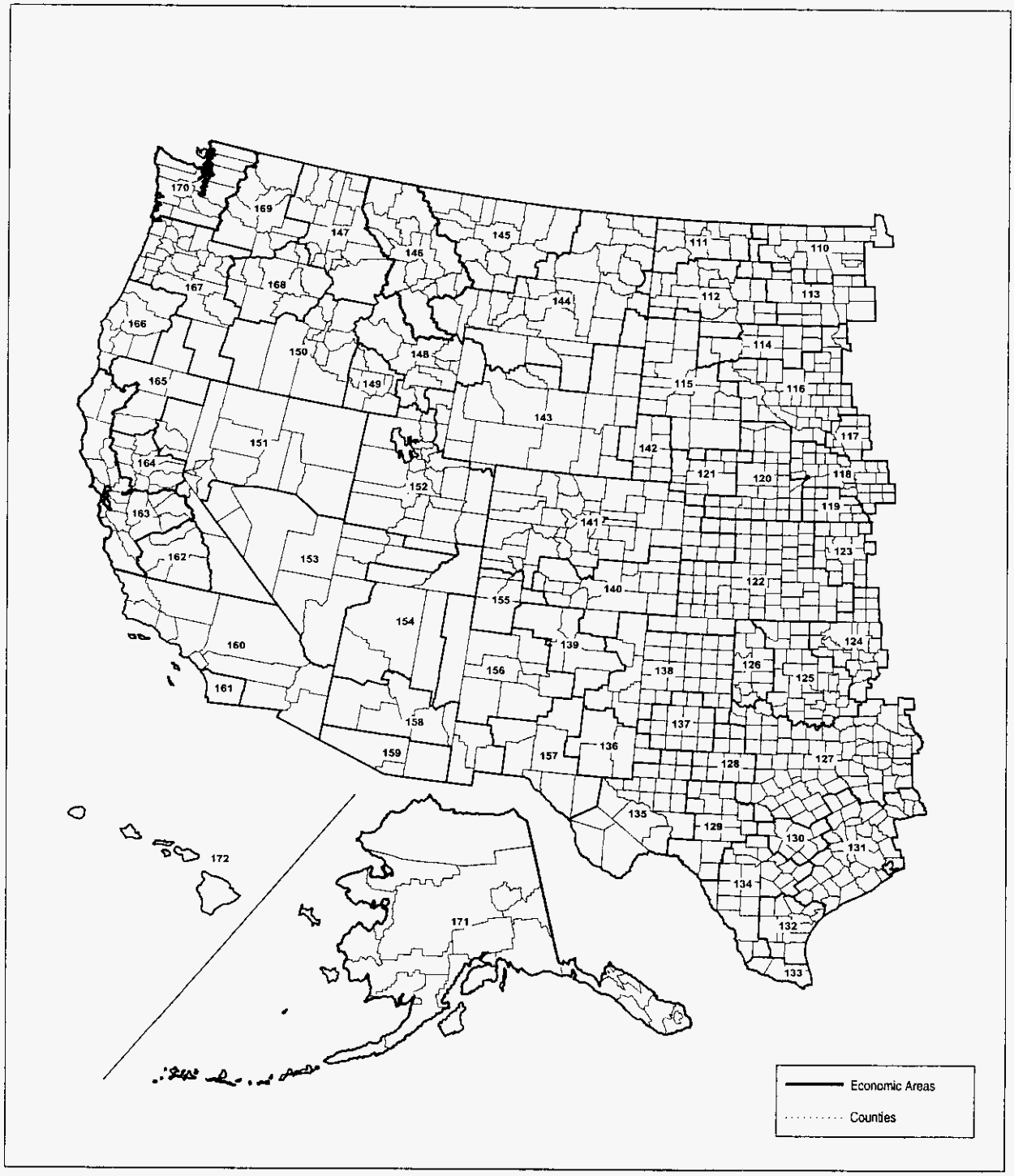
4. The redefinition reflects the changes in the metropolitan-area definitions issued in June 1993 by the Office of Management and Budget for statistical purposes; the definitions of metropolitan areas used by BEA are the county-based definitions. The 310 metropolitan areas consist of 240 metropolitan statistical areas, 59 primary metropolitan statistical areas (PMSA's), and 11 New England county metropolitan areas (NECMA's). (BEA treats the New Haven-Bridgeport-Stamford-Danbury-Waterbury, CT NECMA as a PMSA.)

5. Data for the CEA's can be used by government agencies for administering regulatory programs for small areas and by businesses for developing marketing programs for small areas.

6. The 3,141 counties are those defined as of January 1, 1990; they consist of counties and of areas classified as county equivalents for the 1990 census

CHART 1

BEA Economic Areas, 110–172



NOTE.—The 172 BEA Economic Areas are defined as of February 1995. For economic-area codes and names, see table 1.

U.S. Department of Commerce, Bureau of Economic Analysis

CHART 2

BEA Economic Areas, 1–109

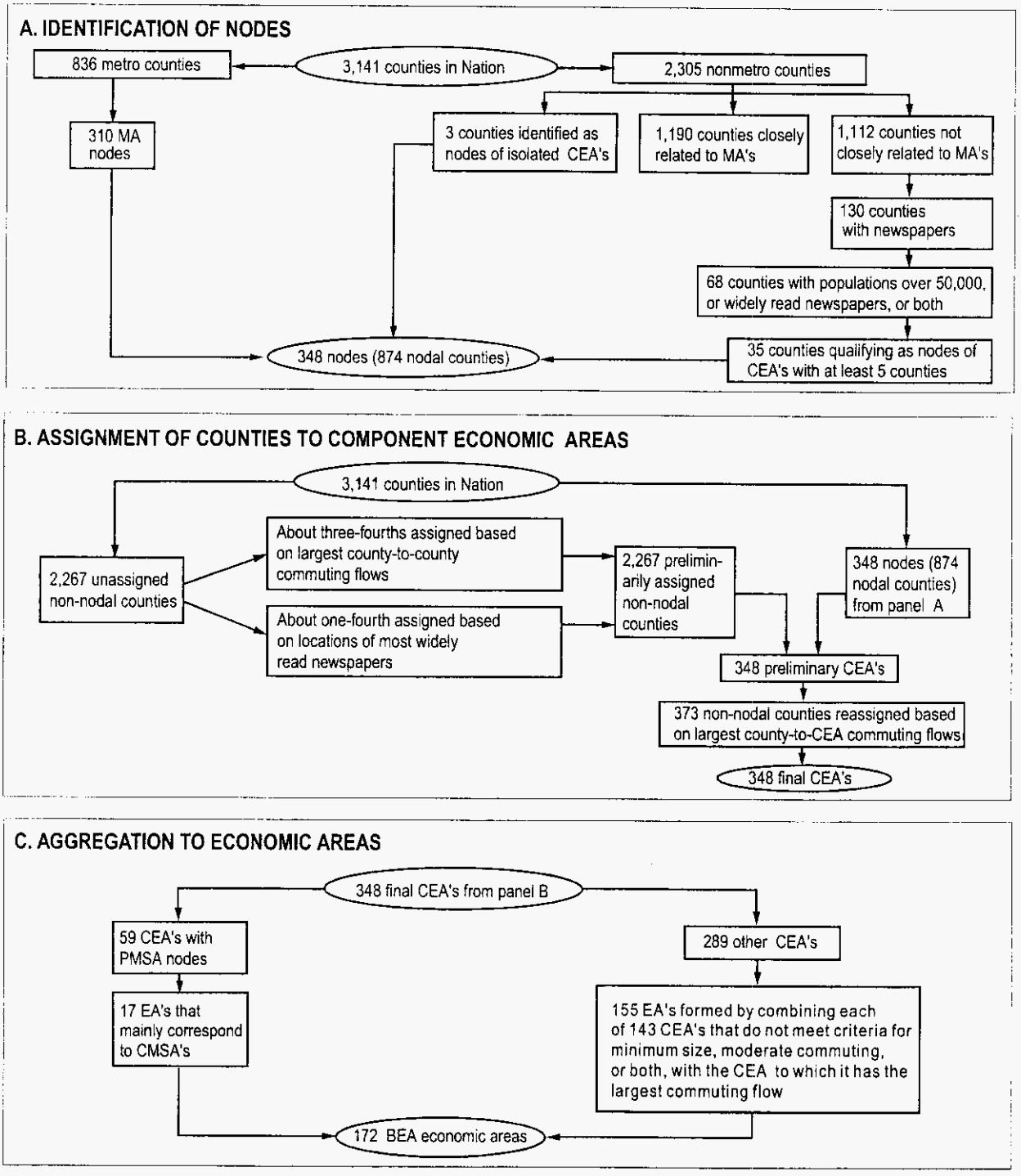


NOTE.—The 172 BEA Economic Areas are defined as of February 1995. For economic-area codes and names, see table 1.

U.S. Department of Commerce, Bureau of Economic Analysis

CHART 3

Redefinition Procedure



CEA Component economic area
CMSA Consolidated metropolitan statistical area
EA Economic area
MA Metropolitan area
Metro Metropolitan
Nonmetro Nonmetropolitan
PMSA Primary metropolitan statistical area

U.S. Department of Commerce, Bureau of Economic Analysis

are locations of newspapers.[7] Third, of these 130 counties, 68 have populations of more than 50,000, or their newspapers are widely read in at least five counties, or both. Fourth, only 35 of the 68 counties qualified as nodes of CEA's that could contain at least five counties. The CEA of each of these 35 nodal counties was named for the city in which the county's major newspaper is published.[8]

In addition, three nonmetropolitan counties were identified as nodes of CEA's because the county contained the largest city in the CEA. These CEA's, which are characterized by their relative economic isolation, are the Alaska panhandle, western Oklahoma, and northern Michigan.

Assignment of counties to component economic areas

Of the 3,141 counties in the Nation, 836 counties constitute the 310 metropolitan area nodes, and 38 counties are identified as nonmetropolitan nodes; together, these 874 counties constitute 348 nodes. Each of the remaining 2,267 nonnodal counties was analyzed to determine the node to which it is most closely related. About three-fourths of these counties were preliminarily assigned to nodes on the basis of their largest county-to-county commuting flows, according to journey-to-work data from the 1990 census. In many instances, the assignment reflected commuting flows to non-nodal counties already assigned to nodes rather than commuting flows to nodal counties. Most of the other counties were preliminarily assigned to nodes on the basis of the locations of the regional newspapers that are most widely read in those counties, according to newspaper circulation data.[9] For all preliminary assignments, the non-nodal counties had to be contiguous to either the nodes or to non-nodal counties already assigned to the nodes.

The preliminary assignment of non-nodal counties to nodes—based on data at the county level—resulted in a preliminary set of CEA's. Data at both the county and CEA levels were then analyzed to ensure that, to the extent possible, each county was assigned to the CEA to which it has the largest commuting flow. This analysis resulted in the reassignment of 373 counties and in the definition of the final set of 348 CEA's.

Availability of Additional Information

The codes, names, and numbers of the counties in each economic area and CEA and of the CEA's in each economic area are available electronically on the Economic Bulletin Board (EBB) from the Commerce Department's STAT-USA. To access the EBB, use a personal computer and modem, dial (202) 482–3870, and follow the instructions. To access the EBB through Internet, use Telnet address "ebb.stat-usa.gov" for remote login, and download the file named "eacodes.exe." For prices and other information about these services, call (202) 482–1986.

The economic area information is also available on a 3½-inch, high-density diskette for $20. When ordering, please specify the BEA Accession Number 61–95–40–101. Send your order, along with a check or money order payable to "Bureau of Economic Analysis," to Public Information Office, Order Desk, BE-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230. For further information or to order using MasterCard or VISA, call (202) 606–3700.

Aggregation to economic areas

The 348 CEA's were used as "building blocks" for the new 172 economic areas. The CEA's were aggregated to economic areas so that (1) each economic area includes, as far as possible, the place of work and the place of residence of its labor force and (2) each economic area is economically large enough to be part of BEA's local area economic projections program.[10] In general, the aggregation had two parts. First, the 59 CEA's with primary metropolitan statistical areas (PMSA's) as nodes were combined into 17 economic areas, which mainly correspond to the 17 consolidated metropolitan statistical areas (CMSA's) that comprise the PMSA's.[11] Second, each of the 143 CEA's that do not meet criteria for minimum size, for moderate commuting across CEA boundaries, or for both, was combined with the CEA to which it has the largest commuting flow.[12]

7. Data by county on newspaper publication and circulation are from the Audit Bureau of Circulations, an organization whose membership accounts for about 98 percent of U.S. newspaper circulation.

8. The cities are Flagstaff, AZ; Jonesboro, AR; Idaho Falls, ID; Twin Falls, ID; Quincy, IL; Manhattan, KS; Paducah, KY; Bowling Green, KY; Salisbury, MD; Traverse City, MI; Marquette, MI; Mankato, MN; Worthington, MN; Hattiesburg, MS; Meridian, MS; Tupelo, MS; Greenville, MS; Missoula, MT; Butte, MT; Grand Island, NE; North Platte, NE; Norfolk, NE; Scottsbluff, NE; Lebanon, NH; Hobbs, NM; Farmington, NM; Minot, ND; Pendleton, OR; Aberdeen, SD; Watertown, SD; Cookeville, TN; Lufkin, TX; Staunton, VA; Clarksburg, WV; and Bluefield, WV. Hattiesburg, MS was defined as a metropolitan statistical area by the Office of Management and Budget in mid-1994, after the redefinition was under way (see footnote 4).

9. The preliminary assignment of a small number of counties with special features, such as unusually small populations, was based on other procedures.

10. In its forthcoming set of regional projections, BEA plans to publish projections for States in the summer of 1995 and projections for the new economic areas and for metropolitan areas in early 1996.

11. A CMSA has more than 1 million residents and comprises two or more PMSA's.

12. The criteria for minimum size were developed from a combination of data on land area, on number of employed residents, and on number of

By definition, the labor force of an economic area should work and reside in that area, so commuting across boundaries should be limited. An evaluation of journey-to-work data from the 1990 census indicated that net numbers of commuters across the new economic area boundaries are indeed relatively low.[13] About 80 percent of the 172 areas have net commuting rates of 1 percent or less.[14] In contrast, again according to the 1990 journey-to-work data, only about 60 percent of the 183 areas defined in 1977 have net commuting rates of 1 percent or less.[15]

Table 1 follows.

counties, and the commuting criteria were developed from journey-to-work data from the 1990 census.

13. The net number of commuters is the difference between the number of in-commuters (nonresidents who commute to work in an economic area) and the number of out-commuters (residents who commute to work out of an economic area).

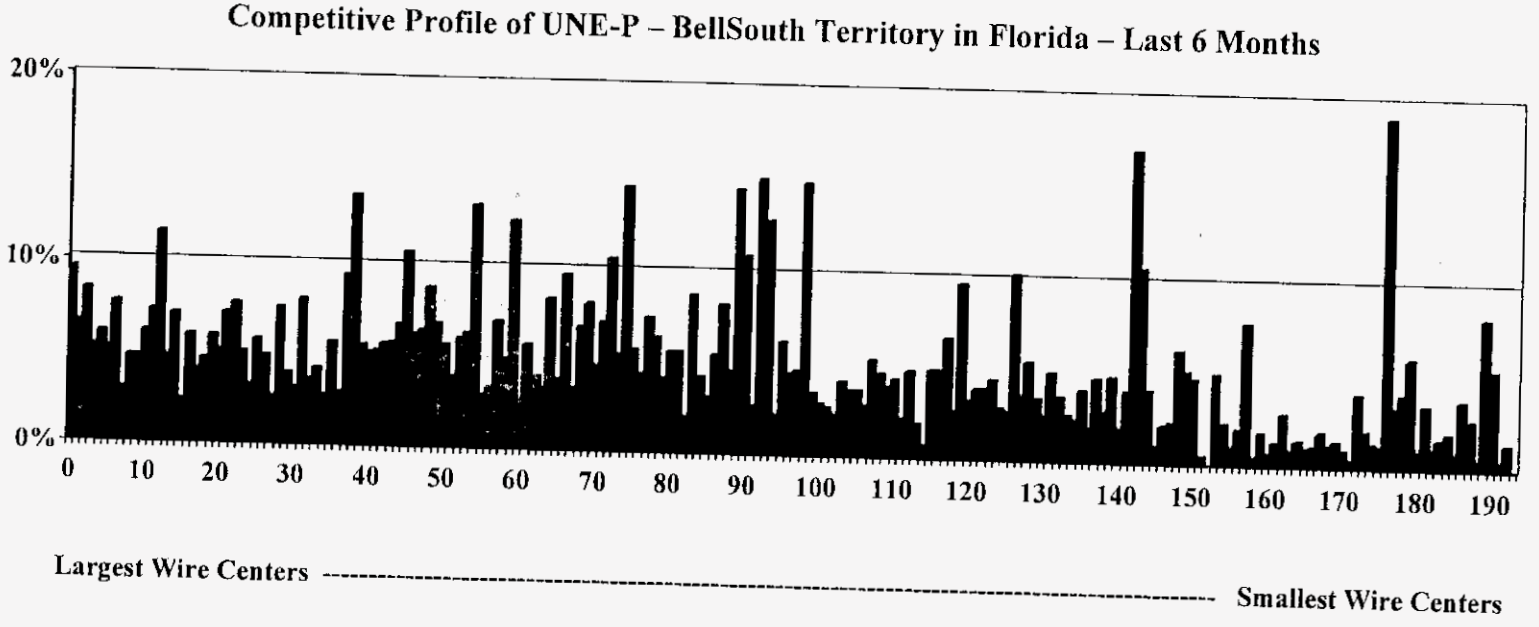
14. The net commuting rate is the difference between the in-commuting rate and the out-commuting rate; the rate of in-commuting (or out-commuting) is the number of in-commuters (or out-commuters) as a percentage of the number of employed residents, regardless of their place of work.

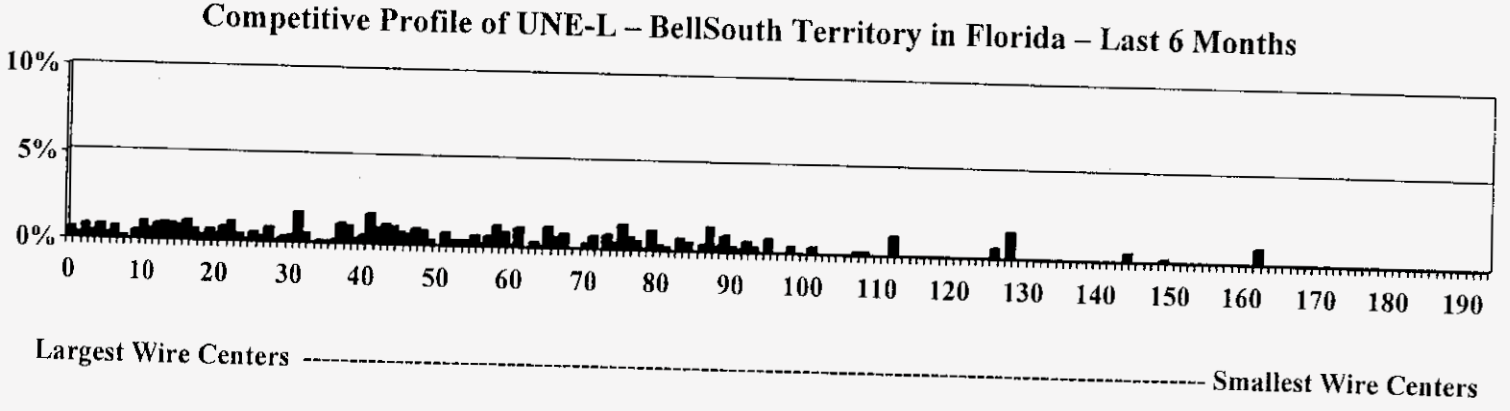
15. In the early 1980's, when definitions of the 183 areas were confirmed on the basis of commuting data from the 1980 census, about 80 percent of the 183 areas then had net commuting rates of 1 percent or less.

Table 1.—Codes and Names for BEA Economic Areas

Code	Name
001	Bangor, ME
002	Portland, ME
003	Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH-RI-VT
004	Burlington, VT-NY
005	Albany-Schenectady-Troy, NY
006	Syracuse, NY-PA
007	Rochester, NY-PA
008	Buffalo-Niagara Falls, NY-PA
009	State College, PA
010	New York-No. New Jersey-Long Island, NY-NJ-CT-PA-MA-VT
011	Harrisburg-Lebanon-Carlisle, PA
012	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD
013	Washington-Baltimore, DC-MD-VA-WV-PA
014	Salisbury, MD-DE-VA
015	Richmond-Petersburg, VA
016	Staunton, VA-WV
017	Roanoke, VA-NC-WV
018	Greensboro-Winston-Salem-High Point, NC-VA
019	Raleigh-Durham-Chapel Hill, NC
020	Norfolk-Virginia Beach-Newport News, VA-NC
021	Greenville, NC
022	Fayetteville, NC
023	Charlotte-Gastonia-Rock Hill, NC-SC
024	Columbia, SC
025	Wilmington, NC-SC
026	Charleston-North Charleston, SC
027	Augusta-Aiken, GA-SC
028	Savannah, GA-SC
029	Jacksonville, FL-GA
030	Orlando, FL
031	Miami-Fort Lauderdale, FL
032	Fort Myers-Cape Coral, FL
033	Sarasota-Bradenton, FL
034	Tampa-St. Petersburg-Clearwater, FL
035	Tallahassee, FL-GA
036	Dothan, AL-FL-GA
037	Albany, GA
038	Macon, GA
039	Columbus, GA-AL
040	Atlanta, GA-AL-NC
041	Greenville-Spartanburg-Anderson, SC-NC
042	Asheville, NC
043	Chattanooga, TN-GA
044	Knoxville, TN
045	Johnson City-Kingsport-Bristol, TN-VA
046	Hickory-Morganton, NC-TN
047	Lexington, KY-TN-VA-WV
048	Charleston, WV-KY-OH
049	Cincinnati-Hamilton, OH-KY-IN
050	Dayton-Springfield, OH
051	Columbus, OH
052	Wheeling, WV-OH
053	Pittsburgh, PA-WV
054	Erie, PA
055	Cleveland-Akron, OH-PA
056	Toledo, OH
057	Detroit-Ann Arbor-Flint, MI
058	Northern Michigan, MI
059	Green Bay, WI-MI
060	Appleton-Oshkosh-Neenah, WI
061	Traverse City, MI
062	Grand Rapids-Muskegon-Holland, MI
063	Milwaukee-Racine, WI
064	Chicago-Gary-Kenosha, IL-IN-WI
065	Elkhart-Goshen, IN-MI
066	Fort Wayne, IN
067	Indianapolis, IN-IL
068	Champaign-Urbana, IL
069	Evansville-Henderson, IN-KY-IL
070	Louisville, KY-IN
071	Nashville, TN-KY
072	Paducah, KY-IL
073	Memphis, TN-AR-MS-KY
074	Huntsville, AL-TN
075	Tupelo, MS-AL-TN
076	Greenville, MS
077	Jackson, MS-AL-LA
078	Birmingham, AL
079	Montgomery, AL
080	Mobile, AL
081	Pensacola, FL
082	Biloxi-Gulfport-Pascagoula, MS
083	New Orleans, LA-MS
084	Baton Rouge, LA-MS
085	Lafayette, LA
086	Lake Charles, LA
087	Beaumont-Port Arthur, TX
088	Shreveport-Bossier City, LA-AR
089	Monroe, LA
090	Little Rock-North Little Rock, AR
091	Fort Smith, AR-OK
092	Fayetteville-Springdale-Rogers, AR-MO-OK
093	Joplin, MO-KS-OK
094	Springfield, MO
095	Jonesboro, AR-MO
096	St. Louis, MO-IL
097	Springfield, IL-MO
098	Columbia, MO
099	Kansas City, MO-KS
100	Des Moines, IA-IL-MO
101	Peoria-Pekin, IL
102	Davenport-Moline-Rock Island, IA-IL
103	Cedar Rapids, IA
104	Madison, WI-IL-IA
105	La Crosse, WI-MN
106	Rochester, MN-IA-WI
107	Minneapolis-St. Paul, MN-WI-IA
108	Wausau, WI
109	Duluth-Superior, MN-WI
110	Grand Forks, ND-MN
111	Minot, ND
112	Bismarck, ND-MT-SD
113	Fargo-Moorhead, ND-MN
114	Aberdeen, SD
115	Rapid City, SD-MT-NE-ND
116	Sioux Falls, SD-IA-MN-NE
117	Sioux City, IA-NE-SD
118	Omaha, NE-IA-MO
119	Lincoln, NE
120	Grand Island, NE
121	North Platte, NE-CO
122	Wichita, KS-OK
123	Topeka, KS
124	Tulsa, OK-KS
125	Oklahoma City, OK
126	Western Oklahoma, OK
127	Dallas-Fort Worth, TX-AR-OK
128	Abilene, TX
129	San Angelo, TX
130	Austin-San Marcos, TX
131	Houston-Galveston-Brazoria, TX
132	Corpus Christi, TX
133	McAllen-Edinburg-Mission, TX
134	San Antonio, TX
135	Odessa-Midland, TX
136	Hobbs, NM-TX
137	Lubbock, TX
138	Amarillo, TX-NM
139	Santa Fe, NM
140	Pueblo, CO-NM
141	Denver-Boulder-Greeley, CO-KS-NE
142	Scottsbluff, NE-WY
143	Casper, WY-ID-UT
144	Billings, MT-WY
145	Great Falls, MT
146	Missoula, MT
147	Spokane, WA-ID
148	Idaho Falls, ID-WY
149	Twin Falls, ID
150	Boise City, ID-OR
151	Reno, NV-CA
152	Salt Lake City-Ogden, UT-ID
153	Las Vegas, NV-AZ-UT
154	Flagstaff, AZ-UT
155	Farmington, NM-CO
156	Albuquerque, NM-AZ
157	El Paso, TX-NM
158	Phoenix-Mesa, AZ-NM
159	Tucson, AZ
160	Los Angeles-Riverside-Orange County, CA-AZ
161	San Diego, CA
162	Fresno, CA
163	San Francisco-Oakland-San Jose, CA
164	Sacramento-Yolo, CA
165	Redding, CA-OR
166	Eugene-Springfield, OR-CA
167	Portland-Salem, OR-WA
168	Pendleton, OR-WA
169	Richland-Kennewick-Pasco, WA
170	Seattle-Tacoma-Bremerton, WA
171	Anchorage, AK
172	Honolulu, HI

NOTE.—Codes are assigned, beginning with 001 in northern Maine, continuing south to Florida, then north to the Great Lakes, and continuing in a serpentine pattern to the West Coast. Except for the Western Oklahoma economic area (126), the Northern Michigan economic area (058), and the 17 economic areas mainly corresponding to CMSA's, each economic area is named for the metropolitan area or city that is the node of its largest CEA and that is usually, but not always, the largest metropolitan area or city in the economic area. The name of each economic area includes each State that contains counties in that economic area.





Docket No. 030851-TP
J. Gillan, Exhibit No. ____ (JPG-6)
Page 1 of 1
Competitive Profile of UNE-P-BellSouth Territory
in Florida - Last 6 Months

Distinctions between Mass Market and Enterprise Customers

The Mass Market and Mass Market Customers

- Residential and small business customers; TRO ¶ 497
- Do not require high bandwidth digital connectivity (i.e., DS1 and above) unlike enterprise customers; TRO ¶ 497
- Accounts tend to be smaller, lower revenue accounts characterized by low margins and are often serviced on a month to month basis and not pursuant to annual contracts; TRO ¶ 459 and Note 1402
- Consumers of analog plain old telephone service or "POTS"; TRO ¶ 459
- Purchase a limited number of POTS lines can only economically be served via analog loops; TRO ¶ 497 and TRO ¶ 459
- Move freely from carrier to carrier which can cause a significant amount of churn and; TRO ¶ 471
- Expect the ability to change local service providers in a seamless and rapid manner. TRO ¶ 467

The Enterprise Market and Enterprise Customers

- Typically medium or large business customers with high demand for a variety of sophisticated telecommunications services that use loops with DS1 capacity and above; TRO ¶ 452
- Characterized by relatively intense, often data centric, demand for telecommunications services sufficient to justify service via high-capacity loops at the DS1 capacity and above; TRO ¶ 451
- Purchase extensive local services resulting in significant revenues to the service provider, allowing a greater opportunity to recover any non-recurring costs associated with the 'set-up' of the loop and switch facilities necessary to provide service; TRO ¶ 452
- Generate comparably greater revenues than residential customers sufficient to justify the sunk and fixed costs of installing the switch; TRO ¶ 452; and
- Willing to sign annual or term commitments. TRO ¶ 452

STATE OF CLEC COMPETITION

Introduction

Understanding precisely how CLECs offer competitive services is made difficult by the lack of public data on network operations. To provide greater understanding in this area, CCG Consulting, Inc. of Riverdale, Maryland was retained to develop survey data on CLEC network operations in six markets: Albany, NY, Augusta, GA, Boston, MA, Chicago, IL, Corpus Christi, TX and Portland, OR. These cities were selected because they represented a fairly broad cross-section of populations, business concentrations and serving incumbents.

CCG collected data from as many network-based competitors as possible in each of these markets. To protect the confidentiality of each CLEC, survey data was collected and aggregated by CCG Consulting. Companies that agreed to participate in the survey (in one or more markets) include:

Allegiance Telecom
AT&T
Birch Telecom
Broadview Networks
Choice One Communications
Conversent Communications
Covad
Electric Lightwave
Eschelon Telecom
Focal Communications
Ionex Communications
KMC Telecom
MCI Metro
McLeodUSA
New Edge Networks
NewSouth Communications
PaeTec Communications
TDS Metrocom
WorldCom
XO Communications

State of CLEC Competition

Although the survey does not include every provider in each market, we believe the sample to be sufficiently large to be representative of CLEC network operations in the market overall. For five of the markets we collected data for the entire MSA. In Boston, the MSA was so large that the CCG collected data for the area inside of Interstate 495. The number of CLEC Class 5 switches in each market is as follows:

	Albany	Augusta	Boston	Chicago	Corpus	Portland
Number of CLEC Switches[1]	5	1	17	15	1	7

The selection of the "market footprint" for analysis was made more difficult by the wide variation in the statistical areas (such as the MSA) defined by the Census Bureau, as well as the variation in the market focus of the individual CLECs. Although individual CLECs do not generally define their target market to match MSA boundaries, we worked with each CLEC to make sure that the data was compiled across the same footprint for each participant. This issue foreshadows a characteristic that is common to each of the following summaries: each market is unique, with different factors, geographies and competitive conditions influencing CLEC activity.

Although this summary of the data collected by CCG is intended to be presented in as a neutral a manner as possible, we are compelled to report one common finding: Competitive facilities development is not only modest (compared to the incumbent and the market), it is kaleidoscopic with no clear pattern that applies to all markets. What the data confirms is that emerging investment strategies of the competitive industry are nearly as diverse as the industry itself. While the majority of competitors in each market rely extensively on incumbent facilities, there is nearly always an exception to this rule. Such diversity is to be expected in a competitive environment, particularly one in which no single strategy has shown itself to be inherently superior to all others. With this overall conclusion in mind, the following summarizes the data we collected.

[1] None of the CLECs in any of these markets offer wholesale switching to any other CLECs.

State of CLEC Competition

Leased Customer Access

The starting point for our survey focused on how CLECs are leasing loops to gain access to end-user customers. We asked each CLEC to identify and quantify the different sources for leased facilities to end-user premises. The results are presented in Table 1.

Table 1: Source of Leased Loop Facilities by Surveyed CLECs

	Albany	Augusta	Boston	Chicago	Corpus	Portland
CLECs in Study	4	3	11	10	4	8
Total Market Voice Access Lines	560,487	270,157	3,567,497	5,688,622	220,866	762,382
Voice Grade 2-Wire UNE Loop	27,380	2,472	57,433	82,446	1,715	9,976
DSL UNE Loop	851	74	12,145	37,248	258	3,837
T1 UNE Loop	13	208	1,375	5,073	255	533
Retail T1 from ILEC	162	92	5,972	10,833	7	1,601
Retail T1 from 3rd Party[2]	7	0	422	2,161	0	0
DS3 UNE Loop	3	0	56	5	6	1
Retail DS3 from ILEC	17	0	217	501	0	128
Total	28,433	2,846	77,620	138,267	2,241	16,076

Table I relies on the following definitions of each loop type:

- **CLECs in Study.** This is the total number of CLECs who provided data for each of the markets.
- **Total Market Voice Access Lines**. This is the combination of the RBOC and the CLEC voice access lines for the study area. RBOC access lines came from HAI Model: Release FCC, loop counts as of 10/99. CLEC access line counts are roughly from the first quarter of 2002 (slightly different months for various CLECs). We did not have reliable RBOC data loop counts by MSA so we used voice access lines in order to demonstrate the relative size of the total market. However, the lack of data access lines understates total access lines.
- **Voice Grade 2-Wire UNE Loops** are Unbundled Network Element loops purchased directly from the ILEC from an interconnection agreement. A CLEC must be collocated to be able to order a 2-wire UNE Loop.

[2] This category includes DS-1s where the billing entity differs from the ILEC, but where the DS1 facility itself may be provisioned using the ILEC network facility. Thus this category is the maximum *potential* number of DS1s obtained from 3rd parties in that market and may, or may not, indicate the emergence of a nascent market in that MSA.

State of CLEC Competition

- **Digital Subscriber Line (DSL) UNE Loop** consists of a 2-wire clean copper DSL-capable loop. These quantities include DSL with and without line-sharing. Without line-sharing the CLEC gets a copper pair certified to have unimpeded signal to at least 12,000 feet. With line-sharing the CLEC gets the ability to offer DSL over a pair that is also providing ILEC voice service to the subscriber. These lines can be used to support a variety of types of DSL and the lines can often support data or voice. The use of these loops requires the collocation of DSLAMs, or DSL base stations.
- **T1 UNE Loop** consists of a 4-wire 1.544 Mbps capable unbundled loop purchased from an interconnection agreement. The CLEC must be collocated in order to utilize T1 UNE loops. The ILEC supplies these loops with T1 capable electronics.
- **T1 Retail Loop from the ILEC** consists of a 4-wire 1.544 Mbps retail circuit purchased from ILEC's retail tariff or access tariff. As a retail purchaser the CLEC is treated like any other ILEC customer in terms of product, price and term.
- **T1 Retail Loop from a 3rd Party** is a 4-wire 1.544 Mbps retail circuit purchased from a carrier other than the ILEC. The other providers in these particular markets are always interexchange carriers. None of the CLECs in these particular markets sell wholesale loops of any kind to other CLECs. We believe that the majority of these loops are ultimately served by and resold from the ILEC local network. Purchasing from a third party does not automatically equate to using an alternate network from the ILEC. In fact, we believe that the majority of these loops are really RBOC loops.
- **DS3 UNE Loop** is a UNE fiber loop cable of supporting a DS3 purchased from the ILEC from an interconnection agreement. These loops come with ILEC-provided electronics.
- **Retail DS3 from the ILEC** is a retail DS3 purchased from ILEC's retail tariff or access tariff. As a retail purchaser the CLEC is treated like any other ILEC customer in terms of product, price and term.

State of CLEC Competition

Table 2: Relative Size of the Largest CLEC for each Loop Category

	Albany	Augusta	Boston	Chicago	Corpus	Portland
Voice Grade 2-Wire UNE Loop	85%	100%	50%	31%	100%	77%
DSL UNE Loop	100%	100%	84%	94%	96%	91%
T1 UNE Loop	100%	71%	81%	80%	100%	47%
Retail T1 from ILEC	62%	96%	33%	44%	100%	55%
Retail T1 from 3rd Party	100%	N/A	93%	99%	N/A	N/A
DS3 UNE Loop	100%	N/A	84%	100%	100%	100%
Retail DS3 from ILEC	100%	N/A	82%	62%	N/A	47%

CLECs vary significantly in the manner in which they conduct business and thus in the way that they use loops. Table 2 shows the relative size of the single largest CLEC in each market for each loop category. This table is driven from the loop numbers presented in Table 1 above. As an example, Table 2 shows that in Albany that one CLEC uses 85% of the 27,380 voice grade 2-wire UNE loops shown in Table 1. Since the business plans of CLECs vary so widely, the CLEC that uses the greatest number of one type of loop may not necessarily use loops of other types. Again, using Albany as an example, the CLEC who uses 85% of the voice grade 2-wire UNE loops may not be the same CLEC who uses 100% of the DSL UNE loops.

State of CLEC Competition

On-Net Customer Access

In addition to relying on leased facilities, some CLECs have developed limited fiber networks that enable them to reach some buildings entirely over their own facilities. In our survey we define On-Net facilities to be those facilities where the CLEC owns both the physical loop and the electronics at both ends of the loop.

We have quantified CLEC On-Net opportunity by the number of buildings connected, the potential capacity of these systems and the number of T1 equivalents actually operating in Table 3. In addition, we have analyzed the geographic focus of CLEC facilities, which generally serve limited portions of each market (discussed below).

Table 3: On-Net Capability of Surveyed CLECs

	Albany	Augusta	Boston	Chicago	Corpus	Portland
Fiber CLECs/Total CLECs	1/4	1/3	4/11	5/10	1/4	4/8
Number of Connected Buildings	24	13	473	390	18	183
Buildings with Wholesale Loops	0	0	0	0	0	0
Buildings with Wholesale Dark Fiber	0	0	0	0	0	0
Number of Establishments in MSA	16,616	7,728	127,453	184,912	7,390	48,881
Number of Fiber Terminals	24	13	560	501	18	217
Fiber Terminal Capacity						
OC-48	0	0	224	236	1	47
OC-12	2	1	144	146	2	40
OC-3	22	12	192	118	15	130
Equivalent T1s Activated	85	66	4,332	4,394	125	551
Active T1s per Building	3.5	5.1	9.2	11.3	7.0	3.0

Following are the definitions of each line of the Table 3:

Fiber CLECs / Total CLECs. Fiber CLECs are those CLECs with at least one customer defined as an On-Net customer. On-Net is defined as a customer where the CLEC owns the loop and the electronics to reach the customer. All CLECs reported that On-Net customers in these markets were being served using fiber. Total CLECs are the total CLECs who participated in the survey for the given market.

Number of Connected Buildings represents the number of discrete street addresses with On-Net customers. These are often referred to as "lit" buildings. Note that lit buildings

State of CLEC Competition

are lower than fiber terminals in markets where some buildings are served by multiple CLECs.

Buildings with Wholesale Loops. Of the connected buildings, these are the buildings where a CLEC offers wholesale loops to other CLECs. None of the CLECs in these markets offers wholesale loops to other CLECs.

Buildings with Wholesale Dark Fiber. Of the connected buildings, these are the buildings where a CLEC offers dark fiber to other CLECs. None of the CLECs in these markets offers dark fiber to other CLECs.

Number of Establishments represents the total number of businesses in the market. The source of the number is Census Bureau data of Business Establishments/MSA.

Fiber Terminal Capacity shows the quantity of various sizes of fiber terminals installed in the lit buildings. The CLECs all reported that very few of these facilities are fully equipped or are fully utilized. For example, a CLEC may have an OC-48 terminal in a building but only have it equipped with a few OC-3 cards.

Equivalent T1s Activated represents the active total equivalent T1s of service that are in place in lit buildings. We also show the number of equivalent T1s per lit building.

Location of On-Net Buildings

The On-Net locations tend to be in the downtown area where CLEC owned fiber networks are most likely to exist. As discussed below, nearly all On-Net buildings are located in very limited geographical sections and pockets in each MSA.

Albany

Of the 41 On-Net buildings in Albany, 37 are within the City limits. Of those, 32 are in the downtown area.

Augusta

In Augusta all of the On-Net buildings are downtown. Eleven of the thirteen lit buildings are on two city streets.

Boston

There are 473 lit buildings in Boston. Of these, 325, or 69% are located in the three exchanges serving the downtown area. The remaining buildings are scattered throughout the study area. However, there is a low density of lit buildings in suburban area and very

State of CLEC Competition

few exchanges outside of the downtown area have more than 2 or 3 lit buildings in the entire exchange.

Chicago

Chicago has 390 lit buildings. 190 of these buildings are within the city limits. The majority of the remaining lit buildings are relatively close to major highways (i.e., Interstate 90, Interstate 84, Interstate 88 and Interstate 290.

Corpus Christi

There are 18 lit buildings in Corpus Christi. 12 of these buildings are clustered downtown.

Portland

The Portland MSA has 183 lit buildings. 132 of the buildings are within the city limits or Portland. The remaining On-Net buildings are clustered at various locations around the MSA. For example, there are 27 buildings clustered close together in Beaverton and 11 buildings clustered together in Vancouver, Washington.

State of CLEC Competition

Network Connectivity

As indicated above, CLECs depend heavily on ILEC access to reach and serve customers. As shown in Table 4 below, CLECs facilities are predominately deployed in digital configurations.

Table 4: Comparing Analog and Digital Connectivity[3]

	Albany	Augusta	Boston	Chicago	Corpus	Portland	Overall
Analog Connectivity[4]	27,380	2,472	57,433	82,446	1,715	9,976	181,422
DS1 Connectivity	6,408	8,784	290,424	539,064	9,288	64,440	918,408
DS3 Connectivity	13,440	0	183,456	340,032	4,032	86,688	627,648
Percent Digital	42.0%	78.0%	89.2%	91.4%	88.6%	93.8%	89.5%

[3] The quantities in this table are Voice Grade Equivalents.

[4] CCG is aware that some analog loops are being used to provide xDSL services and, as such, should more properly be counted as a form of digital connectivity. CCG does not, however, have the data to identify the percentage of the purchased analog loops that have been configured to provide such service.

ORIGINAL

McWHIRTER REEVES

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TALLAHASSEE

TALLAHASSEE OFFICE:
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January 22, 2004

Ms. Blanca S. Bayo
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Fl 32399-0850

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04 JAN 22 PM 4:48
COMMISSION
CLERK

Re: Docket No. 030851-TP

Dear Ms. Bayo:

Enclosed please find the original and fifteen copies of revised Exhibit No. __ (JPG-9) to the Rebuttal Testimony of Joseph Gillan in the above docket. We ask that you substitute this for Exhibit No. __ (JPG-9) in Mr. Gillan's January 7, 2004 testimony.

Please contact me if you have any questions.

Sincerely,

Vicki Gordon Kaufman

VGK:bae
Enclosures
Cc: Parties of record (w/ encl.)

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Preliminary Summary Comparison of Trigger Candidates to Criteria

Trigger Candidate	Switches are not Enterprise	Actively Serving the Mass Market			Serving the Geographic Market	Relying on ILEC Loops or Offering Comparable Services	Not Affiliated with ILEC	Sufficient Activity to Support Finding
		Actively Providing Service	Serving Residential	Likely to Continue				
KMC Telecom	NO	NO	NO					NO Competitive Activity is De Minimus.
PaeTec	NO	NO	NO					
ITC^DeltaCom	NO	NO	NO					
Comcast		NO		NO		NO		
TCG (AT&T)	Disqualified by Company Witness							
SBC Telecom	NO	NO	NO	NO	NO		NO	
Allegiance	NO		NO	NO				
Time Warner	Claim Withdrawn by BellSouth							
XO	NO		NO					
Supra	Disqualified by Company Witness							
NuVox	NO	NO						
MCI/WCOM	Disqualified by Company Witness							
US LEC	NO	NO	NO					
AllTel					NO		NO	
Xspedius	NO	NO	NO					
Network Telephone	NO	NO	NO					
Florida Multimedia	NO	NO	NO	NO				
Orlando Telephone	NO	NO	NO	NO				
Sprint	Disqualified by Company Witness							
FDN/MPower								

Note: Blanks do not mean that a trigger candidate satisfies a particular criterion. Analysis is ongoing and some trigger candidates will address whether they qualify directly in rebuttal testimony. Moreover, some criteria (such as geographic coverage and de minimus standard) require analysis of discovery that is not yet complete.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing PUBLIC Rebuttal Testimony and Exhibits of Joseph Gillan on behalf of the Florida Competitive Carriers Association has been provided by (*) hand delivery, (**) email and U.S. Mail this 7th day of January 2004, to the following:

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Attorneys for Florida Competitive
Carriers

In-Service Analog UNE Loops Leased by Alleged Self-Provisioning Switch Triggers

Alleged Self-Provider	Wire Centers	In-Service UNE Loops		Annual Change
		Nov-02	Nov-03	
Allegiance	[redacted]	[redacted]	[redacted]	[redacted]
AllTel	[redacted]	[redacted]	[redacted]	[redacted]
FDN/MPower	[redacted]	[redacted]	[redacted]	[redacted]
Florida Multimedia	[redacted]	[redacted]	[redacted]	[redacted]
ITC^DeltaCom	[redacted]	[redacted]	[redacted]	[redacted]
KMC	[redacted]	[redacted]	[redacted]	[redacted]
MCI/WCOM	[redacted]	[redacted]	[redacted]	[redacted]
Network Telephone	[redacted]	[redacted]	[redacted]	[redacted]
NuVox/Trivergent	[redacted]	[redacted]	[redacted]	[redacted]
Orlando Telephone	[redacted]	[redacted]	[redacted]	[redacted]
PAETEC	[redacted]	[redacted]	[redacted]	[redacted]
SBC	[redacted]	[redacted]	[redacted]	[redacted]
Sprint	[redacted]	[redacted]	[redacted]	[redacted]
Supra	[redacted]	[redacted]	[redacted]	[redacted]
TCG/AT&T	[redacted]	[redacted]	[redacted]	[redacted]
US LEC	[redacted]	[redacted]	[redacted]	[redacted]
XO	[redacted]	[redacted]	[redacted]	[redacted]
Xspedius/E*Spire	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]

Total Loops in Areas where BellSouth Claims Triggers Are Met	3,635,308
Market Share of BellSouth's Alleged Switch Triggers	1.4%

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 1056
COMPANY/ FCCA / Gillan
WITNESS JPG-10 - 3 pgs-11
DATE D2/29-27/04

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
FCCA's 2nd Interrogatories
November 10, 2003
Item No. 24
Page 1 of 1

REQUEST: For the most recent quarter for which the information is available, provide the:

a. Total number of UNE-P lines in Florida;
b. Total billed revenues for unbundled local switching, shared transport and any charges for call detail records/access records billed UNE-P carriers in Florida.

RESPONSE: a. As of September 30, 2003, there were 617,494 UNE-P lines in Florida.

b. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

Total billed revenue for unbundled local switching and shared transport:

Jul 2003 [redacted]
Aug 20003
Sept 2003

BellSouth does not have its revenue information broken down to the detail needed to exclude call detail records/access records from other revenues.

RESPONSE PROVIDED BY: Craig Williard
David H. Wood

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing PUBLIC Surrebuttal Testimony and Exhibit of Joseph Gillan on behalf of the Florida Competitive Carriers Association has been provided by (*) hand delivery, (**) email and U.S. Mail this 28th day of January 2004, to the following:

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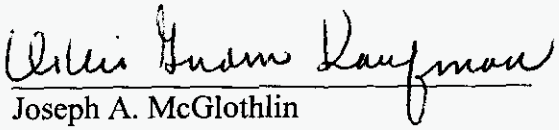
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Attorneys for Florida Competitive
Carriers Association

BELLSOUTH

[redacted]

Dear [redacted]

We're always disappointed to lose a valued customer like you. So in hopes of bringing you back, we have created something new and really special — a money-saving, make-your-life-simple calling plan.

Introducing the BellSouth® Unlimited Answers™ Plan!

Come back today and get unlimited long distance and local service and the BellSouth® Complete Choice® plan — all for one low monthly fee of just $49.99.

It's the perfect calling plan! Now you can call anytime, anywhere in the United States, as often as you want. Just look at all you get:

- Unlimited local and long distance service...24 hours a day, 7 days a week!
- The Complete Choice plan, including Caller ID Deluxe*...Call Waiting Deluxe... Call Return (*69)*...Three-way Calling*...BellSouth® RingMaster Service®...Call Block* and more.
- BellSouth® Voice Mail service...so you never miss a call.
- All from one company, on one bill, with one phone number.

PLUS, we'll waive your local service connection fee — a savings of $42.50.

There's never been a better time to come back to BellSouth! In fact, we'll even give you some spending money to use however you please...

$75.00 CASH BACK when you sign up for the Complete Choice plan!*

Enjoy the convenience of having all your phone services in one place, with one simple, easy-to-read bill. Regardless of your individual calling needs, BellSouth has a plan and the services to fit your lifestyle and your budget...local service, long distance, dial-up and high-speed DSL Internet services, wireless, 2-way paging and more. All from the company you know and trust.

Call us today toll free at 1 800 467-5509.

Sincerely,

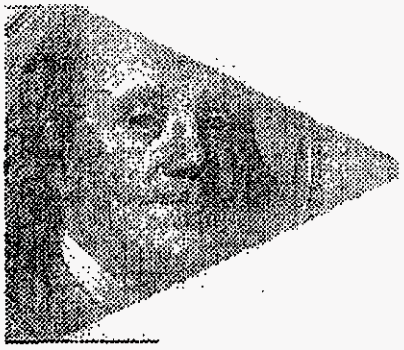
Cherise Cameron

Cherise Cameron
Director, Consumer Marketing

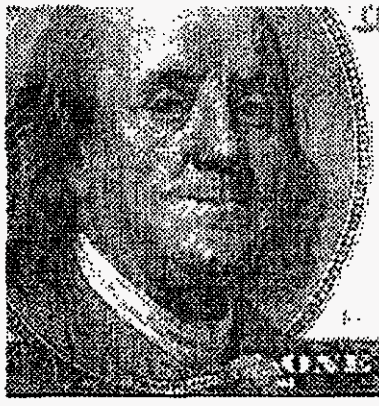
P.S. Come back to BellSouth today and get $75.00 CASH BACK!

[redacted]

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 106 comp
COMPANY/ WITNESS. Sprint/Stahr BKS-1 thru BKS-2
DATE: 02/24-27/04



>> Got $100 to spend any way you want?



>> Now you do!

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$100 CASH BACK!

Plus

$25 BELLSOUTH REWARDS PRE-PAID VISA® CARD!

Plus

$25 BELLSOUTH GIFT CARD!

Plus

We'll waive your local service connection fee – a savings of $41.50!

You get the BellSouth® PreferredPack® plan, giving you our most popular calling features – all for just $18.95 a month! Plus your local monthly service charge.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

ACT NOW and get a monthly $5 Welcome Discount on the PreferredPack plan for the first year!

Call us toll free: 1.877.213.0068

TRO Economic Business Case
DS0 to DS1 Cross Over

State = Florida
Company = State

A	B	C	D	E	F
Row	**Description**	**DS1 + Channel Bank**	**DS0**	**Cross-Over DS0 Quantity**	**Cross-Over Rounded DS0 Quantity**
10	**Weighted Average**				
11	MRC	$178.28	$17.14		
12	NRC - Ammortized	$41.42	$1.51		
13	Total	$219.70	$18.66	11.78	12
14					

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 107 comp
COMPANY/ SPRINT/Dickerson
WITNESS: KWD-1 & 3 thru 9, 10 thru 11
DATE: 03/24-25/04

Protective Agreement Provision
Sprint of Nevada's UNE Cost Model

Protected Materials shall include, without being stamped "Confidential" or "Proprietary," Sprint's UNE cost model. Sprint's UNE cost model consists of, but is not limited to, the computer programming code in both Source Code (i.e., human-readable) and Object Code (i.e., machine-readable form). Allowing the parties to review and analyze Sprint's UNE cost model shall not be deemed in any manner as a grant of a license with respect to the UNE cost model and/or any components of the UNE cost model. Sprint provides its UNE cost model to the Parties subject to this Agreement, only to assist the Parties in their analysis in this proceeding. Sprint's UNE cost model may not be used by the Parties for any other purpose whatsoever.

Legal Department

Andrew D Shore
Senior Regulatory Counsel

BellSouth Telecommunications, Inc.
150 South Monroe Street
Room 400
Tallahassee, Florida 32301
(404) 335-0743

January 24, 2002

Mrs. Blanca S. Bayó
Director, Division of the Commission
Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Investigation into Pricing of Unbundled Network Elements (BellSouth Track), Docket No. 990649A-TP

Dear Mrs. Bayó:

The purpose of this letter is to inform the Commission and parties to this proceeding of changes BellSouth has made to certain inputs in its cost-study filed in this proceeding and to explain the reasons for the changes.

First, the engineering factors BellSouth used in its original cost study are the same factors used in BellSouth's internal cost estimating system, OSPCM. In gathering information for a Staff-requested late-filed deposition exhibit, BellSouth learned of a discrepancy in the way the OSPCM system applies the factors and the way the BSTLM© applies the factors. The engineering factors in the OSPCM are applied to Telco labor plus contractor costs. The BSTLM©, however, was programmed to apply the factors to Telco labor, contractor costs, and material cost. Thus, application of the factors from BellSouth's OSPCM resulted in an overstatement of the engineering costs for copper and fiber cable accounts. In order to address this problem, BellSouth has developed engineering factors based on relationships between engineering costs and total non-engineering investments for each plant account. A worksheet setting forth the development of these factors is attached.

Second, BellSouth has made two of the BSTLM© logic changes addressed by Mr. Pitkin in his rebuttal testimony and by Mr. Stegman in his surrebuttal testimony. Those two changes address the cell reference problem

DOCUMENT NUMBER-DATE
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FPSC-COMMISSION CLERK

with the fiber cable, EF&I calculation and the cell reference problem with the structure sharing calculation.

Third, BellSouth is correcting an error with respect to Feeder/Distribution Interface (FDI) placing hours. BellSouth uses contractors to place FDI's with placement costs based on the weight of the cabinets. Since the BSTLM input tables for FDI placement assume Telco placement, BellSouth had to convert contractor costs to Telco placement hours by dividing contractor costs by the Telco labor rate. BellSouth made an error in that calculation, resulting in a slight overstatement of FDI cost. BellSouth's revised inputs reflect the a correction of the referenced error.

Lastly, BellSouth changed inputs regarding its underground excavation costs and manhole costs. BSTLM© calculates all conduit duct costs, underground excavation costs and manhole costs as engineering, furnished and installed (EF&I) (rather than distinguishing between material and labor), because BellSouth's contracts with outside vendors provide for these items on a furnished and installed basis that includes the material and labor associated with installing the material. Since the BSTLM© applies loadings (e.g., sales tax, exempt material, supply expense) to material only, this would result in an understatement of these miscellaneous loading costs in the BSTLM©. BellSouth developed a 4C loading factor to account for these loadings and applied that factor to the BSTLM inputs in its cost study filing in this proceeding. BellSouth later learned that this loading was not applied to Type 1 and Type 2 manholes or to the underground excavation costs per foot. BellSouth is correcting this problem by applying the loading to all manhole sizes, to duct costs per foot. and to underground excavation costs per foot. BellSouth is also revising manhole costs as set forth in the surrebuttal testimony of BellSouth witness Daonne Caldwell.

BellSouth is in the process of re-running its cost models with the revised inputs discussed above and plans to file an amended cost study as well as an amended Exhibit DDC-3 to Ms. Caldwell's testimony. However, due to the processing times associated with running the cost models and the logistics of making electronic copies and transporting them to Tallahassee, BellSouth will be unable to file its amended cost study and exhibit, which is the cost output summary, until Monday, January 28, 2002. We did, however, want to get this information to the Commission and the parties even before those cost study runs can be completed. We are providing to all parties today via e-mail an executable file, FI_Network_Version_Changes.exe, to replace a user's Invest Logic.xls file, as well as with three new .mdb data bases (1 for each BSTLM© scenario) with BellSouth's revised inputs so that parties can see these revisions and run them

in the cost model if they wish. This file contains proprietary information and is being provided pursuant to a Notice of Intent being filed today as well as to the terms of the Protective Agreement.

I would appreciate your marking a copy of this letter as "filed" and returning it to me. If you have any questions or need any further information, please do not hesitate to contact me.

Sincerely,

Andrew D. Shore (KLA)
Andrew D. Shore

cc: All Parties of Record (via e-mail and overnight mail)
Marshall M. Criser III
R. Douglas Lackey
Nancy B. White

BACE Model Version 2.2 Scenario Summary

Scenario Summary by MSA
Mass Market NPV Values

Sprint-Florida, Inc.
Docket No. 030851-TP
Staff's 4th PODs
02-Feb-04
Exhibit KWD-6 (Revised 2/12/04)

A	B	C	D	E	F	G	H	J	K	L	M	N
	Scenario:	1	2	3	4	5	6	7	8	9	10	11
Row	MSA	Bell South as filed	Sprint Base Case: Negative NPV filters = No to all, no lowest residential quintile customers	Sprint Base Case: 10% market share in year 10	Sprint Base Case: Slow market speed penetration (p-value = .25)	Sprint Base Case: Price adjustments	Sprint Base Case: Equity/Debt Change	Sprint Base Case: Adjust Purchasing Power	Sprint Base Case: Adjust Sales Cost	Sprint Base Case: Include Terminal Value = No	Sprint Base Case: Adjust Bad Debt	Cumulative Changes Scenarios 2 thru 11
12	Daytona Beach	10,764,916	12,016,256	5,804,227	8,258,545	4,921,680	7,824,902	10,071,003	5,782,693	10,815,930	9,720,188	(8,263,753)
13	Gainsville	4,115,540	4,364,097	1,887,554	2,927,571	1,563,720	2,784,200	3,547,109	1,960,200	3,883,573	3,459,835	(4,290,085)
14	Jacksonville	27,511,957	29,398,725	14,774,232	20,942,796	12,646,521	19,570,753	25,438,407	15,491,106	26,757,205	24,022,065	(16,326,165)
15	Melbourne	11,438,909	12,543,688	6,824,674	9,154,378	5,716,355	8,362,966	10,865,187	6,432,610	11,423,739	10,345,733	(6,020,651)
16	Miami-Ft Lauderdale	165,917,618	167,884,856	90,866,955	122,224,187	93,698,861	114,468,750	148,833,803	108,490,998	155,112,337	144,361,316	(24,517,676)
17	Orlando	25,353,400	25,803,180	13,965,078	18,975,117	12,494,310	17,458,467	22,757,054	14,915,808	23,672,479	21,649,602	(9,508,210)
18	Panama City	609,118	1,116,394	107,904	352,720	(478,775)	503,766	534,559	(277,027)	849,497	602,545	(4,634,689)
19	Pensacola	6,545,230	7,516,759	3,198,271	4,989,730	2,147,355	4,698,321	5,918,646	2,791,147	6,611,072	5,764,902	(8,289,251)
20	West Palm Beach	46,510,090	48,535,217	26,455,656	35,431,411	23,239,448	32,896,375	42,828,434	27,940,959	44,449,258	40,529,065	(16,100,075)
21	None	9,199,361	8,493,633	(530,081)	3,837,187	(6,608,447)	4,084,725	5,188,779	(4,218,371)	6,856,359	3,783,408	(38,505,344)
22												
23	Total	307,966,138	317,672,806	163,354,470	227,093,641	149,341,028	212,653,224	275,982,982	179,310,123	290,431,450	264,238,660	(136,455,897)
24												

DOCUMENT NUMBER-DATE
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BellSouth Telecommunications, Inc.
Florida Docket No. 030851-TP
Sprint's Fifth Set of Interrogatories
December 31, 2003
Item No. 15
Page 1 of 1

REQUEST: For the purposes of this question, engineering costs incurred by a CLEC for each wire center in which the CLEC collocates include costs related to the placement of power cabling, cross-connect cabling and collocation equipment.

a. Have all of the CLEC costs for engineering of its collocation arrangements listed above been included in the BACE Model?

b. Where in the model are such engineering costs included?

c. How are such engineering costs calculated?

d. Where in the model can such engineering cost results be viewed?

e. Where in the model can calculations of such engineering costs be viewed?

RESPONSE:

a. Yes. Costs related to engineering and placement of equipment, including cabling are incorporated into the BACE Model results via in-plant factors.
b. In-Plant factors found in the In Plant and Loadings factor table account for the engineering and installation of equipment. Support and Power loading factors identified in the In Plant and Loadings table account for the material costs of power cabling to the CLECs collocation equipment.
c. The annual material Amount associated with each Network Cost Input that has an associated PlantCat is multiplied by the In-Plant factor for the identified PlantCat to establish the installed investment associated with the equipment. Similarly, the BACE Model logic matches Network Cost Input records with the appropriate Support and Power loading factor by matching on PlantCat and multiplies the factors by the installed investment.
d. The costs related to the In-Plant and Support and Power factors are included in the PlantCat investment associated with each cost element, i.e., it is not separated from the material investment.
e. The calculations cannot be viewed within the BACE Model.

RESPONSE PROVIDED BY: Bob McKnight
James Stegeman

REQUEST: Map each USOA Part 32 Expense Account (6XXX series), at a 4-digit level, to the following expense categories reflected in the model and its reports:

Opex/Mtce
COGS
Sales
G&A

RESPONSE: Since the BACE model does not explicitly use the USOA account structure, the mapping of categories to accounts is approximate. See below for all the part 32 expense accounts and the associated expense category as requested by Sprint. Note that although BACE allows the user to enter Network Operations costs for all the Part 32 expense items, the "Opex/Mtce" costs included in the BACE results are based on the equipment necessary to provide the modeled services. Thus, costs associated with each of the listed accounts may not be included in the BACE results filed for this proceeding. That is, there may not in fact be equipment included in BACE that is associated with each part 32 "Opex/Mtce" subaccount.

In addition to the items listed below, the cost of goods sold (COGS) also includes UNE loops and other service and network capabilities leased from BellSouth or other providers. Depreciation, amortization and provision for uncollectible notes receivable accounts are not used in the model. However, depreciation expense is calculated in the model for the purposes of calculating income taxes, but is not a cash flow used in the NPV calculation. Note that the 6XXX series of expense accounts omits many important negative cash flows included in the BACE model such as capex, taxes, and bad debt.

RESPONSE: (Cont.)

Account	Account Description	Category
6110	Network support expense	G&A
6112	Motor vehicle expense	G&A
6113	Aircraft expense	G&A
6114	Special purpose vehicles expense	G&A
6115	Garage work equipment expense	G&A
6116	Other work equipment expense	G&A
6120	General support expenses	G&A
6121	Land and building expenses	G&A
6122	Furniture and artworks expense	G&A
6123	Office equipment expense	G&A
6124	General purpose computers expense	G&A
6210	Central office switching expense	Opex/Mtce
6211	Analog electronic expense	Opex/Mtce
6212	Digital electronic expense	Opex/Mtce
6215	Electro-mechanical expense	Opex/Mtce
6220	Operators system expense	Opex/Mtce
6230	Central office transmission expenses	Opex/Mtce
6231	Radio systems expense	Opex/Mtce
6232	Circuit equipment expense	Opex/Mtce
6310	Information origination/termination expense	Opex/Mtce
6311	Station apparatus expense	Opex/Mtce
6341	Large private branch exchange expense	Opex/Mtce
6351	Public telephone terminal equipment expense	Opex/Mtce
6362	Other terminal equipment expense	Opex/Mtce
6410	Cable and wire facilities expenses	Opex/Mtce
6411	Poles expense	Opex/Mtce
6421	Aerial cable expense	Opex/Mtce
6422	Underground cable expense	Opex/Mtce
6423	Buried cable expense	Opex/Mtce
6424	Submarine cable expense	Opex/Mtce
6425	Deep sea cable expense	Opex/Mtce
6426	Intrabuilding network cable expense	Opex/Mtce
6431	Aerial wire expense	Opex/Mtce
6441	Conduit systems expense	Opex/Mtce
6510	Other property plant and equipment expenses	Opex/Mtce
6511	Property held for future Telecommunications use expense	G&A
6512	Provisioning expense	G&A
6530	Network operations expenses	G&A

RESPONSE: (Cont.)

6531	Power expense	G&A
6532	Network administration expense	G&A
6533	Testing expense	G&A
6534	Plant operations administration expense	G&A
6535	Engineering expense	G&A
6540	Access expense	COGS
6560	Depreciation and amortization expense	
6561	Depreciation expense—telecommunications	
6562	Depreciation expense—property held for future telecommunications use	
6563	Amortization expense—tangible	
6564	Amortization expense—intangible	
6565	Amortization expense—other	
6610	Marketing	Sales
6611	Product management	Sales
6612	Sales	Sales
6613	Product advertising	Sales
6620	Services	G&A
6621	Call completion services	G&A
6622	Number services	G&A
6623	Customer services	G&A
6710	Executive and Planning	G&A
6711	Executive	G&A
6712	Planning	G&A
6720	General and administrative	G&A
6721	Accounting and finance	G&A
6722	External relations	G&A
6723	Human resources	G&A
6724	Information management	G&A
6725	Legal	G&A
6726	Procurement	G&A
6727	Research and development	G&A
6728	Other general and administrative	G&A
6790	Provision for uncollectible notes receivable	

RESPONSE PROVIDED BY: James Stegeman

Sprint-Florida, Inc.
Docket No. 030851-TP
Exhibit KWD-11 Page 1 of 6
Filed: January 28,2004

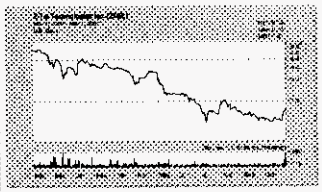
Thomas Weisel Partners
MERCHANT BANKING

November 8, 2001

Telecom Services - Integrated Communications Providers

James J. Linnehan
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Source: FactSet

Z-TEL TECHNOLOGIES, INC.[1,2]—MARKET PERFORM

STILL CHUGGING ALONG

Earnings Update **NASDAQ: ZTEL-$1.34**

Key Data	
Price	$1.34
52-Week Range:	$1-$10
Market Cap.(mn):	$45.5
Shares Out.(mn):	34.0
Avg Daily Vol.:	87,495
Fiscal Year End:	31-Dec
Debt/Total Capital:	22%
Price/TTM Sales:	0.2x
Net Cash/Share:	$0.11
Book Value/Share:	$0.00
Price/Book Value:	NM
Secular Growth:	10%

FY	2000	2001	2001 Prv	2002	2002 Prv
EPS					
Q1	($0.48)A	($0.60)A	($0.60)A	($0.34)E	($0.09)E
Q2	($0.70)A	($0.64)A	($0.64)A	($0.29)E	($0.03)E
Q3	($0.92)A	($0.77)A	($0.37)E	($0.24)E	$0.02E
Q4	($1.23)A	($0.39)E	($0.14)E	($0.16)E	$0.08E
Year	**($3.35)A**	**($2.39)E**	**($1.75)E**	**($1.02)E**	**($0.02)E**
P/E	**NM**	**NM**		**NM**	
Revenue(mn)					
Q1	$14.0A	$75.0A	$75.0A	$63.5E	$74.6E
Q2	$40.2A	$73.1A	$73.1A	$66.1E	$78.2E
Q3	$54.4A	$68.6A	$69.2E	$69.7E	$78.5E
Q4	$69.1A	$62.4E	$71.4E	$76.1E	$79.4E
Year	**$177.7A**	**$279.1E**	**$288.8E**	**$275.5E**	**$310.7E**
TEV/Sales	**0.2x**	**0.2x**		**0.2x**	

EPS estimates are after one-time items

Executive Summary

- Z-Tel reported revenue of $68.6 million in 3Q01, below our $69.2 million estimate and down 6% from 2Q01. Z-Tel ended 3Q01 with 260,000 subscribers generating an ARPU of roughly $75 versus 300,000 and $63 in 2Q01.
- Gross margin was 44.2% in 3Q01, in line with our estimate. EBITDA (excluding one time charges) was ($6.9) million in 3Q01, below our ($4.4) million estimate, but better than ($12.3) million in 2Q01. EPS were ($0.77) in 3Q01 versus our ($0.37) estimate.
- We are adjusting our model to reflect 3Q01 results and Z-Tel cleaning up its subscriber base. We are adjusting our revenue estimates from $289 million to $279 million in 2001 and from $311 million to $276 million in 2002. We are adjusting our EPS estimates from ($1.75) to ($2.39) in 2001 and from ($0.02) to $(1.02) in 2002.
- We believe the Z-Tel shares will remain under pressure until Z-Tel demonstrates its ability to grow its subscriber and revenue base through profitable sales channels. We believe Z-Tel will need to meet current expectations over the next few quarters and deliver improving trends in subscriber adds and profitability before investors revisit the shares.

Company Description: *Z-Tel is an integrated communications provider. Z-Tel offers packages of local, long distance and Internet services integrated with Internet enhanced communication features. Delivered by proprietary software and an innovative network design, Z-Tel's services merge the familiarity and simplicity of the telephone with the power and visual, "point and click" facility of the Internet.*

THIRD-QUARTER RESULTS

Z-Tel reported 3Q01 revenue of $68.6 million, below our $69.2 million estimate and down 6% from 2Q01. Z-Tel ended 3Q01 with 260,000 subscribers generating an average monthly revenue (ARPU) of roughly $75 versus an ARPU of $63 in 2Q01. Z-Tel lost 40,000 subscribers in 3Q01 versus 80,000 subscribers lost in 2Q01. The decrease in subscribers is due to Z-Tel writing off subscribers that were considered high credit risk.

Gross margin was 44%, better than our estimate of 43% and 43% in 2Q01. EBITDA (excluding one time charges) was ($6.9) million, in line with our estimate and better than the ($12.3) million in 2Q01. Z-Tel reported EPS of ($0.77) versus our ($0.37) estimate. The following table highlights Z-Tel's results versus our estimates.

Z-Tel 3Q01 Results

	TWP Estimate (millions)	Actual	Change/ Estimate	Change/ Prior Quarter
Revenues	$69.2	$68.6	-1%	-6%
Gross Margin	43.0%	44.2%	3%	3%
SG&A and R&D Expenses	$34.2	$37.2	9%	-15%
EBITDA	($4.4)	($6.9)	56%	-44%
EPS	($0.37)	($0.77)	106%	20%
Wght Avg. Shares Out.	33.9	34.0	0%	0%
				Vs. 3Q00
EOP HE Subs	308,542	260,000	-16%	256,093
Avg. Mthly Rev/Sub	$70.00	$70.00	0%	$70.00

Source: Thomas Weisel Partners LLC estimates

Additional information is available upon request.

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[1]Thomas Weisel Partners makes a market in the security mentioned in this report.

[2]Thomas Weisel Partners was a *manager or comanager (within three years) of the most recent public offering of* the company mentioned in this report.

[3]Thomas Weisel Partners may have a position or own options in the security; or any individuals preparing this communication have a position or own options in the security.

[4]Thomas Weisel Partners, a member, allied member, or employee is a director of the issuer.

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KEY TRENDS

Churn. Z-Tel reported monthly churn of roughly 4%, in line with 2Q01. Z-Tel expects churn to remain at this level in 4Q01 as it continues to focus on eliminating poor credit quality customers.

Sales Channels. Z-Tel is making an increased effort to lower its customer acquisition cost to below $50 from roughly $100-$120 excluding TV advertisements in 3Q01. Z-Tel plans to achieve this by cutting back on its use of telemarketing and eliminating the use of direct mail, as these are its most expensive sales channels. Z-Tel will instead focus on its agent sales and referral incentives such as its "City of America" plan.

Prepaid. Z-Tel announced that it intends to launch a prepaid product in order to retain the 50% of incoming orders it currently rejects due to credit concerns. While we believe this channel can deliver additional revenue at minimal cost, we are cautious with regards to increased churn typically associated with this type of customer base.

ADJUSTING OUR MODEL

As a result of Z-Tel's 3Q01 results, we are adjusting our model. We are lowering our revenue estimates from $289 million to $279 million in 2001 and from $311 million to $276 million in 2002. We are reducing our EBITDA estimates from ($26.9) million to ($37.4) million in 2001 and from $32.9 million to ($0.7) million in 2002. We are adjusting our EPS estimates from ($1.75) to ($2.39) in 2001 and from ($0.02) to ($1.02) in 2002. The decrease in EPS is largely due to reduced interest income previously expected from late fees that Z-Tel charges its customers. With the write-down of lower credit quality customers, we do not expect as great a contribution from late fees. The following table highlights the changes to our forecast.

Z-Tel Revised Estimates ($mn except share data)

	2001E		2002E	
	From	To	From	To
Revenue	288.8	279.1	310.7	275.5
Gross Profit	123.8	121.1	136.3	125.3
Gross Margin	43%	43%	44%	45%
EBITDA	(26.9)	(37.4)	32.9	(0.7)
EBITDA Margin	-9%	-13%	11%	0%
Operating Income	(48.7)	(60.3)	13.7	(21.6)
Operating Margin	-17%	-22%	4%	-8%
EPS	($1.75)	($2.39)	($0.02)	($1.02)
End of Per. Subs.				
Home Edition	324,882	264,350	409,500	334,420

Source: Thomas Weisel Partners LLC estimates

INVESTMENT THESIS

We believe ZTEL shares will remain under pressure until ZTEL demonstrates its ability to grow its subscriber and revenue base through profitable sales channels. As a result, we reiterate our MARKET PERFORM recommendation. Z-Tel is currently trading at 0.1x our 2002 revenue estimate versus a CLEC average of 2.8x.

Z-Tel Quarterly Income Statement

	2000A	Mar 1Q01A	Jun 2Q01A	Sep 3Q01A	Dec 4Q01E	2001E	Mar 1Q02E	Jun 2Q02E	Sep 3Q02E	Dec 4Q02E	2002E
Revenue	**177.7**	**75.0**	**73.1**	**68.6**	**62.4**	**279.1**	**63.5**	**66.1**	**69.7**	**76.1**	**275.5**
Network Cost	107.1	43.3	41.7	38.3	34.7	158.0	35.0	36.1	37.9	41.2	150.1
Gross Profit	**70.6**	**31.7**	**31.4**	**30.3**	**27.7**	**121.1**	**28.5**	**30.0**	**31.8**	**35.0**	**125.3**
Gross Margin	**39.7%**	**42.3%**	**43.0%**	**44.2%**	**44.4%**	**43.4%**	**44.9%**	**45.4%**	**45.7%**	**45.9%**	**45.5%**
Sales Expense	45.0	12.8	8.9	3.9	3.5	29.1	3.1	2.9	2.7	2.7	11.3
General & Admin Exp.	91.3	30.2	32.3	31.1	26.8	120.4	26.7	26.7	27.0	27.6	108.1
R&D Expense	8.3	2.4	2.6	2.3	1.9	9.1	1.8	1.7	1.6	1.5	6.6
EBITDA	**(74.0)**	**(13.6)**	**(12.3)**	**(6.9)**	**(4.6)**	**(37.4)**	**(3.0)**	**(1.2)**	**0.5**	**3.1**	**(0.7)**
EBITDA Margin	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	**1%**	**4%**	**NM**
Depreciation & Amort.	17.2	6.0	6.5	5.3	5.1	22.95	5.2	5.2	5.3	5.3	21.0
Total Operating Exp.	268.9	94.7	91.9	80.8	72.1	339.4	71.7	72.6	74.5	78.3	297.1
Operating Income	(91.2)	(19.6)	(18.8)	(12.2)	(9.7)	(60.3)	(8.2)	(6.5)	(4.8)	(2.2)	(21.6)
Operating Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Net Interest Exp. (income)	(3.2)	(2.05)	(0.14)	(0.36)	0.05	(2.49)	0.08	0.05	(0.01)	(0.12)	(0.01)
Income Before Tax	(88.0)	(17.6)	(18.6)	(11.9)	(9.7)	(57.8)	(8.3)	(6.5)	(4.8)	(2.1)	(21.6)
Taxes	-	-	-	-	-	-	-	-	-	-	-
Net Income	(88.0)	(17.6)	(18.6)	(11.9)	(9.7)	(57.8)	(8.3)	(6.5)	(4.8)	(2.1)	(21.6)
Preferred Stock Dividend	3.6	2.5	3.0	5.3	3.6	14.5	3.6	3.6	3.6	3.6	14.5
Net Income to common	(91.6)	(20.1)	(21.7)	(17.1)	(13.4)	(72.3)	(11.9)	(10.1)	(8.4)	(5.7)	(36.1)
One Time Items	20.4	-	-	8.9	-	8.9	-	-	-	-	-
Net Income after One Time Items	(110.7)	(20.1)	(21.7)	(26.0)	(13.4)	(81.2)	(11.9)	(10.1)	(8.4)	(5.7)	(36.1)
Weighted Avg. Shares Out	33.1	33.8	33.9	34.0	34.0	33.9	34.5	35.01	35.53	36.07	35.3
Diluted Shares Out	37.7	38.7	39.6	40.6	41.6	40.1	42.2	42.88	43.52	44.18	43.2
EPS	$ (2.77)	$ (0.60)	$ (0.64)	$ (0.50)	$ (0.39)	$ (2.13)	$ (0.34)	$ (0.29)	$ (0.24)	$ (0.16)	$ (1.02)
EPS (after one time items)	(3.35)	(0.60)	(0.64)	(0.77)	(0.39)	(2.39)	(0.34)	(0.29)	(0.24)	(0.16)	(1.02)

Source: Company reports and Thomas Weisel Partners LLC estimates

11/08/01

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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 1076
COMPANY/ Sprint/Dickerson
WITNESS: KWD-4,5,7,8,12&13-B
DATE: 02/24 - 27/04

Sprint - BACE Model Analysis
Summary of Collocation Build Out NPV Differences

Line	Wire Center	DS0 Lines Year 10	a Sprint Calc of Collo Build Out NPVs	b BACE Calc of ColloBuildOut NPVs	c = a - b Difference	d = c / b Percent Difference
1	[redacted]					
2						
3						
4						
5						
6						
7	*Total*					

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 1076
COMPANY/ Sprint/Dickerson
WITNESS: KWD-4,5,7,8,12-13
DATE: 02/24-27/04

Sprint - BACE Model Analysis
Sprint Calculation of Collocation Build Out NPV
Wire Center: DYBHFLPO

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model	[redacted]											
2	DS1 Demand	BACE Model												
3	DSL Demand	BACE Model												
4	DS0 Planning Demand	Ln 1 Yr X + ((Ln 1 Yr (X+1) - Ln 1 Yr X) / 2)												
5	DS1 Planning Demand	Ln 2 Yr X + ((Ln 2 Yr (X+1) - Ln 2 Yr X) / 2)												
6	DSL Planning Demand	Ln 3 Yr X + ((Ln 3 Yr (X+1) - Ln 3 Yr X) / 2)												
7	Amps Required DS0 Planning Demand	Ln 4 / 1,056 * 59												
8	Amps Required DS1 Planning Demand	Ln 5 / 28 * 7												
9	Amps Required DSL Planning Demand	Ln 6 / 224 * 12												
10	Amps Required Total Planning Demand	Sum Lns 7 Thru 9												
11	Fuse Power Cabling Req	Ln 10 / 80%												
12	Power Cabling Required	Based on Anticipated Power Demand Ln 11												
13	Application H.1.1	BST Price List												
14	Space Prep H.1.45	BST Price List												
15	Engineering Initial	Sprint Price List												
16	Engineering Augment [a]	Sprint Price List												
17	Power Cabling 60-Amp	Sprint Price List												
18	Total Buildout	Sum Lns 13 Thru 17												
19	Buildout NPV Factors													
20	**Buildout NPV**	Ln 18 x Ln 19		$ 24,946	$ 10,828	$ 8,137	$ 3,135	$ 2,846	$ -	$ -	$ -	$ -	$ -	$ -

Note (a) Engineering Augments necessary for the addition of power cabling or cross-connect cabling.

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Page 2 of 7

Sprint - BACE Model Analysis
Sprint Calculation of Collocation Build Out NPV
Wire Center: HLWDFLPE

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model												
2	DS1 Demand	BACE Model												
3	DSL Demand	BACE Model												
4	DS0 Planning Demand	Ln 1 Yr X + ((Ln 1 Yr (X+1) - Ln 1 Yr X) / 2)												
5	DS1 Planning Demand	Ln 2 Yr X + ((Ln 2 Yr (X+1) - Ln 2 Yr X) / 2)												
6	DSL Planning Demand	Ln 3 Yr X + ((Ln 3 Yr (X+1) - Ln 3 Yr X) / 2)												
7	Amps Required DS0 Planning Demand	Ln 4 / 1,056 * 59												
8	Amps Required DS1 Planning Demand	Ln 5 / 28 * 7												
9	Amps Required DSL Planning Demand	Ln 6 / 224 * 12												
10	Amps Required Total Planning Demand	Sum Lns 7 Thru 9												
11	Fuse Power Cabling Req	Ln 10 / 80%												
12	Power Cabling Required	Based on Anticipated Power Demand Ln 11												
13	Application H.1.1	BST Price List												
14	Space Prep H.1.45	BST Price List												
15	Engineering Initial	Sprint Price List												
16	Engineering Augment [a]	Sprint Price List												
17	Power Cabling 60-Amp	Sprint Price List												
18	Power Cabling 200-Amp	Sprint Price List												
19	Total Buildout	Sum Lns 13 Thru 18												
20	Buildout NPV Factors													
21	Buildout NPV	Ln 19 x Ln 20												

Note (a) Engineering Augments necessary for the addition of power cabling or cross-connect cabling.

Sprint - BACE Model Analysis
Sprint Calculation of Collocation Build Out NPV
Wire Center: MIAMFLOL

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model												
2	DS1 Demand	BACE Model												
3	DSL Demand	BACE Model												
4	DS0 Planning Demand	Ln 1 Yr X + ((Ln 1 Yr (X+1) - Ln 1 Yr X) / 2)												
5	DS1 Planning Demand	Ln 2 Yr X + ((Ln 2 Yr (X+1) - Ln 2 Yr X) / 2)												
6	DSL Planning Demand	Ln 3 Yr X + ((Ln 3 Yr (X+1) - Ln 3 Yr X) / 2)												
7	Amps Required DS0 Planning Demand	Ln 4 / 1,056 * 59												
8	Amps Required DS1 Planning Demand	Ln 5 / 28 * 7												
9	Amps Required DSL Planning Demand	Ln 6 / 224 * 12												
10	Amps Required Total Planning Demand	Sum Lns 7 Thru 9												
11	Fuse Power Cabling Req	Ln 10 / 80%												
12	Power Cabling Required	Based on Anticipated Power Demand Ln 11												
13	Application H.1.1	BST Price List												
14	Space Prep H.1.45	BST Price List												
15	Engineering Initial	Sprint Price List												
16	Engineering Augment [a]	Sprint Price List												
17	Power Cabling 60-Amp	Sprint Price List												
18	Total Buildout	Sum Lns 13 Thru 17												
19	Buildout NPV Factors													
20	Buildout NPV	Ln 18 x Ln 19												

Note (a) Engineering Augments necessary for the addition of power cabling or cross-connect cabling.

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Sprint - BACE Model Analysis
Sprint Calculation of Collocation Build Out NPV
Wire Center: MRTHFLVE

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model	[redacted]											
2	DS1 Demand	BACE Model												
3	DSL Demand	BACE Model												
4	DS0 Planning Demand	Ln 1 Yr X + ((Ln 1 Yr (X+1) - Ln 1 Yr X) / 2)												
5	DS1 Planning Demand	Ln 2 Yr X + ((Ln 2 Yr (X+1) - Ln 2 Yr X) / 2)												
6	DSL Planning Demand	Ln 3 Yr X + ((Ln 3 Yr (X+1) - Ln 3 Yr X) / 2)												
7	Amps Required DS0 Planning Demand	Ln 4 / 1,056 * 59												
8	Amps Required DS1 Planning Demand	Ln 5 / 28 * 7												
9	Amps Required DSL Planning Demand	Ln 6 / 224 * 12												
10	Amps Required Total Planning Demand	Sum Lns 7 Thru 9												
11	Fuse Power Cabling Req	Ln 10 / 80%												
12	Power Cabling Required	Based on Anticipated Power Demand Ln 11												
13	Application H.1.1	BST Price List												
14	Space Prep H.1.45	BST Price List												
15	Engineering Initial	Sprint Price List												
16	Engineering Augment [a]	Sprint Price List												
17	Power Cabling 60-Amp	Sprint Price List												
18	Total Buildout	Sum Lns 13 Thru 17												
19	Buildout NPV Factors													
20	Buildout NPV	Ln 18 x Ln 19												

Note (a) Engineering Augments necessary for the addition of power cabling or cross-connect cabling.

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Sprint - BACE Model Analysis
Sprint Calculation of Collocation Build Out NPV
Wire Center: PRSNFLFD

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model												
2	DS1 Demand	BACE Model												
3	DSL Demand	BACE Model												
4	DS0 Planning Demand	Ln 1 Yr X + ((Ln 1 Yr (X+1) - Ln 1 Yr X) / 2)												
5	DS1 Planning Demand	Ln 2 Yr X + ((Ln 2 Yr (X+1) - Ln 2 Yr X) / 2)												
6	DSL Planning Demand	Ln 3 Yr X + ((Ln 3 Yr (X+1) - Ln 3 Yr X) / 2)												
7	Amps Required DS0 Planning Demand	Ln 4 / 1,056 * 59												
8	Amps Required DS1 Planning Demand	Ln 5 / 28 * 7												
9	Amps Required DSL Planning Demand	Ln 6 / 224 * 12												
10	Amps Required Total Planning Demand	Sum Lns 7 Thru 9												
11	Fuse Power Cabling Req	Ln 10 / 80%												
12	Power Cabling Required	Based on Anticipated Power Demand Ln 11												
13	Application H.1.1	BST Price List												
14	Space Prep H.1.45	BST Price List												
15	Engineering Initial	Sprint Price List												
16	Engineering Augment [a]	Sprint Price List												
17	Power Cabling 60-Amp	Sprint Price List												
18	Total Buildout	Sum Lns 13 Thru 17												
19	Buildout NPV Factors													
20	Buildout NPV	Ln 18 x Ln 19												

Note (a) Engineering Augments necessary for the addition of power cabling or cross-connect cabling.

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Sprint - BACE Model Analysis
Sprint Calculation of Collocation Build Out NPV
Wire Center: SBSTFLMA

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model												
2	DS1 Demand	BACE Model												
3	DSL Demand	BACE Model												
4	DS0 Planning Demand	Ln 1 Yr X + ((Ln 1 Yr (X+1) - Ln 1 Yr X) / 2)												
5	DS1 Planning Demand	Ln 2 Yr X + ((Ln 2 Yr (X+1) - Ln 2 Yr X) / 2)												
6	DSL Planning Demand	Ln 3 Yr X + ((Ln 3 Yr (X+1) - Ln 3 Yr X) / 2)												
7	Amps Required DS0 Planning Demand	Ln 4 / 1,056 * 59												
8	Amps Required DS1 Planning Demand	Ln 5 / 28 * 7												
9	Amps Required DSL Planning Demand	Ln 6 / 224 * 12												
10	Amps Required Total Planning Demand	Sum Lns 7 Thru 9												
11	Fuse Power Cabling Req	Ln 10 / 80%												
12	Power Cabling Required	Based on Anticipated Power Demand Ln 11												
13	Application H.1.1	BST Price List												
14	Space Prep H.1.45	BST Price List												
15	Engineering Initial	Sprint Price List												
16	Engineering Augment [a]	Sprint Price List												
17	Power Cabling	Sprint Price List												
18	Total Buildout	Sum Lns 13 Thru 17												
19	Buildout NPV Factors													
20	Buildout NPV	Ln 18 x Ln 19												

Note (a) Engineering Augments necessary for the addition of power cabling or cross-connect cabling.

Sprint-Florida, Inc.
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Exhibit KWD-4
Filed: January 7, 2004
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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 1076
COMPANY: Sprint/Dickerson
WITNESS: KWD-5
DATE: 02/24 - 27/04

ATTACHMENT A

Document and page and line numbers	Justification for Confidential Treatment
Highlighted Information on Page 2 of Exhibit KWD-5	This information is proprietary information obtained by Sprint via its relationship with its vendors. Release of this information would impair the efforts of the company or its affiliates to contract for goods or services on favorable terms s. 364.183(3)(d), F.S.
Highlighted information in Exhibit KWD-7	This information is proprietary, competitively sensitive information relating to Sprint's sales costs. The information is information relating to Sprint's competitive interests, the disclosure of which would impair the competitive business of Sprint. Section 364.183(3)(e), F.S.

Sprint - BACE Model Analysis
Calculation of DC Power Consumption Understatement - MonthlyCollo Cost Center
All Wire Centers

Line		Source	Rates	Total NPV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	DS0 Demand	BACE Model	[redacted]											
2	Divide Line 1 by 1,056 Lines	From Page 2 of 2												
3	Multiply Line 2 By 59 Amps	From Page 2 of 2												
4	Annual DC Power Cost To Serve DS0 Demand	Ln 3 x 12 x Ln 4 Rate												
5	Present Value Factors													
6	DC Power NPV To Serve DS0 Demand	Ln 4 x Ln 5												
7	Amps Assumed in BACE	170 Offices x 60 Amps												
8	Annual DC Power Cost To Serve 60 Amps Per Month	Ln 7 x 12 x Ln 8 Rate												
9	Present Value Factors													
10	DC Power NPV To Serve 60 Amps Per Month in BACE	Ln 8 x Ln 9												
11	**BACE Model Understatement of DC Power in MonthlyCollo Cost Center**	Ln 6 - Ln 10												
12	**BACE Model Understatement Per Cent**	Ln 11 / Ln 10												

Sprint - BACE Model Analysis

Power Requirements of NGDLC Equipment Correlated to Demand for Voice Line Service

Equipment Addition Necessary	NGDLC Vendor DC Power Requirement to Serve Associated Line Quantities: Per Shelf DC Power Requirement	Cumulative DC Power Requirement	DS0 Lines Served
Advanced Fibre Communications AccessMax Control Shelf	[redacted]		
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			
Advanced Fibre Communications AccessMax Control Shelf			
Advanced Fibre Communications AccessMax Expansion Shelf			

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DOCKET NO. 030851-TP EXHIBIT NO. 1076
COMPANY/ Sprint/Dickerson
WITNESS: KWD-7
DATE: 02/24 - 27/04

ATTACHMENT A

Document and page and line numbers	Justification for Confidential Treatment
Highlighted Information on Page 2 of Exhibit KWD-5	This information is proprietary information obtained by Sprint via its relationship with its vendors. Release of this information would impair the efforts of the company or its affiliates to contract for goods or services on favorable terms s. 364.183(3)(d), F.S.
Highlighted information in Exhibit KWD-7	This information is proprietary, competitively sensitive information relating to Sprint's sales costs. The information is information relating to Sprint's competitive interests, the disclosure of which would impair the competitive business of Sprint. Section 364.183(3)(e), F.S.

Sprint BACE Model Analysis
BACE Model Sales Costs Inputs
Redacted Version

Sprint-Florida, Inc.
Docket No. 030851-TP
Exhibit KWD - 7
Filed: January 7, 2004

A	B C	D	E	F	G	H	I	J	K	L	M
Row	Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
6	**BACE Model Sales Costs Input**										
7	**Mass Market**										
8	Residential Customers										
9	SOHO Customers										
10	SME/A Customers										
11	**Enterprise Market**										
12	SME/B Customers										
13	SME/C Customers										

Sprint BACE Model Analysis
BACE Model Sales Costs Inputs
Redacted Version

Sprint-Florida, Inc.
Docket No. 030851-TP
Exhibit KWD - 7
Filed: January 7, 2004

A	B C	D	E	F	G	H	I	J	K	L	M
Row	Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
6	**BACE Model Sales Costs Input**										
7	**Mass Market**										
8	Residential Customers										
9	SOHO Customers										
10	SME/A Customers										
11	**Enterprise Market**										
12	SME/B Customers										
13	SME/C Customers										

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DOCKET NO. 030851-TP EXHIBIT NO. 1076
COMPANY/ Sprint / Dickerson
WITNESS: KWD-8
DATE: 02/24 - 27/04

BACE Model - BellSouth Inputs
NPV Analysis

Sprint-Florida, Inc.
Docket No. 030851-TP
Exhibit KWD - 8
Filed: January 7, 2004
Page 1 of 1

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Net Revenue												
Operating Expenses												
Income Taxes												
Capital Expenditures												
Net Cashflow												
NPV of Cashflow												
Exponent for NPV Calc												

Internal Rate of Return 37.37%

Note: Internal Rate of Return (IRR) calculated via iterative process to determine the rate at which the 10-year Net Present Value equals zero. Cashflow in Year 0 assumed at beginning of Year 1. Cashflow in Years 1-10 is assumed to be in middle of year.

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02635 FEB 23 04
DOCUMENT NUMBER-DATE

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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 1076
COMPANY/ Sprint/Dickerson
WITNESS: KWD-12 redacted
DATE: 02/24 - 27/04

Florida Exhibit BACE Version 2.2

Exhibit KWD-12
Redacted

Sprint-Florida, Inc.
Docket No. 030851-TP
Staff's 4th PODs
02-Feb-04
Exhibit KWD-12 (Revised 2/10/04)

	A	B	C	D	E	F	G
10		Total 10 Year Income Statement: data source is NetIncome Total standard BACE report		Bell South sales cost with Sprint's other cumulative changes	Sprint cumulative changes: Scenario 11	Sprint cumulative scenario 11 with decrease in enterprise sales cost	Sprint cumulative scenario 11 with decrease in mass market sales cost
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26		10-Year NPV: data source is CEA UNEZone standard BACE report		Bell South sales cost with Sprint's other cumulative changes	Sprint cumulative changes: Scenario 11	Sprint cumulative scenario 11 with decrease in enterprise sales cost	Sprint cumulative scenario 11 with decrease in mass market sales cost
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41		Sales Cost Change		Sales Cost Inputs - Bell South	Sales Cost Inputs - Sprint Scenario 11	Sales Cost Inputs - Decrease Enterprise	Sales Cost Inputs - Decrease Mass Market
42							
43							
44							
45							
46							

Notes:

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DOCKET NO. 030851-TP EXHIBIT NO. 1076
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WITNESS: KWD-13 conf
DATE: 02/24 - 27/04

Docket No. 030851-TP

Exhibit KWD-13

PROPRIETARY

Comparison of Sprint Florida Commission Approved Capital to Bell South BACE Model Results for End Office Switches and Loop DLC Equipment

Sprint
Exhibit KWD - 13

A	B	C	D	E	F	G	H	I	J	K	L	M
Row	Description	Source/Calculation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
5	**BACE Access Lines**											
6	BACE Access Lines	Note A.										
7												
8	**Switching**											
9	Bell South BACE Model											
10	Capex-Switching	Note B.										
11	Capex per line-cumulative	E11=SUM(D10:E10)/E6										
12												
13	Sprint Investment per line (1)	WS:Investment Support										
14	BACE % Capital Understated	E14=(E13-E11)/E11	40%	111%	134%	149%	152%	134%	126%	118%	101%	93%
15												
16	(1) Hosts Only Investment and Excludes Line Termination Investment											
17												
18												
19	**Digital Loop Carrier (DLC)**											
20	Bell South BACE Model											
21	Capex-DLC	Note C.										
22	Capex-DLC per line-cumulative	E22=SUM(D21:E21)/E6										
23												
24	Sprint Investment per line	WS:Investment Support										
25	BACE % Capital Understated	E25=(E24-E22)/E22	183%	237%	245%	218%	196%	178%	163%	148%	135%	123%
26												
27												

28 Note A: Access lines are from BellSouth filed BACE Model results. *The Report Data Source is Quantity and* Customer Count, fields to view include: State, Product and QUOM. Criteria: 1. Product Area = Internet
29 and QUOM = Data Lines or Lines 2. Product Area = Local and QUOM = Lines

30

31 Note B: Capex-Switching is from BellSouth filed BACE Model results. The Report Data Source is Revenue and Cost, fields to view include: Cost Center and Cost Element. *Criteria: 1. Cost Center = Local Switching*
32 and Cost Element <> BuildingLoading. Total Capex-Switching excludes Cost Elements BuildingLoading and FeatureFunctionality.

33

34 Note C: Capex-DLC is from BellSouth filed BACE Model results. The Report Data Source is Revenue and Cost, fields to view include: Cost Center. Criteria: 1. Cost Center = DLCEquipment.

Comparison of Sprint Florida Commission Approved Capital to Bell South BACE Model Results
for End Office Switches and Loop DLC Equipment

Sprint
Exhibit KWD - 13

print - Florida Docket # 990649-TP
pproved UNE Switch Investments, DLC Investments and Lines

A	B	C	D	E
Row	Description			
7	Switching	Commission Approved		Commission Approved
		Host & Remote Switches		Host Switches Only Excludes Line Termination Investment
8				
9	Access Lines			
10	Total Switch Investment			
11	Switching Investment per Line			
12				
13				
14		*Source:* FL Docket #990649-TP		
15		Staff approved switching investments		
16				
17		*File:* Sprint TELRIC Model		
18		Inpflt01.xls		
19				
20		*Data:*		
21				
22				
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39				

Comparison of Sprint Florida Commission Approved Capital to Bell South BACE Model Results for End Office Switches and Loop DLC Equipment

	Commission Approved
DLC	
DLC Lines	
Total DLC Investment	
DLC Investment per Line	

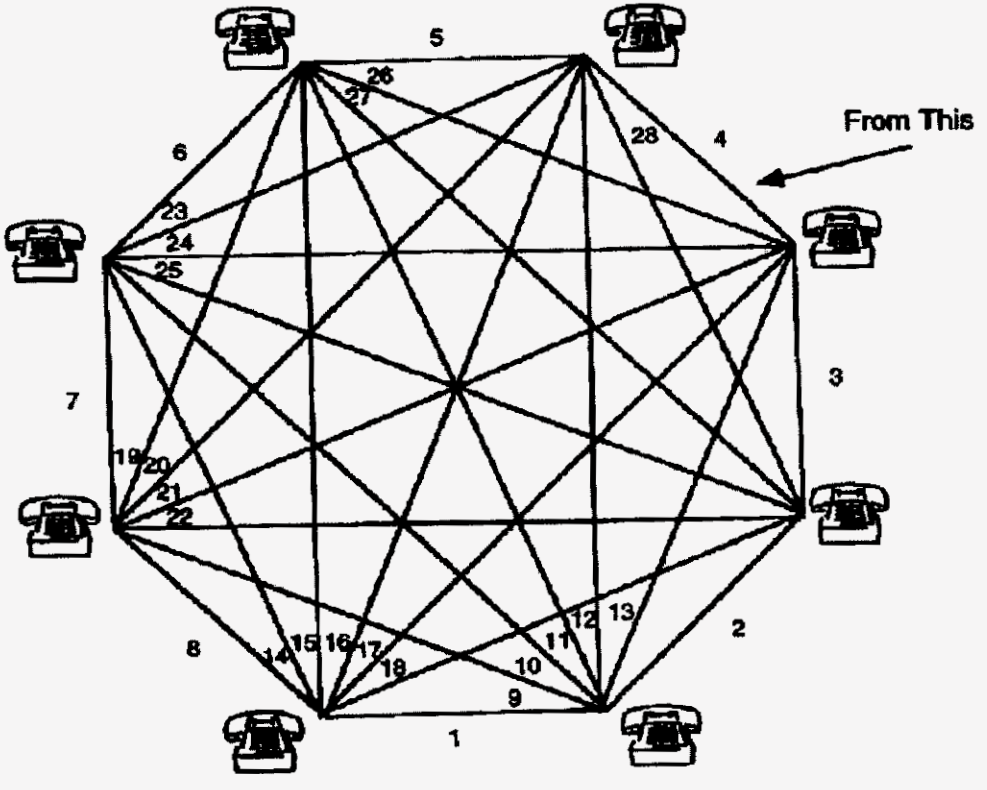
Source: FL Docket #990649-TP
Staff approved UNE-P DLC investments

File: Sprint TELRIC Model
Inpflt01.xls

Data:

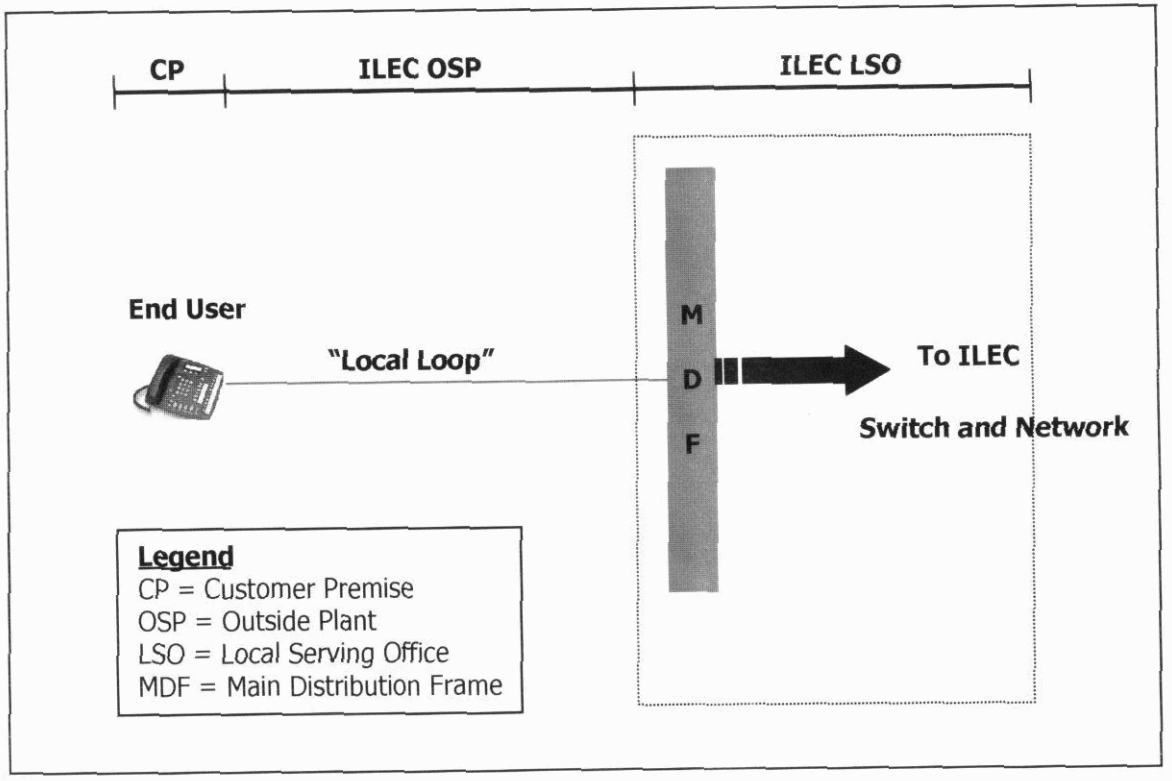
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 108-Comp
COMPANY/ AT+T/BradBury
WITNESS. JMB-1 thru 10, JMB-SR1
DATE: 02/24-27/04 / JMB-R1→
Exhibit JMB-1→

The Need for Centralized Switching



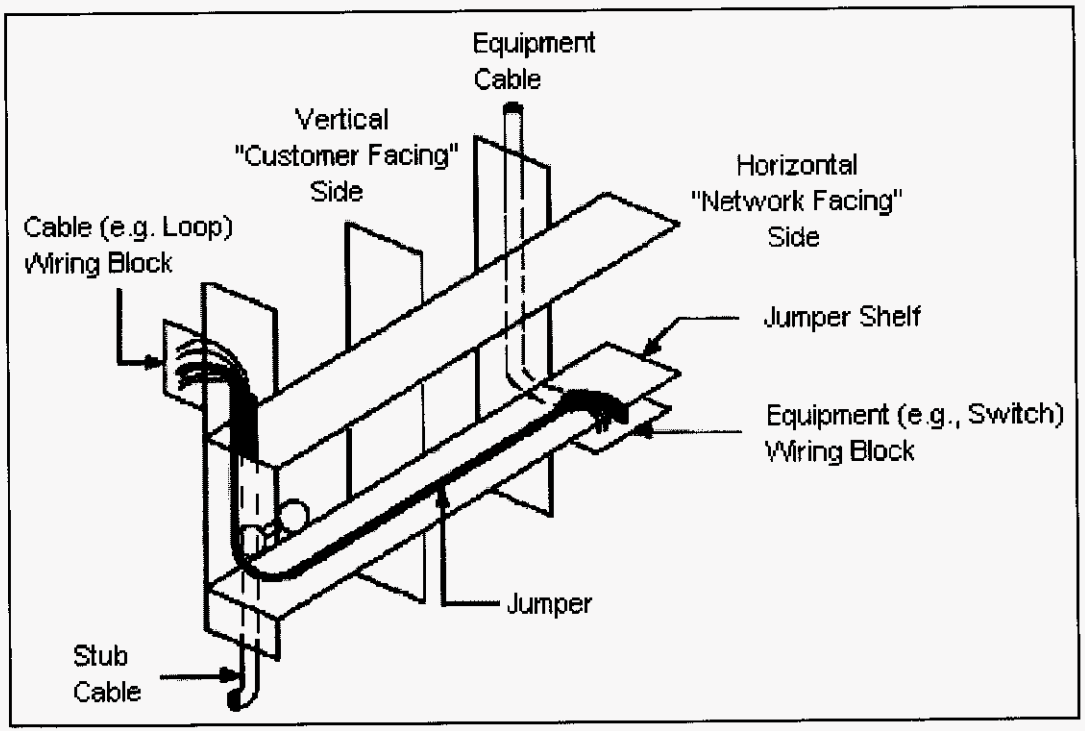
Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. ___, JMB-1

The Local Loop



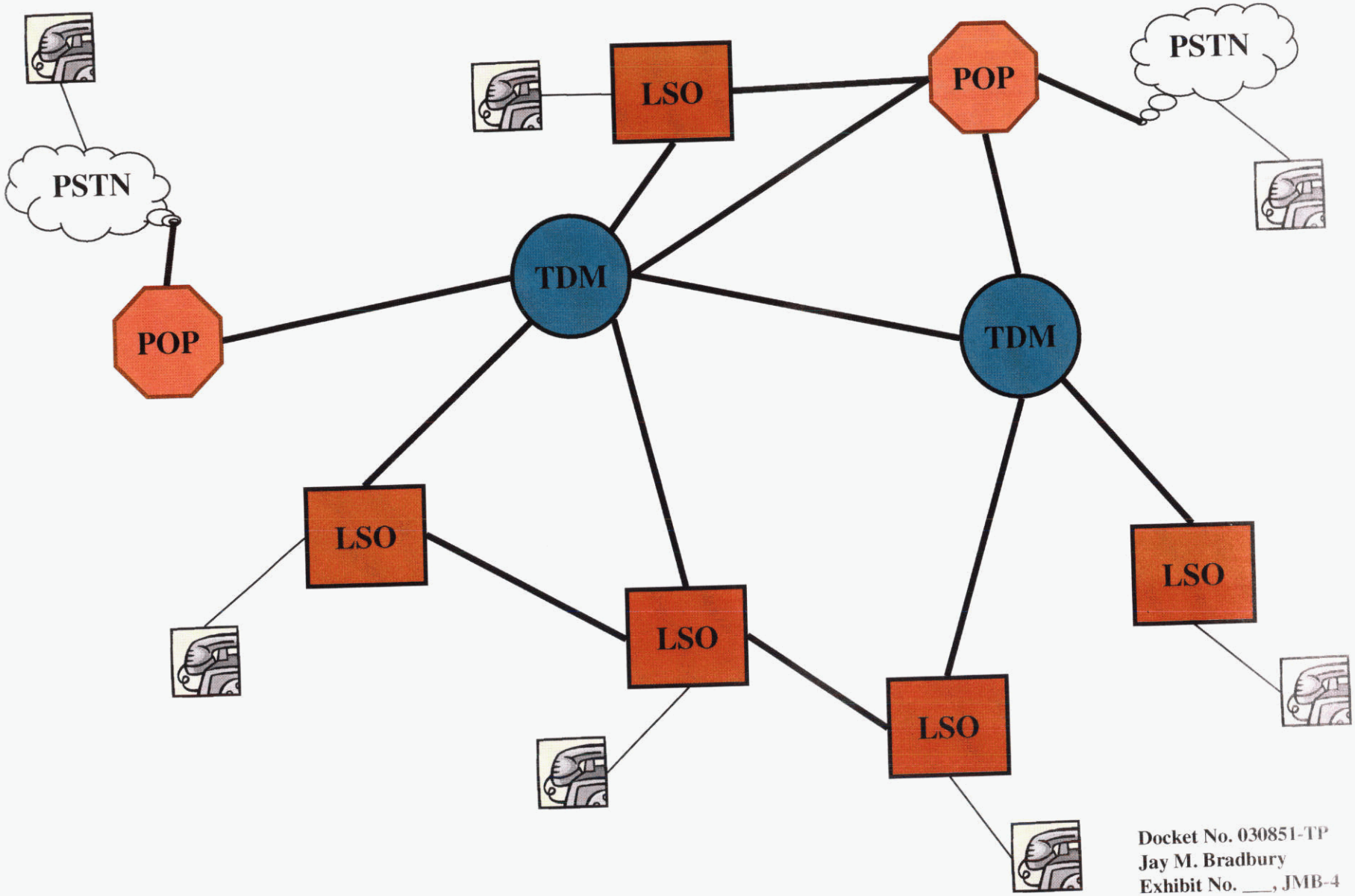
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Exhibit No. ___, JMB-2

A Distribution Frame



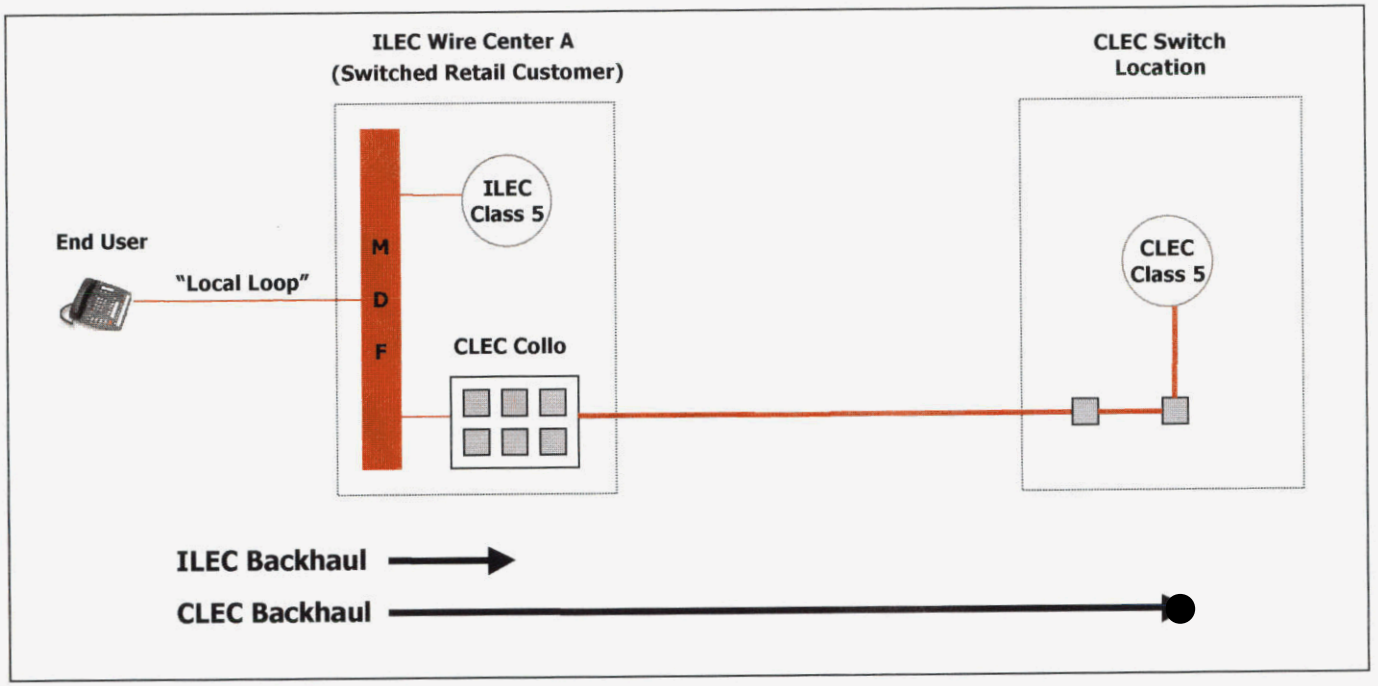
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Exhibit No. ___, JMB-3

The ILEC network architecture provides efficient call termination.



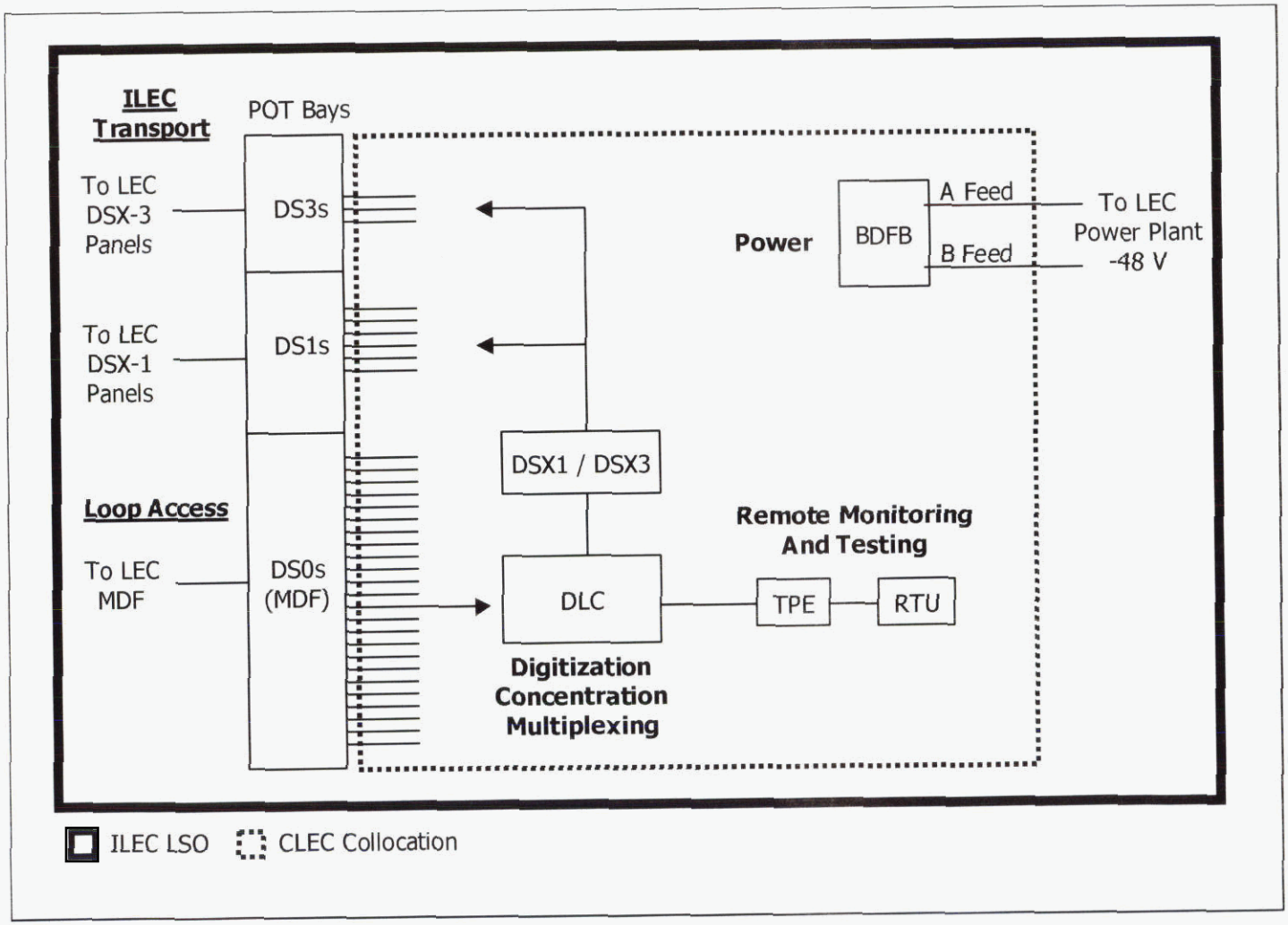
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Exhibit No. ___, JMB-4

Collocation and Backhaul



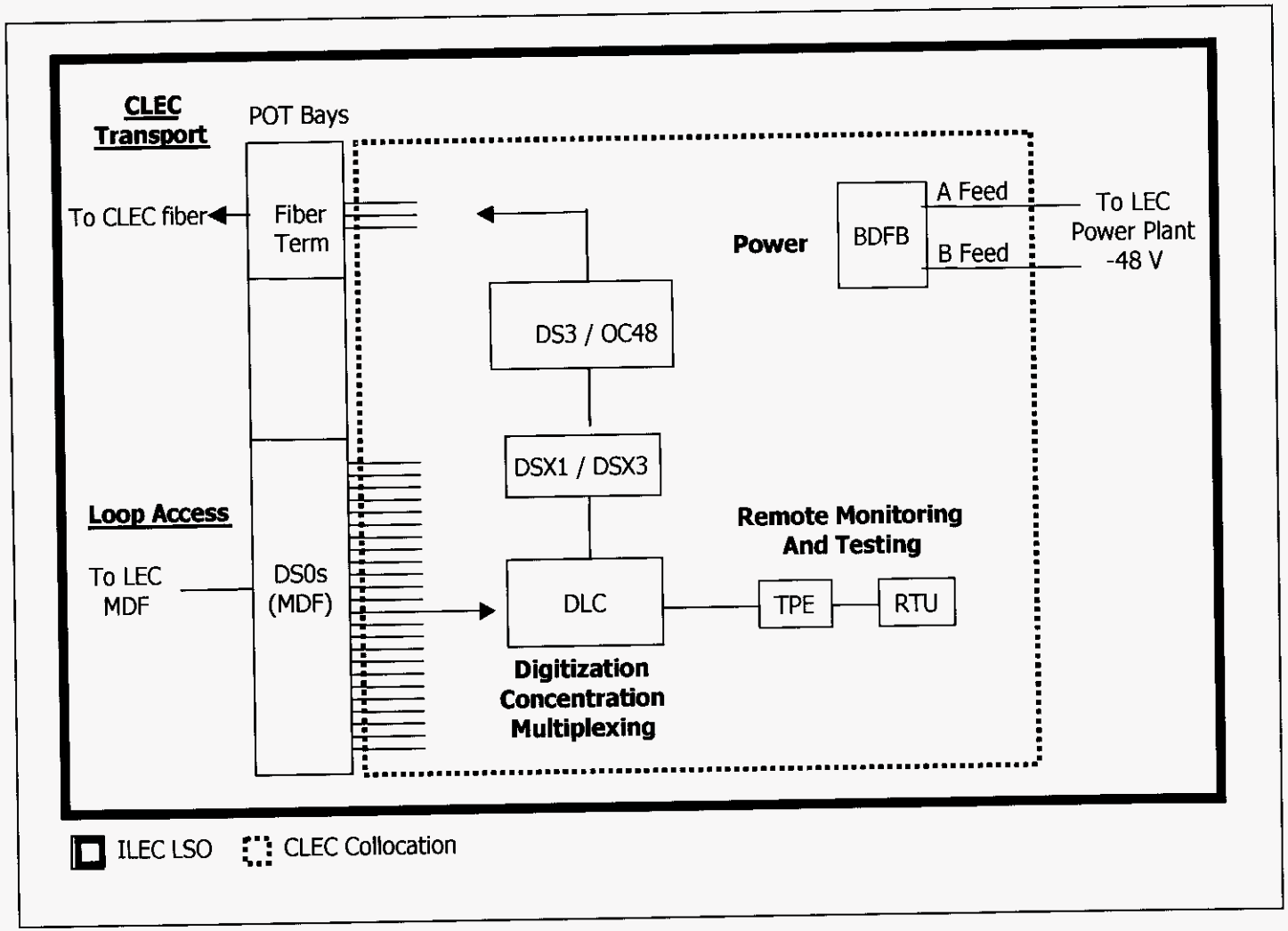
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Exhibit No. ___, JMB-5

Collocation with ILEC Transport



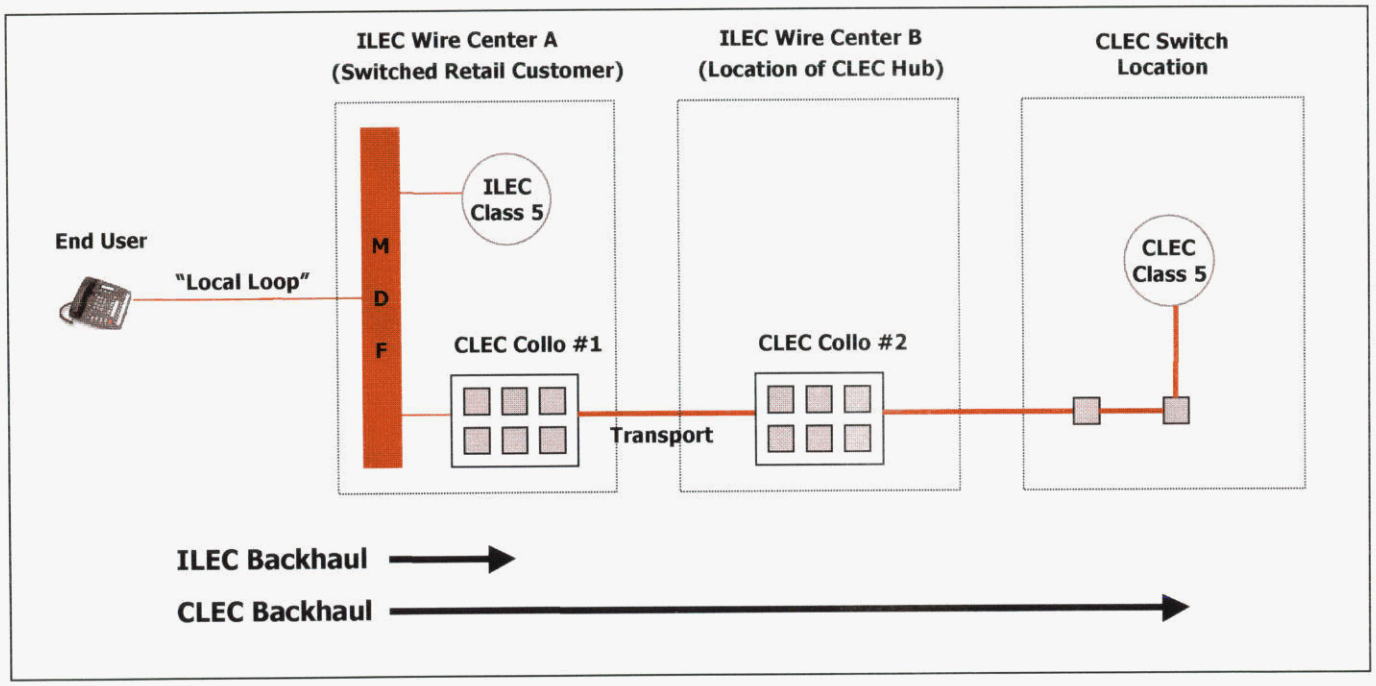
Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. ___, JMB-6

Collocation with CLEC Backhaul

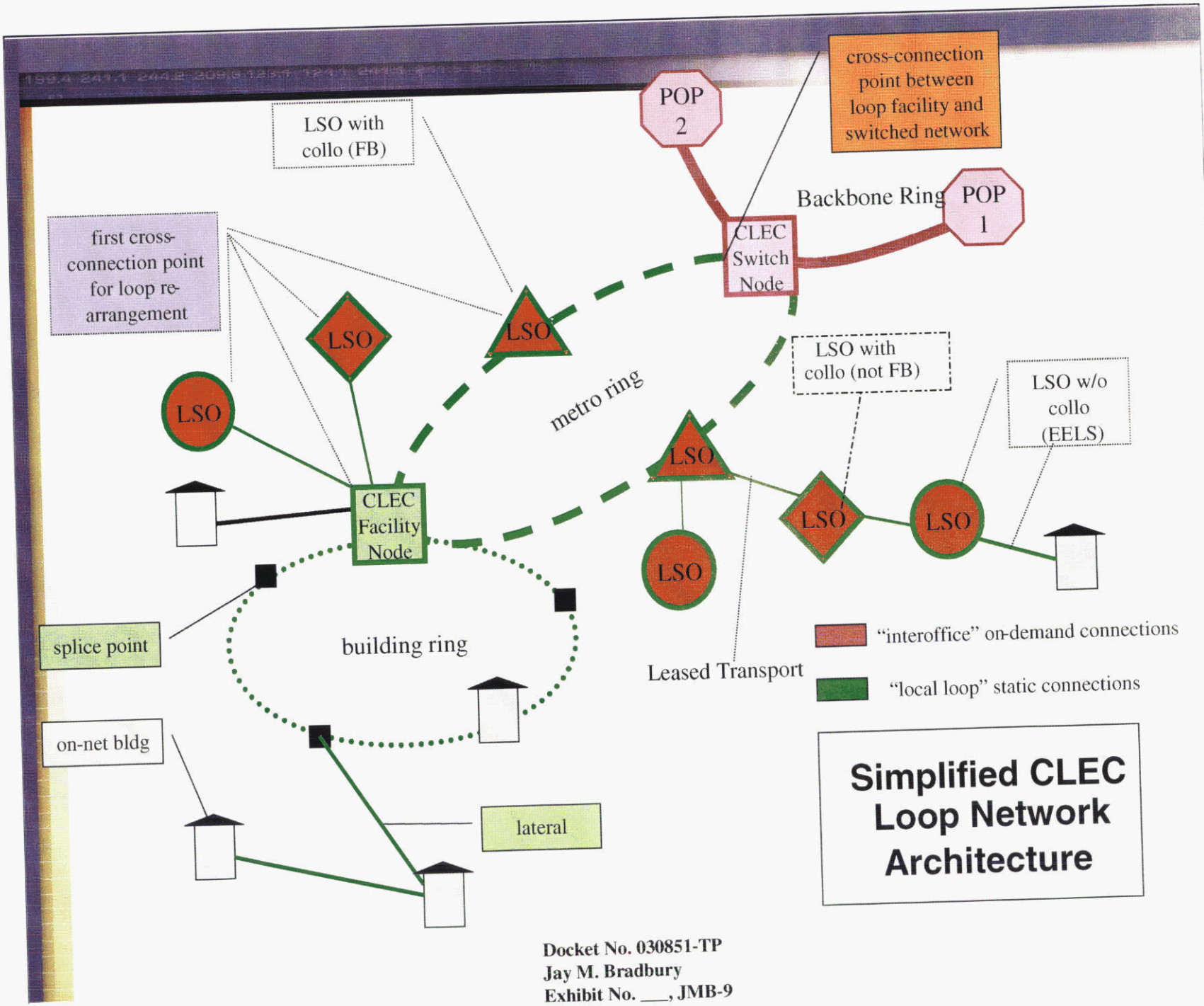


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Exhibit No. ___, JMB-7

Collocation Hubbing and Backhaul

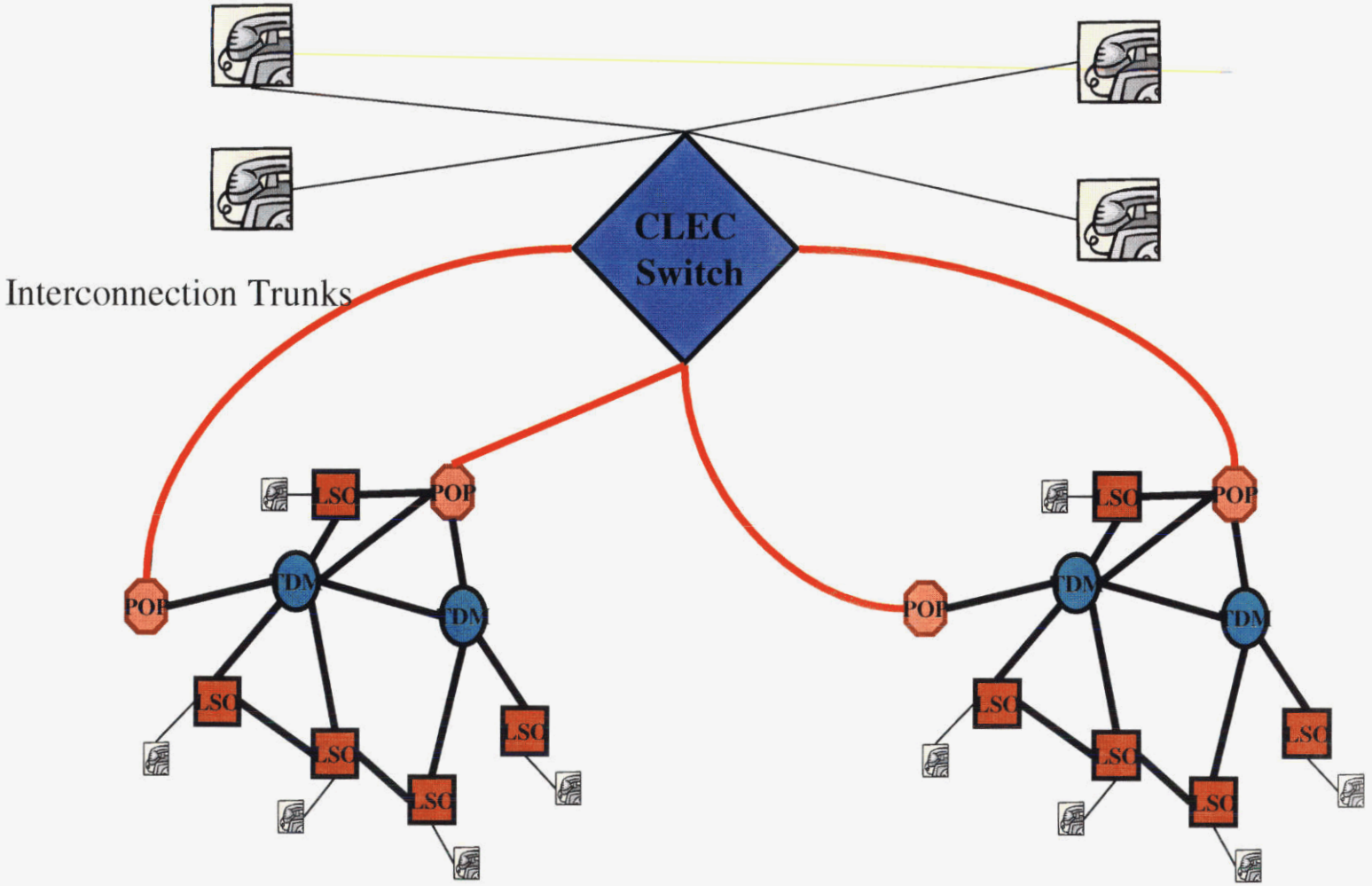


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Exhibit No. ___, JMB-8



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Jay M. Bradbury
Exhibit No. ___, JMB-9

The CLEC call termination requirements span multiple ILEC local calling areas, must use the ILEC network and can not duplicate the ILEC call termination efficiencies.



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Exhibit No. ___, JMB-10

Electronic Loop Provisioning (ELP)

Enabling The Competitive, All-Service Network Of The Future

November 2003

Overview

Electronic Loop Provisioning (ELP)

Enabling The Competitive, All-Service Network Of The Future

<<< Background and Introduction >>>

<<< Network Architecture and Design >>>

<<< Investments and Costs >>>

<<< Attachments >>>

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Background and Introduction



Background

Why The Need For ELP ?

- The local network and loop access architecture was designed with one carrier and one carrier only in mind—the Incumbent LEC
- As a result, there are inherent architectural impediments in the Incumbent LECs' local networks that effectively preclude practical and economic CLEC access to analog voice-grade loops used to provide voice services
- Unlike the ILECs, whose circuit switches are located at the same location where their end-users' loops terminate (i.e. the Local Serving Office or LSO), CLECs must create an extensive "backhaul network" to extend their end-users' loops to their circuit switches
- In order to connect their customers' loops to their switches, the ILECs merely run a jumper wire from one side of a Main Distribution Frame ("MDF") to the other in the same LSO
- In sharp contrast, CLECs face a significant "backhaul penalty" in order to connect UNE-Loops to their circuit switches
- The underlying network must change in order to accommodate practical, efficient and economical multi-carrier access to loops – ELP is one potential way

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Background

The CLEC Backhaul Penalty

- In summary, the CLEC backhaul penalty includes the following costs :

  (1) Engineering, establishing and maintaining collocation, including the associated space preparation and power requirements for sustaining collocation

  (2) Installing and maintaining digitization, concentration and multiplexing equipment at collocations, as well as related monitoring/testing and power distribution equipment

  (3) Arranging for and providing transport between collocations and CLEC switch locations

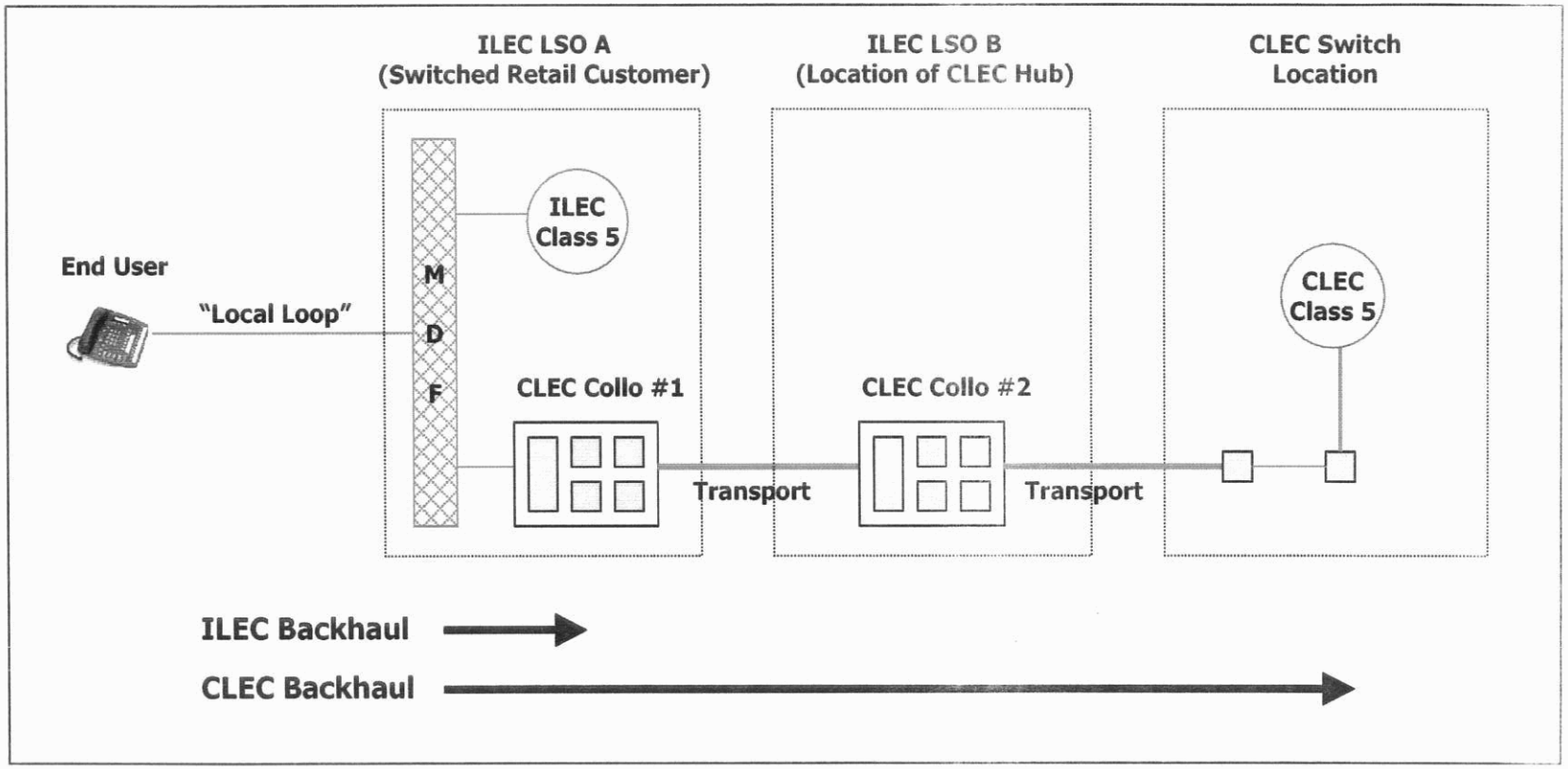
  (4) Engaging in the "coordinated hot-cut process" in order to migrate loops from the ILEC's network to the CLEC's network, which starts at the CLEC collocation

- Only after each of these requirements have been satisfied can a CLEC provision POTS service to end-users using an unbundled ILEC loop

- This "backhaul penalty" makes it practically and economically prohibitive to service analog voice grade loops using a UNE-L facilities based entry

Background

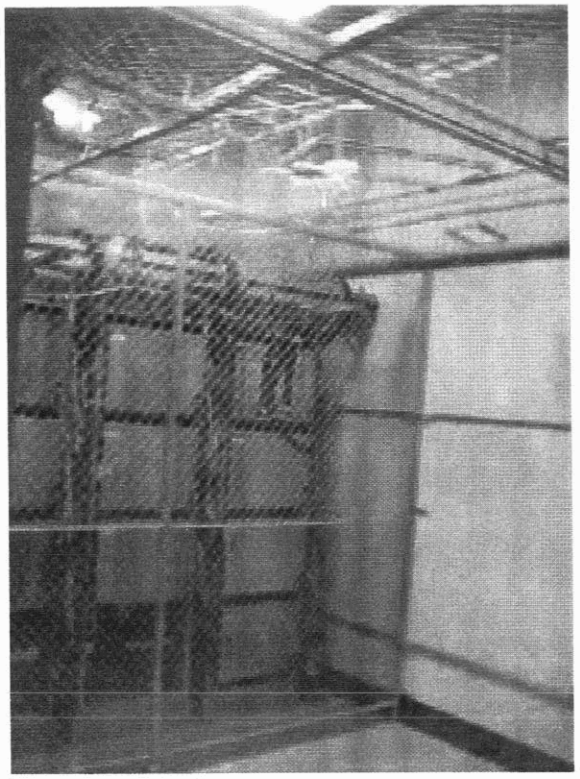
ILEC vs. CLEC Loop Access



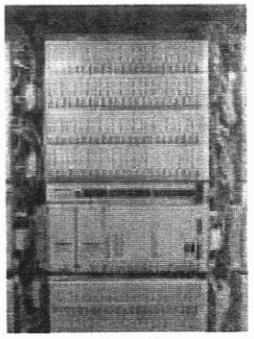
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Background

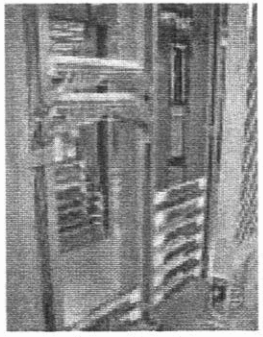
*Today's Collocation**
Digitization, Concentration, Multiplexing, Power and Testing Equipment



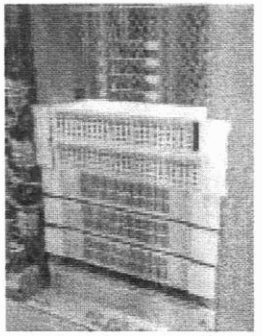
Collocation Cage
(Empty—Looking Out)



DLC



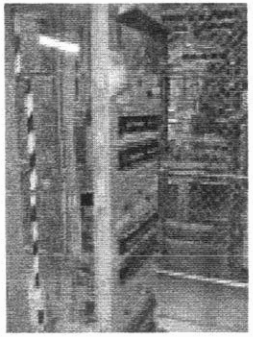
DSX-1



DSX-3



OC-X

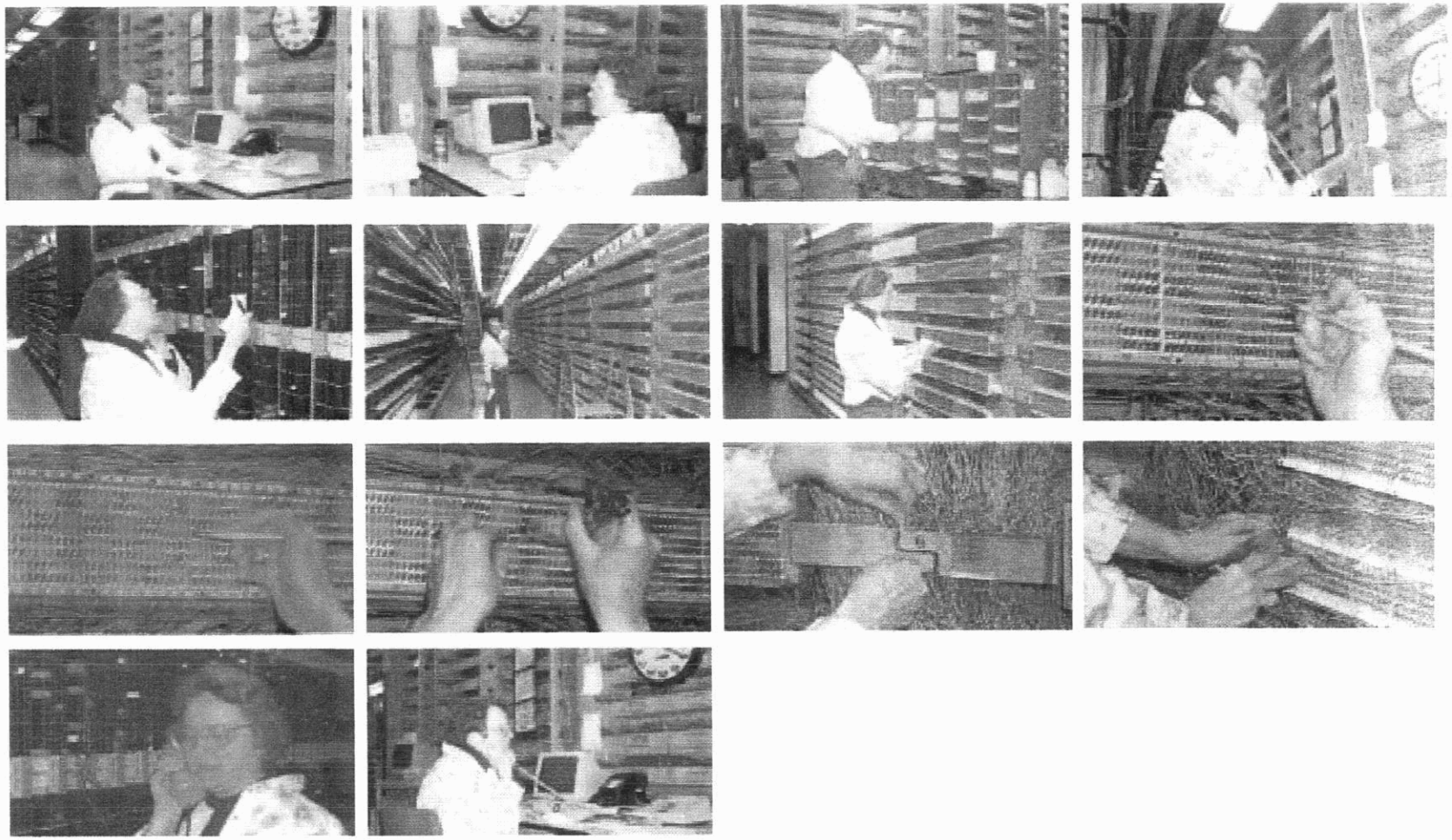


BDFB

*NOTE : Collocation profiles may vary based on CLEC and/or particular circumstances.

Background

Today's Loop Migration via "Hot-Cuts"



Source : BellSouth

Background

ELP Is One Potential Solution

- ELP addresses the underlying network architecture issues that impede competition for the so-called "mass-market" (i.e., residential and small business locations)
- ELP is a targeted infrastructure upgrade to the incumbent LECs' local network that introduces currently available network transmission technology into the local access network that digitizes and packetizes all end-user communications traffic, both voice and data
- Digitization and Packetization of the local access network...
  - ...eliminates the need for manual, labor-intensive "hot-cuts"
  - ...reduces the need for CLEC collocation and related equipment
  - ...improves CLEC transport economies
- ELP (or a technological equivalent that provides CLECs equivalent access to end-user loops as the ILECs) in conjunction with pro-competitive policies is required in order to make it both (a) practical, and (b) economic for CLECs to serve mass market locations using UNE-L facilities based entry
- Absent such a solution, UNE-P is the only practical and economic entry strategy to bring local competition to mass market locations

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Introduction

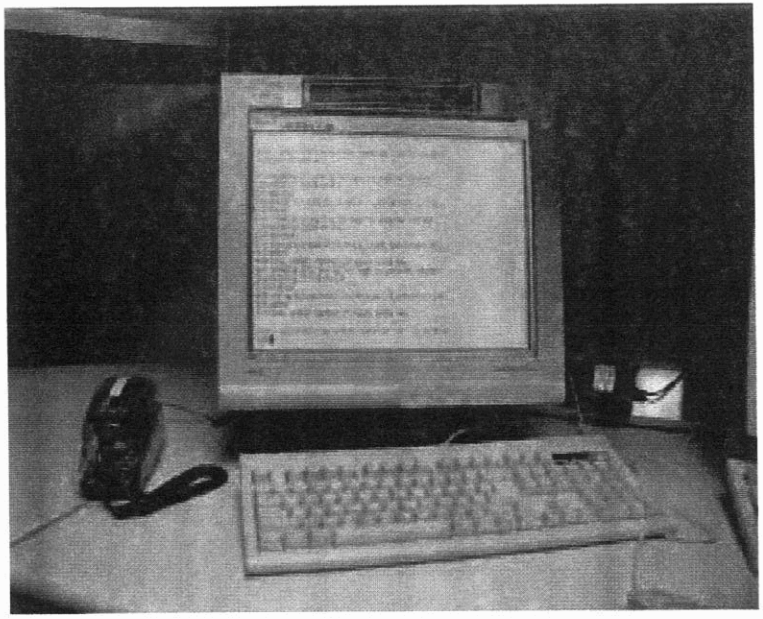
AT&T's Proposed Solution

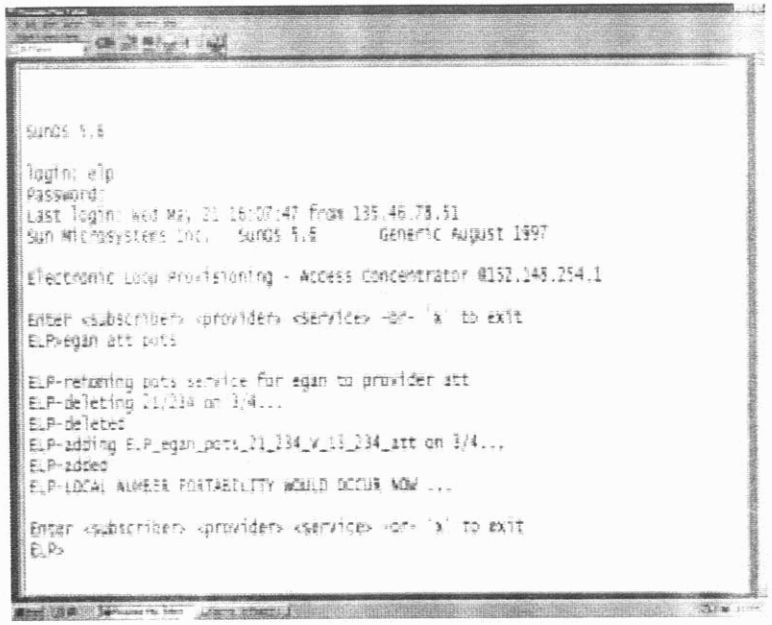
- AT&T's ELP proposal is one way in which voice digitization and packetization in the access network can be achieved
- It is premised on a "true" NGDLC access architecture that employs ATM transmission protocol
- ELP introduces three network elements into the local access network:
  - "true" Next Generation Digital Loop Carrier (tNGDLC) equipment
  - ATM modules
  - Voice Gateways (VGs)
- The introduction of these network elements transforms the local network into a digital, packet access network
- This fundamental change enables an open network architecture that will support nondiscriminatory multi-carrier access

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Background

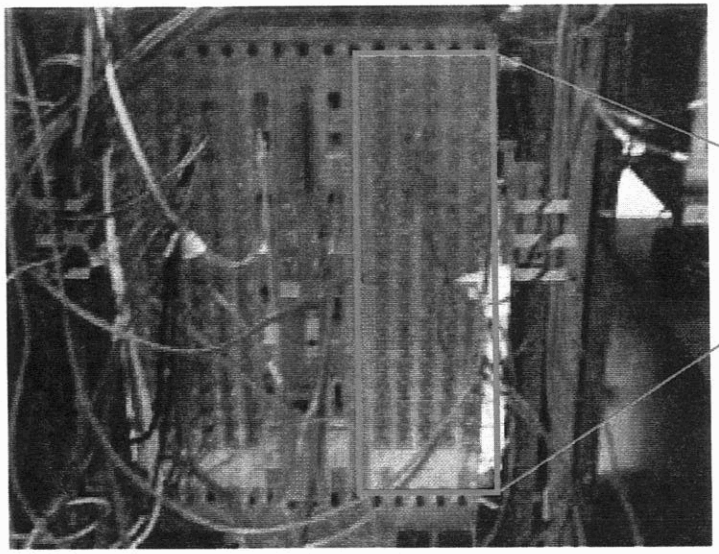
Loop Migration via ELP



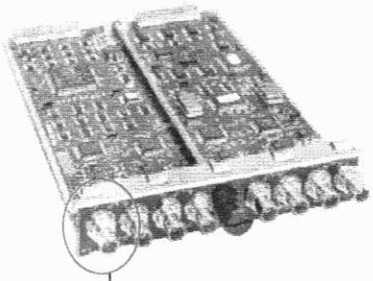


Background

Collocation Under ELP
*An ATM Module Port and Associated Transport Facility**



ATM Module (Backplane View)



CLEC Collocation can equal a DS1, DS3, or OC-3 or higher port on the ATM Module w/associated transport facility

*NOTE : Collocation under ELP will vary/be dependent upon how it is architecturally implemented.

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Network Architecture and Design

Network Architecture and Technology

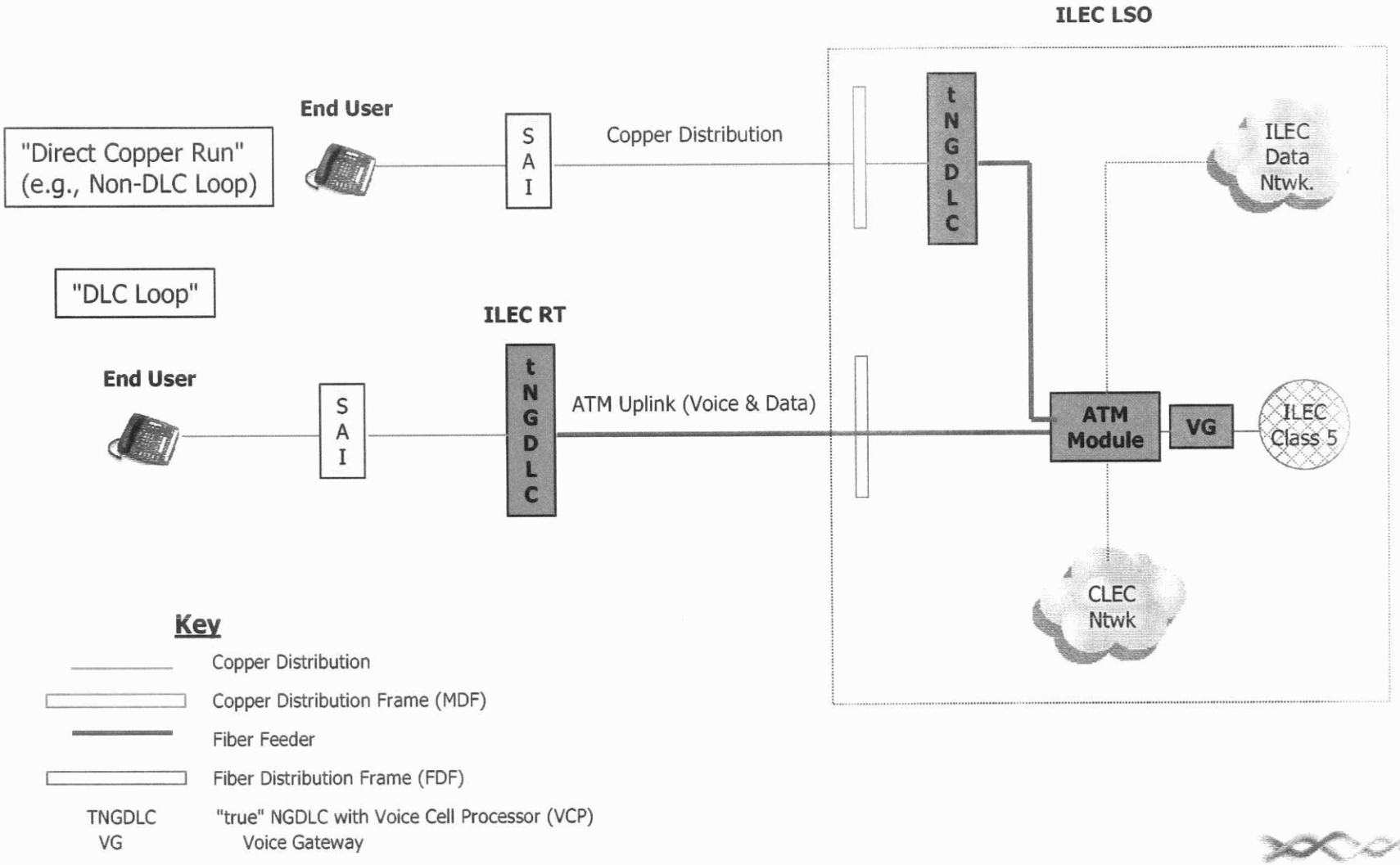
Three Key Elements

- Three Prime Components in the ELP Architecture
  - "true" NGDLC (tNGDLC)
  - ATM module
  - Voice Gateway (VG)
- ***tNGDLC.*** Performs the analog-to-digital conversion, voice and data "packetization" (e.g., Voice Packet Processing or VPP), multiplexing and concentration of end-users' communications traffic
- ***ATM Module.*** Performs the multiplexing and concentration of end-users' communications traffic from sub-tending tNGDLC units in RTs or in the CO
- ***VG.*** Performs the packet-to-circuit protocol conversion between the ATM based ELP access architecture and TDM based circuit switched architecture

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ELP Network Architecture Overview

Generic ELP Network Architecture



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Network Architecture and Technology

"true" NGDLC Technology

- **"True" NGDLC (tNGDLC) technology** converts current separate voice/data hardwired end-user to central office connections into software-defined connections that:
  - Convert end-user analog voice signals into packet format before they are transported to the central office
  - Combine these voice signals with data traffic (which current DSL technology already transports as packets)
  - Transport these combined voice and data packets to the central office over all-fiber facilities
- The most convenient packet-like transport format is likely to be **Asynchronous Transfer Mode (ATM)** protocol:
  - ATM is the format currently used for nearly all DSL transport
  - ATM permits quality-controlled permanent virtual circuits (PVCs) to be established and maintained for voice traffic as well

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Network Architecture and Technology

Values of a Digital, Packet Access Network

- By converting data *and* voice traffic into packet format...
  - All traffic rides on a converged loop network
  - A central office-located packet module (e.g., an ATM module) serves as an efficient interface point where all service providers can access all voice and data PVCs ("loops") subtending this switch
    - An end-user's voice traffic may be unbundled separately from that end-user's data traffic
    - Both ILECs and CLECs obtain identical access to these loops (although CLECs still face some asymmetric but reduced backhaul costs and issues)
  - Because the "loop" and "network" ports on this packet module are software-controlled:
    - Loops can be assigned to different carriers instantaneously
    - New services can be provisioned by all carriers equally
    - Functionality analogous to 1980s FGD "equal access" with its automated PIC process for selecting long distance carriers is established for local loops and carriers

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Network Architecture and Technology

Preservation of Legacy Investments

- All other portions of current loop infrastructure may remain unchanged by ELP
  - CPE used for voice services remains unchanged – as does CPE currently used for advanced services such as DSL or derived voice lines, etc.
  - Copper distribution facilities remain unchanged (unless they need to be shortened and/or repaired or conditioned to improve service)
  - Fiber feeder facilities remain unchanged (copper facilities upgraded to fiber, as necessary)
- Substantial portions of current ILEC NGDLC investment (and investment in legacy DLC systems) may be reusable
  - Sites, cabinets, power systems
  - Channel banks, common cards and channel cards (depending on vendor of legacy equipment)
  - ATM Modules (e.g., OCDs under Pronto, PARTS, etc.)

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Investments and Costs



ELP Forward-Looking Investment Cost

Three Key Elements

- **Baseline forward-looking network costed using UNE SynMod**
  - No change to SynMod NID or loop distribution investments because are based on <18 kft. of clean copper
  - DLC investments adjusted to current GR-303 prices
  - Feeder remains copper/fiber – no concentration and no daisy-chaining
  - CO remains Class 5 circuit switch
  - SONET ring / TDM interoffice transport
  - SS7 signaling

- **Forward-looking basic ELP costed using UNE SynMod *(assuming DSL capability, but no actual DSL provisioning)***
  - No change to NID or loop distribution investments
  - Add tNGDLC investments on previous copper lines
  - Substitute tNGDLC investments on previous fiber/DLC lines
  - All feeders costed as fiber – no daisy-chaining
  - Add ATM module and voice gateway at each CO
  - CO remains Class 5 circuit switch
  - SONET ring / TDM interoffice transport
  - SS7 signaling

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Network Architecture and Technology

Results

- Incremental forward-looking investment cost for basic ELP over current forward-looking baseline
  - ~ $113/line
  - Cost to upgrade all RBOC lines: ~$17.4 B
  - This cost will vary based on extent of ELP upgrade (e.g., just switched lines or switched plus special lines), carrier universe (e.g., just RBOCs or all nonrural) and expected ADSL "take" rate
- Further investments necessary to actually provision DSL
  - Substitution of a combo voice/DSL channel card for a voice-only channel card
  - Modest increases in ATM capacity
  - Cost of interoffice data network to serve ISPs
  - Extra investment cost over basic ELP: ~ $150/line
  - Cost to provision DSL on 40% of all RBOC lines: ~$9.2 B

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ELP Short Run Incremental Cost

"Upgrades" By Loop Technology

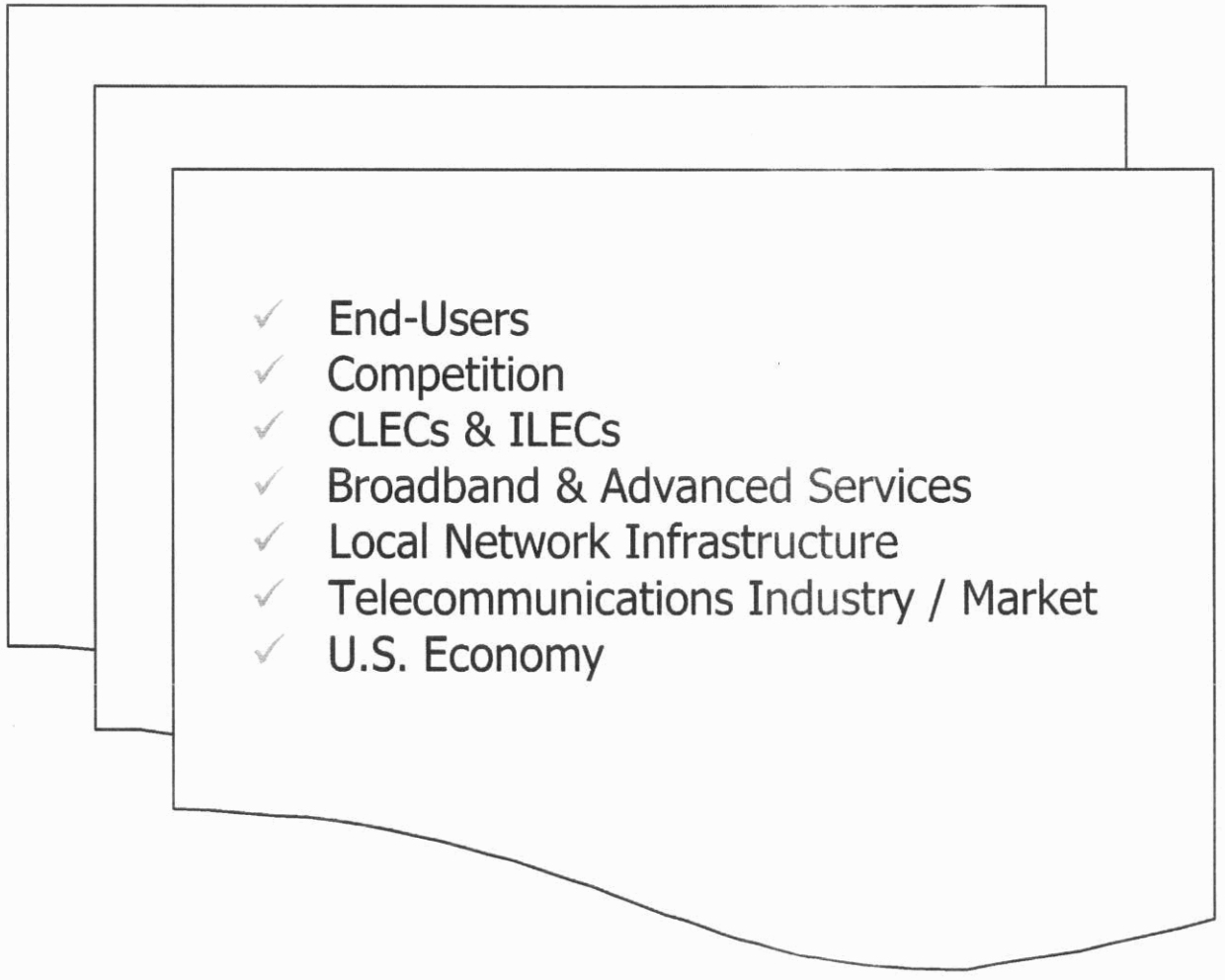
Loop Technology	Additional Equipment
Fiber-fed IDLC/NGDLC	Voice Packet Processor (VPP) ATM module and VG
Fiber-fed UDLC	tNGDLC w/ VPP ATM module and VG
Copper-fed legacy DLC or all copper >18 kft.	tNGDLC w/ VPP Fiber feeder ATM module and VG
All copper <18 kft.	tNGDLC w/ VPP Fiber feeder (if needed) ATM module and VG

- The cost of these short run incremental investments to current embedded networks will depend on these networks' existing penetrations of fiber and modern DLC. It will likely exceed full forward-looking incremental investment cost by 25 to 50%.

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Investments and Costs In Perspective

ELP Investment Must Be Viewed in The Context of Its Benefits

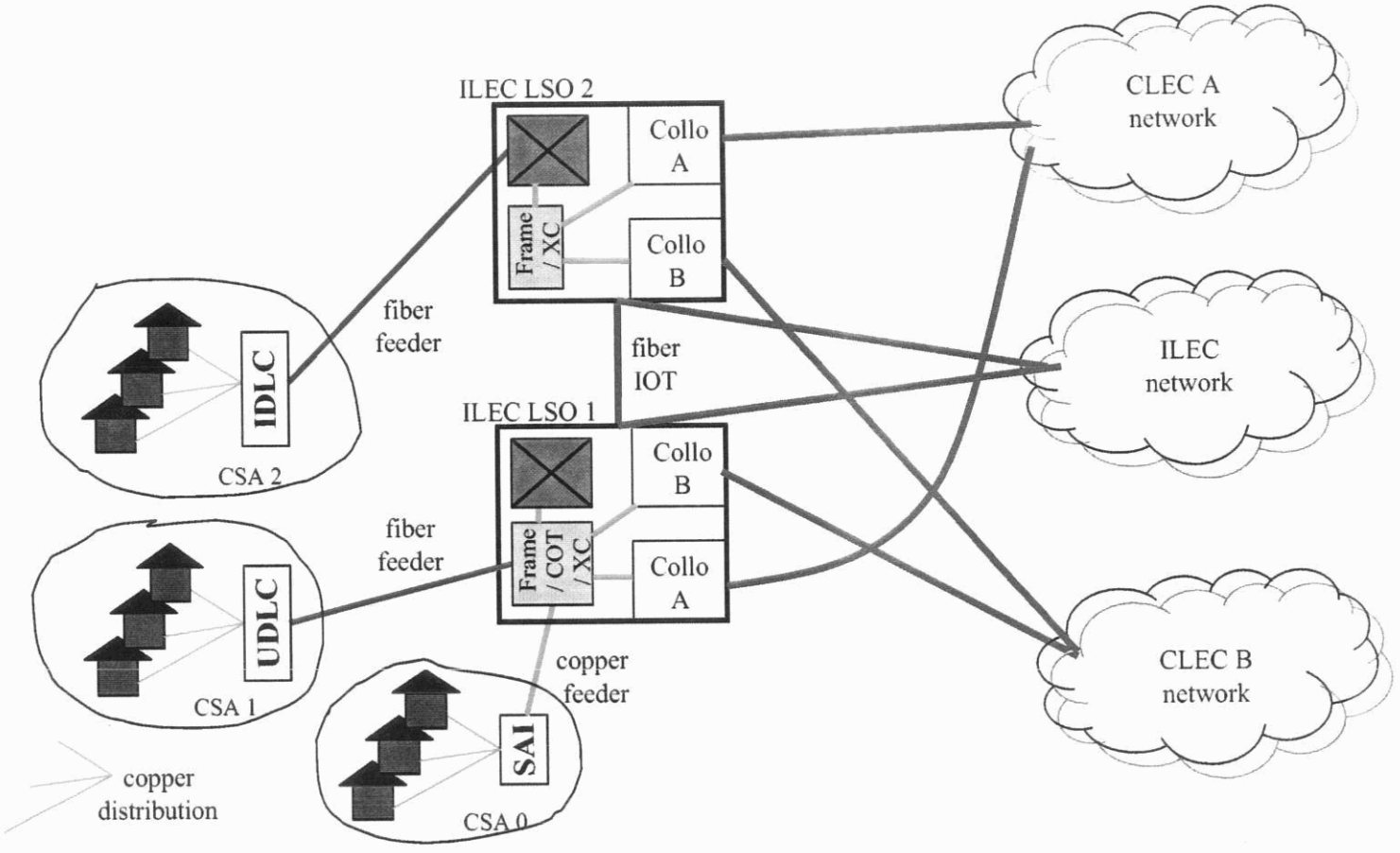


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Attachments

Legacy ILEC Network Topologies

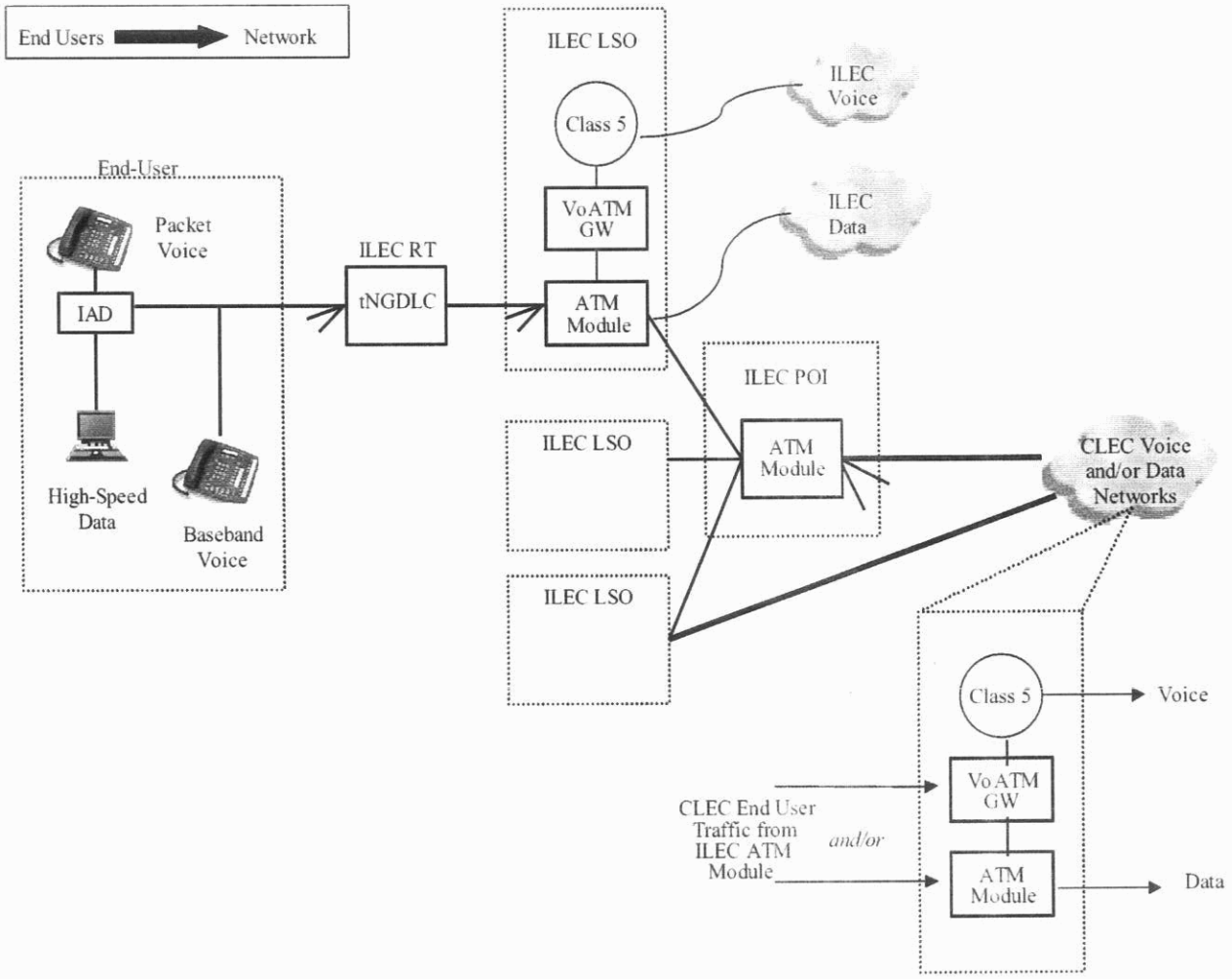
Carrier Serving Architecture



Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. _____, JMB-SR1
Page 25 of 27

ELP Network Architecture

Base ELP Design

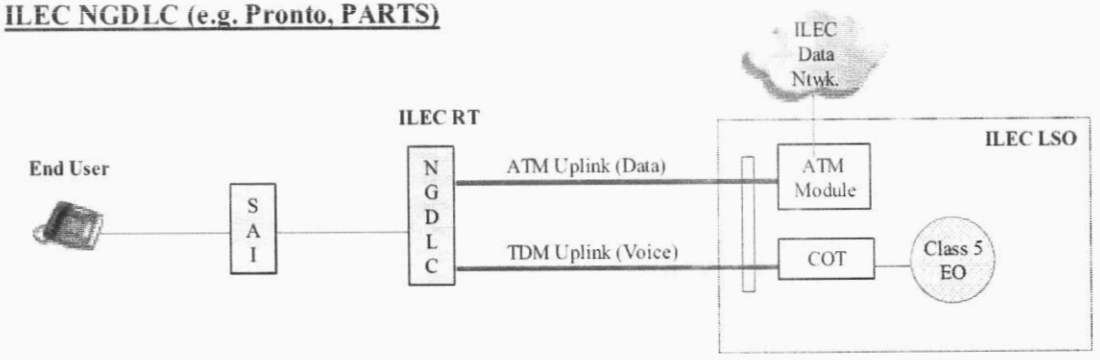


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Jay M. Bradbury
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Page 26 of 27

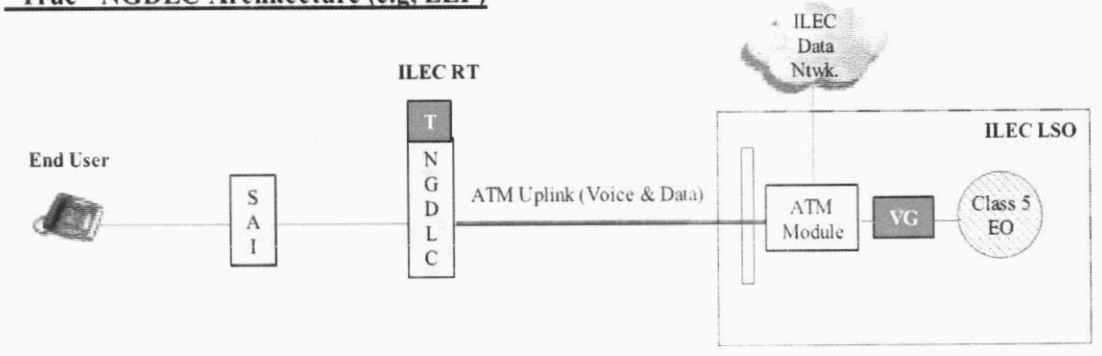
ILEC NGDLC vs. "true" NGDLC

Key Functional Differences

ILEC NGDLC (e.g. Pronto, PARTS)



"True" NGDLC Architecture (e.g. ELP)



Key

	Copper Distribution
	Fiber Feeder
	Fiber Distribution Frame (FDF)
TNGDLC	NGDLC with Voice Packet Processor (VPP)
VG	Voice Gateway

Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. _____, JMB-SR1
Page 27 of 27

REQUEST: BellSouth First Set of Interrogatories

DATED: October 9, 2003

Interrogatory 1: Identify each switch owned by AT&T that AT&T uses to provide a qualifying service anywhere in Florida, irrespective of whether the switch itself is located in the state and regardless of the type of switch (e.g., circuit switch, packet switch, soft switch, host switch, remote switch.)

Response: Subject to the following, see Confidential Attachments 1 and 1A. To the extent that the definitions of "qualifying service" and "non-qualifying service" as defined by BellSouth in BellSouth's First Set of Interrogatories to AT&T are different than the definitions of "qualifying" and "non-qualifying" service as defined in 47 C.F.R. § 51.5, this interrogatory is vague. Specifically, 47 C.F.R. § 51.5 defines a "qualifying service" as "a telecommunications service that competes with a telecommunications service that has been traditionally the exclusive or primary domain of incumbent local exchange carriers ("ILECs"), including, but not limited to, local exchange service, such as plain old telephone service ("POTS"), and access services, such as digital subscriber line services and high capacity circuits." "Non-qualifying services" are defined as services that are "not qualifying service[s]." Id. Subject to the foregoing, and without waiving any objection, AT&T will construe the terms contained in this interrogatory, and all other interrogatories, in accordance with 47 C.F.R. § 51.5 and applicable law and consider all traditional local telecommunications service as a "qualifying" service and all traditional long distance service as "non-qualifying" service.

Subject to the foregoing and pursuant to Section 1.340(c), Florida Rules of Civil Procedure, see Confidential Attachments 1 and 1a. These attachments provide information on two categories of switches used (and owned) by AT&T. The first category consists of "Class 5" switches.

The second category consists of switches used (and owned) by AT&T to provide AT&T Digital Link Service ("ADL") to enterprise using "Class 4" and "Class 5 edge" long-distance

Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. 106, JMB-R1
AT&T Supplemental Responses to BellSouth's
First Set of Interrogatories
dated 1/6/2004
Page 1 of 3

switches. ADL is not a stand-alone local product but rather one that allows large enterprise AT&T long distance customers to add local voice traffic to their dedicated facilities that handle voice and data transmission. This permits customers to maximize efficiency by using the same trunks for local, intraLATA, long distance and international calls. Customers that subscribe to ADL service use a DS1 or higher level facility and must also employ sophisticated customer premises equipment on their premises. The switches are not capable of providing service to mass market customers because they do not have the necessary connectivity (i.e., line-side analog ports), functionality (e.g., vertical features like call waiting and call forwarding), and network interconnection, including connection to Public Safety Answering Points. AT&T does not use unbundled network elements to provide ADL service.

Provided by: Jay Bradbury

Supplemental Response

The ADL capable (enterprise) switches identified in Attachment 1b are identified by their toll switch CLLI codes, which end in a "T". In the LERG these same switches appear using a psuedo CLLI code ending in "DS_" because the LERG will not accept the "T" code for a switch identified as having "end office functions" and having a "LRN".

The "Class 5 edge" long distance switches are either Lucent 5ESS or Nortel DMS switches. Both of these switch types are common in ILEC local networks. However, the switches used in the ILEC network to provide local services and the edge long distance switches in AT&T's network perform totally different functions.

Converting the edge switches to provide local services, would require extensive hardware modifications, software modifications, and E911 Connectivity, as well as supporting OSS modifications and connectivity. As a practical matter, the modifications required precludes conversion of these switches.

For Example: The 5ESS and DMS would need to be completely rebuilt/retrofitted to support local services. Only the basic 5ESS and DMS platform (equipment racks, containers/cabinets, and some switch modules) could be reused. Modifications

would include, but not limited to the following:

- OSS modifications (including loading of databases) and Connectivity to support Fault, Configuration, Account, Performance, and Security (FCAPS) Management, and other Operations, Administration, Maintenance, and Provisioning (OAM&P) processes (e.g., LIDB and ISCP).
- Software and Switch Memory Upgrades (and additional RTU Licenses) to support the Vertical Features required to provide local service.
- Line Side Peripheral Hardware Upgrades to support local services.
- E911 Connectivity and Support.
- AIN support (software and connectivity) to support IN Triggers.
- Announcement System (Hardware, Software, and Transport Facilities).
- 105 Test Line Responder Units (Hardware & Software)
- Test Buss Control Unit (TBCU) to support MLT type loop testing functions (Hardware)
- Additional Facilities and Interfaces (Hardware) required for DCS and SONET Connectivity to the Network.
- Building of ODD (Office Dependent Data) which is unique to each switch and relates to translations (lines) and parameters (equipment) which consists of information related to switch owner (line, trunk, routing, charging, equal access, BRCS) and/or the office equipment (quantity, configuration, equipage). This makes up the office database.

001542 111600 47

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

DAVID L. TALBOTT

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.
AND TCG SOUTH FLORIDA, INC.

DOCKET NO. 000731-TP

NOVEMBER 16, 2000

Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. _____, JMB-R2
Fl. PSC Docket No. 000731-TP
dated 11/16/2000
Direct Testimony of David L. Talbott
Page 1 of 4

II. TANDEM SWITCH RATE

ISSUE 12

Q. WHAT DO THE FCC REGULATIONS PROVIDE ABOUT ALEC SWITCHES AND TANDEM RATES?

A. The FCC recognizes that there is parity between a competitive carrier's end office switch and an ILEC tandem switch. The FCC regulations, 47 C.F.R. § 51.711 (a)(3), provide:

> Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

Q. HAS THE FCC PROVIDED ANY ADDITIONAL GUIDANCE REGARDING THE ESTABLISHMENT OF TRANSPORT AND TERMINATION RATES?

A. Yes, it has. In the Local Competition Order, the FCC stated:

> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination

rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch. In such event, states shall also consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination *via the incumbent LEC's tandem switch.* Where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate.[10]

Q. **DO AT&T'S SWITCHES IN FLORIDA COVER A GEOGRAPHIC AREA COMPARABLE TO THE AREA COVERED BY BELLSOUTH SWITCHES?**

A Yes. AT&T offers local exchange service in Florida via 4ESS switches, which function primarily as long distance switches, and 5ESS switches, which act as adjuncts to the 4ESS switches. AT&T has the ability to connect

10 FCC Local Competition Order at ¶ 1090 (emphasis added)

virtually any qualifying local exchange customer in Florida to one of these switches through AT&T's dedicated access services.

TCG provides local exchange services using Class 5 switches. TCG is able to connect virtually any customer in a LATA to the TCG switch serving that LATA either through (1) TCG's own facilities built to the customer premises, (2) UNE loops provisioned through collocation in BellSouth end offices, or (3) using dedicated high-capacity facilities (in special access services or combinations of UNEs purchased from BellSouth).[11]

AT&T requests that the Commission order BellSouth to pay AT&T BellSouth's tandem interconnection rate for the termination of local traffic at any AT&T Communications switch and any TCG switch. AT&T is justified in its request because the geographic area covered by each switch is comparable to the area covered by BellSouth's tandem switches.

Q. **HAVE YOU PREPARED ANY MATERIALS THAT WILL ASSIST THE COMMISSION IN DETERMINING THE GEOGRAPHIC COVERAGE OF AT&T'S AND TCG'S SWITCHES?**

A. To assist the Commission in understanding this issue, I have prepared a series of maps that are marked as Exhibit DLT-6. Exhibit DLT-6 contains both

[11] AT&T and TCG are separate legal entities, are separately certified in Florida, and should be treated as separate entities under the completed agreements. Moreover, their local service networks provide entirely distinct services and products to distinct classes of customers and are not integrated in any way. Accordingly, each entity should be examined separately for purposes of determining whether that entity meets the requirements under 47 C.F.R. § 51.711 (A)(3).

BEFORE
THE NEW JERSEY BOARD OF PUBLIC UTILITIES

In re: Applications of	*	
AT&T COMMUNICATIONS OF NJ, L.P.	*	Docket No. TO00110893
TCG DELAWARE VALLEY, INC.	*	
TELEPORT COMMUNICATIONS NEW YORK	*	
Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Verizon New Jersey Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	*	

PANEL DIRECT TESTIMONY OF AT&T COMMUNICATIONS OF NEW JERSEY, L.P. ET AL

MEMBERS OF THE PANEL

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DATE: FEBRUARY 25, 2003

One thing is clear about Verizon's proposed interpretation, however. It has the effect of penalizing CLECs entering the market, because they would not yet have had sufficient time to build their customer bases to be "comparable" to the size and scope of Verizon. Accordingly, AT&T is entitled to be compensated at the Verizon tandem rate for termination of Verizon's traffic delivered to all of AT&T's switches that are capable of serving a geographical area comparable to Verizon's tandem switches.

Q. ARE AT&T'S SWITCHES IN NEW JERSEY CAPABLE OF SERVING A GEOGRAPHICAL AREA COMPARABLE TO VERIZON'S TANDEM SWITCHES?

A. Yes, they are. Because AT&T's switches are capable of serving geographical areas comparable to Verizon's tandem switches in New Jersey, the Board should order Verizon to pay the applicable tandem interconnection rate for the termination of local traffic at each AT&T switch.

AT&T offers local exchange service in New Jersey utilizing two separate networks. One network is operated on behalf of AT&T Communications of New Jersey LLC. ("AT&T Communications"). The second network is operated on behalf of TCG Delaware Valley, Inc. and Teleport Communications New York (together, "TCG"). Their local service networks provide entirely distinct services and products to distinct classes of customers and are not integrated.

AT&T Communications has deployed 4ESS switches, which function primarily as long distance switches, and 5ESS switches, which act as adjuncts to the 4ESS switches. AT&T Communications has the ability to connect virtually any qualifying local exchange customer in New Jersey to one of these switches through access services offered by AT&T or another access provider (as, for example, in the case of a business

customer with calling volumes sufficient to justify the cost of dedicated access arrangements).

TCG provides local exchange services using Class 5 switches. TCG is able to connect virtually any qualifying customer in a LATA to the TCG switch serving that LATA either through (1) TCG's own facilities built to the customer premises, (2) UNE loops provisioned through collocation in Verizon end offices, or (3) using dedicated high-capacity facilities (in special access services or combinations of UNEs purchased from Verizon).

Because the AT&T Communications and the TCG networks are separate and not integrated, it is appropriate for the Board to make a separate judgment whether the AT&T Communications and TCG networks each meet the requirement of the tandem rate rule.

Q. HAVE YOU PREPARED ANY DOCUMENTATION THAT DEMONSTRATES THAT AT&T'S SWITCHES COVER A GEOGRAPHIC AREA COMPARABLE TO THE AREAS COVERED BY VERIZON'S TANDEM SWITCHES?

A. Yes. To assist the Board in resolving this issue, we have prepared a series of maps that are marked as Exhibit TS-1 through TS-4.[77] The first map, Exhibit TS-1, provides the number of switches Verizon currently operates and the areas these switches serve in New Jersey on a LATA-by-LATA basis. The second map, Exhibit TS-2, shows the number of switches AT&T Communications currently operates and the areas these switches serve in New Jersey on a LATA-by-LATA basis. Thus, while AT&T

[77] Statewide and LATA-specific maps were created by using data contained in the Local Exchange Routing Guide ("LERG"). The LERG, produced by Telcordia Technologies, contains routing data that supports the current local exchange network configuration within the North American Numbering Plan (NANP) as well as identifying reported planned changes in the network. The LERG data in conjunction with MapInfo V-4.1.1.2, a commercial mapping software package, was used to prepare the attached state-wide and LATA-specific maps.

BEFORE
THE NEW JERSEY BOARD OF PUBLIC UTILITIES

In re: Applications of	*	
AT&T COMMUNICATIONS OF NJ, L.P.	*	
	*	**Docket No. TO00110893**
TCG DELAWARE VALLEY, INC.	*	
TELEPORT COMMUNICATIONS NEW YORK	*	
Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Verizon New Jersey Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	*	

PANEL REBUTTAL TESTIMONY OF AT&T COMMUNICATIONS OF NJ, L.P. ET AL

MEMBERS OF THE PANEL

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E. Christopher Nurse
John D. Schell
David L. Talbott

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(703) 691-6046

DATE: **MARCH 18, 2003**

Q. IS VERIZON CONTENDING THAT AT&T MUST "ACTUALLY SERVE" CUSTOMERS IN EACH VERIZON RATE CENTER SERVED BY AN AT&T SWITCH?

A. Verizon does not make such an assertion explicitly. Accordingly, Verizon appears to recognize the proposition that facilities-based CLECs design their networks to satisfy the economics of serving market shares that are smaller than the monopoly for which Verizon designed and built its own network. Efficiency demands that CLECs deploy switches to serve broad geographic areas, and not within each specific rate center for which Verizon has built out its network. The FCC has never articulated a requirement that a facilities-based CLEC must serve individual customers in *each* ILEC rate center served by a CLEC switch. Such a requirement would be fundamentally arbitrary since it would presume that competitors must replicate the network design that Verizon followed to fulfill its monopoly obligations. This is contrary to the reasoning the FCC gave for promulgating 47 C.F.R. § 51.711(a)(3).[42]

Q. WHAT IS THE CORRECT READING OF FCC RULE 51.711(A)(3)?

A. FCC Rule 51.711(a)(3) imposes none of the exacting standards that Verizon would use to avoid having to pay AT&T at the tandem reciprocal compensation rate. The rule provides a proxy for the additional costs a CLEC incurs to terminate Verizon's traffic to *any* customer on a CLEC network. These costs consist of both switch and distribution facilities costs for a CLEC network that is

[42] *Local Competition Order*, ¶ 1090.

designed to serve an area comparable to that served by an ILEC tandem switch. Verizon's specific network is characterized by numerous switches and relatively shorter distribution facilities AT&T competes with Verizon for local-service customers using fewer switches and comparatively longer distribution facilities. Currently, AT&T has a menu of options that it can use to economically connect end users located relatively far from a switch. These options include: (1) high-capacity fiber optic rings to commercial buildings and multiple dwelling units; (2) fixed-wireless technology, such as 38 gHz systems; (3) UNE loop resale through AT&T collocation in Verizon end offices; and (4) dedicated high-capacity facilities (in some cases using special access services purchased from Verizon but more appropriately through combinations of UNEs). Due to the very high initial cost of switching platforms as compared to the lower incremental cost of high-capacity facility systems, AT&T has chosen to deploy fewer switches and more transport on the end-user side of the switch. It is not the capability of the switch alone that makes a switch capable of serving a certain geographic area, but rather a network configuration that consists of switching, available loop facilities, and interconnection facilities. AT&T has deployed a facilities-based network that provides the same functionalities as Verizon's facilities-based network for providing local service. The evidence that AT&T provided in its Direct Testimony specifies all of the areas where AT&T has deployed such capabilities.

REQUEST: BellSouth First Set of Interrogatories

DATED: October 9, 2003

Interrogatory 1: Identify each switch owned by AT&T that AT&T uses to provide a qualifying service anywhere in Florida, irrespective of whether the switch itself is located in the state and regardless of the type of switch (e.g., circuit switch, packet switch, soft switch, host switch, remote switch.)

Response: Subject to the following, see Confidential Attachments 1 and 1A. To the extent that the definitions of "qualifying service" and "non-qualifying service" as defined by BellSouth in BellSouth's First Set of Interrogatories to AT&T are different than the definitions of "qualifying" and "non-qualifying" service as defined in 47 C.F.R. § 51.5, this interrogatory is vague. Specifically, 47 C.F.R. § 51.5 defines a "qualifying service" as "a telecommunications service that competes with a telecommunications service that has been traditionally the exclusive or primary domain of incumbent local exchange carriers ("ILECs"), including, but not limited to, local exchange service, such as plain old telephone service ("POTS"), and access services, such as digital subscriber line services and high capacity circuits." "Non-qualifying services" are defined as services that are "not qualifying service[s]." Id. Subject to the foregoing, and without waiving any objection, AT&T will construe the terms contained in this interrogatory, and all other interrogatories, in accordance with 47 C.F.R. § 51.5 and applicable law and consider all traditional local telecommunications service as a "qualifying" service and all traditional long distance service as "non-qualifying" service.

Subject to the foregoing and pursuant to Section 1.340(c), Florida Rules of Civil Procedure, see Confidential Attachments 1 and 1a. These attachments provide information on two categories of switches used (and owned) by AT&T. The first category consists of "Class 5" switches.

The second category consists of switches used (and owned) by AT&T to provide AT&T Digital Link Service ("ADL") to enterprise using "Class 4" and "Class 5 edge" long-distance

switches. ADL is not a stand-alone local product but rather one that allows large enterprise AT&T long distance customers to add local voice traffic to their dedicated facilities that handle voice and data transmission. This permits customers to maximize efficiency by using the same trunks for local, intraLATA, long distance and international calls. Customers that subscribe to ADL service use a DS1 or higher level facility and must also employ sophisticated customer premises equipment on their premises. The switches are not capable of providing service to mass market customers because they do not have the necessary connectivity (i.e., line-side analog ports), functionality (e.g., vertical features like call waiting and call forwarding), and network interconnection, including connection to Public Safety Answering Points. AT&T does not use unbundled network elements to provide ADL service.

Provided by: Jay Bradbury

Supplemental Response

The ADL capable (enterprise) switches identified in Attachment 1b are identified by their toll switch CLLI codes, which end in a "T". In the LERG these same switches appear using a psuedo CLLI code ending in "DS_" because the LERG will not accept the "T" code for a switch identified as having "end office functions" and having a "LRN".

The "Class 5 edge" long distance switches are either Lucent 5ESS or Nortel DMS switches. Both of these switch types are common in ILEC local networks. However, the switches used in the ILEC network to provide local services and the edge long distance switches in AT&T's network perform totally different functions.

Converting the edge switches to provide local services, would require extensive hardware modifications, software modifications, and E911 Connectivity, as well as supporting OSS modifications and connectivity. As a practical matter, the modifications required precludes conversion of these switches.

For Example: The 5ESS and DMS would need to be completely rebuilt/retrofitted to support local services. Only the basic 5ESS and DMS platform (equipment racks, containers/cabinets, and some switch modules) could be reused. Modifications

would include, but not limited to the following:

- OSS modifications (including loading of databases) and Connectivity to support Fault, Configuration, Account, Performance, and Security (FCAPS) Management, and other Operations, Administration, Maintenance, and Provisioning (OAM&P) processes (e.g., LIDB and ISCP).
- Software and Switch Memory Upgrades (and additional RTU Licenses) to support the Vertical Features required to provide local service.
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- E911 Connectivity and Support.
- AIN support (software and connectivity) to support IN Triggers.
- Announcement System (Hardware, Software, and Transport Facilities).
- 105 Test Line Responder Units (Hardware & Software)
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001542 111600 47

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

DAVID L. TALBOTT

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.
AND TCG SOUTH FLORIDA, INC.

DOCKET NO. 000731-TP

NOVEMBER 16, 2000

Docket No. 030851-TP
Jay M. Bradbury
Exhibit No. _____, JMB-R2
FL PSC Docket No. 000731-TP
dated 11/16/2000
Direct Testimony of David L. Talbott
Page 1 of 4

II. TANDEM SWITCH RATE

ISSUE 12

Q. WHAT DO THE FCC REGULATIONS PROVIDE ABOUT ALEC SWITCHES AND TANDEM RATES?

A. The FCC recognizes that there is parity between a competitive carrier's end office switch and an ILEC tandem switch. The FCC regulations, 47 C.F.R. § 51.711 (a)(3), provide:

> Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

Q. HAS THE FCC PROVIDED ANY ADDITIONAL GUIDANCE REGARDING THE ESTABLISHMENT OF TRANSPORT AND TERMINATION RATES?

A. Yes, it has. In the Local Competition Order, the FCC stated:

> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination

rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch. In such event, states shall also consider whether new technologies (*e.g.*, fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch. Where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate.[10]

Q. DO AT&T'S SWITCHES IN FLORIDA COVER A GEOGRAPHIC AREA COMPARABLE TO THE AREA COVERED BY BELLSOUTH SWITCHES?

A. Yes. AT&T offers local exchange service in Florida via 4ESS switches, which function primarily as long distance switches, and 5ESS switches, which act as adjuncts to the 4ESS switches. AT&T has the ability to connect

10 FCC Local Competition Order at ¶ 1090 (emphasis added).

virtually any qualifying local exchange customer in Florida to one of these switches through AT&T's dedicated access services.

TCG provides local exchange services using Class 5 switches. TCG is able to connect virtually any customer in a LATA to the TCG switch serving that LATA either through (1) TCG's own facilities built to the customer premises, (2) UNE loops provisioned through collocation in BellSouth end offices, or (3) using dedicated high-capacity facilities (in special access services or combinations of UNEs purchased from BellSouth).[11]

AT&T requests that the Commission order BellSouth to pay AT&T BellSouth's tandem interconnection rate for the termination of local traffic at any AT&T Communications switch and any TCG switch. AT&T is justified in its request because the geographic area covered by each switch is comparable to the area covered by BellSouth's tandem switches.

Q. HAVE YOU PREPARED ANY MATERIALS THAT WILL ASSIST THE COMMISSION IN DETERMINING THE GEOGRAPHIC COVERAGE OF AT&T'S AND TCG'S SWITCHES?

A. To assist the Commission in understanding this issue, I have prepared a series of maps that are marked as Exhibit DLT-6. Exhibit DLT-6 contains both

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BEFORE
THE NEW JERSEY BOARD OF PUBLIC UTILITIES

In re: Applications of	*	
	*	
AT&T COMMUNICATIONS OF NJ, L.P.	*	
	*	**Docket No. TO00110893**
TCG DELAWARE VALLEY, INC.	*	
	*	
TELEPORT COMMUNICATIONS NEW YORK	*	
	*	
	*	
Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Verizon New Jersey Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	*	
	*	
	*	

PANEL DIRECT TESTIMONY
OF AT&T COMMUNICATIONS OF NEW JERSEY, L.P. ET AL

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DATE: **FEBRUARY 25, 2003**

One thing is clear about Verizon's proposed interpretation, however. It has the effect of penalizing CLECs entering the market, because they would not yet have had sufficient time to build their customer bases to be "comparable" to the size and scope of Verizon. Accordingly, AT&T is entitled to be compensated at the Verizon tandem rate for termination of Verizon's traffic delivered to all of AT&T's switches that are capable of serving a geographical area comparable to Verizon's tandem switches.

Q. ARE AT&T'S SWITCHES IN NEW JERSEY CAPABLE OF SERVING A GEOGRAPHICAL AREA COMPARABLE TO VERIZON'S TANDEM SWITCHES?

A. Yes, they are. Because AT&T's switches are capable of serving geographical areas comparable to Verizon's tandem switches in New Jersey, the Board should order Verizon to pay the applicable tandem interconnection rate for the termination of local traffic at each AT&T switch.

AT&T offers local exchange service in New Jersey utilizing two separate networks. One network is operated on behalf of AT&T Communications of New Jersey LLC. ("AT&T Communications"). The second network is operated on behalf of TCG Delaware Valley, Inc. and Teleport Communications New York (together, "TCG"). Their local service networks provide entirely distinct services and products to distinct classes of customers and are not integrated.

AT&T Communications has deployed 4ESS switches, which function primarily as long distance switches, and 5ESS switches, which act as adjuncts to the 4ESS switches. AT&T Communications has the ability to connect virtually any qualifying local exchange customer in New Jersey to one of these switches through access services offered by AT&T or another access provider (as, for example, in the case of a business

customer with calling volumes sufficient to justify the cost of dedicated access arrangements).

TCG provides local exchange services using Class 5 switches. TCG is able to connect virtually any qualifying customer in a LATA to the TCG switch serving that LATA either through (1) TCG's own facilities built to the customer premises, (2) UNE loops provisioned through collocation in Verizon end offices, or (3) using dedicated high-capacity facilities (in special access services or combinations of UNEs purchased from Verizon).

Because the AT&T Communications and the TCG networks are separate and not integrated, it is appropriate for the Board to make a separate judgment whether the AT&T Communications and TCG networks each meet the requirement of the tandem rate rule.

Q. HAVE YOU PREPARED ANY DOCUMENTATION THAT DEMONSTRATES THAT AT&T'S SWITCHES COVER A GEOGRAPHIC AREA COMPARABLE TO THE AREAS COVERED BY VERIZON'S TANDEM SWITCHES?

A. Yes. To assist the Board in resolving this issue, we have prepared a series of maps that are marked as Exhibit TS-1 through TS-4.[7] The first map, Exhibit TS-1, provides the number of switches Verizon currently operates and the areas these switches serve in New Jersey on a LATA-by-LATA basis. The second map, Exhibit TS-2, shows the number of switches AT&T Communications currently operates and the areas these switches serve in New Jersey on a LATA-by-LATA basis. Thus, while AT&T

[7] Statewide and LATA-specific maps were created by using data contained in the Local Exchange Routing Guide ("LERG"). The LERG, produced by Telcordia Technologies, contains routing data that supports the current local exchange network configuration within the North American Numbering Plan (NANP) as well as identifying reported planned changes in the network. The LERG data in conjunction with MapInfo V-4.1.1.2, a commercial mapping software package, was used to prepare the attached state-wide and LATA-specific maps.

BEFORE
THE NEW JERSEY BOARD OF PUBLIC UTILITIES

In re: Applications of	*	
	*	
AT&T COMMUNICATIONS OF NJ, L.P.	*	
	*	**Docket No. TO00110893**
TCG DELAWARE VALLEY, INC.	*	
	*	
TELEPORT COMMUNICATIONS NEW YORK	*	
	*	
	*	
Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Verizon New Jersey Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	*	
	*	
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PANEL REBUTTAL TESTIMONY OF AT&T COMMUNICATIONS OF NJ, L.P. ET AL

MEMBERS OF THE PANEL

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DATE: **MARCH 18, 2003**

Q. IS VERIZON CONTENDING THAT AT&T MUST "ACTUALLY SERVE" CUSTOMERS IN EACH VERIZON RATE CENTER SERVED BY AN AT&T SWITCH?

A. Verizon does not make such an assertion explicitly. Accordingly, Verizon appears to recognize the proposition that facilities-based CLECs design their networks to satisfy the economics of serving market shares that are smaller than the monopoly for which Verizon designed and built its own network. Efficiency demands that CLECs deploy switches to serve broad geographic areas, and not within each specific rate center for which Verizon has built out its network. The FCC has never articulated a requirement that a facilities-based CLEC must serve individual customers in *each* ILEC rate center served by a CLEC switch. Such a requirement would be fundamentally arbitrary since it would presume that competitors must replicate the network design that Verizon followed to fulfill its monopoly obligations. This is contrary to the reasoning the FCC gave for promulgating 47 C.F.R. § 51.711(a)(3).[42]

Q. WHAT IS THE CORRECT READING OF FCC RULE 51.711(A)(3)?

A. FCC Rule 51.711(a)(3) imposes none of the exacting standards that Verizon would use to avoid having to pay AT&T at the tandem reciprocal compensation rate. The rule provides a proxy for the additional costs a CLEC incurs to terminate Verizon's traffic to *any* customer on a CLEC network. These costs consist of both switch and distribution facilities costs for a CLEC network that is

[42] *Local Competition Order*, ¶ 1090.

designed to serve an area comparable to that served by an ILEC tandem switch. Verizon's specific network is characterized by numerous switches and relatively shorter distribution facilities AT&T competes with Verizon for local-service customers using fewer switches and comparatively longer distribution facilities. Currently, AT&T has a menu of options that it can use to economically connect end users located relatively far from a switch. These options include: (1) high-capacity fiber optic rings to commercial buildings and multiple dwelling units; (2) fixed-wireless technology, such as 38 gHz systems; (3) UNE loop resale through AT&T collocation in Verizon end offices; and (4) dedicated high-capacity facilities (in some cases using special access services purchased from Verizon but more appropriately through combinations of UNEs). Due to the very high initial cost of switching platforms as compared to the lower incremental cost of high-capacity facility systems, AT&T has chosen to deploy fewer switches and more transport on the end-user side of the switch. It is not the capability of the switch alone that makes a switch capable of serving a certain geographic area, but rather a network configuration that consists of switching, available loop facilities, and interconnection facilities. AT&T has deployed a facilities-based network that provides the same functionalities as Verizon's facilities-based network for providing local service. The evidence that AT&T provided in its Direct Testimony specifies all of the areas where AT&T has deployed such capabilities.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

DR. BRIAN K. STAIHR

ORG for TR 00279

Introduction/Purpose

Q. Please state your name, title, and business address.

A. My name is Brian K. Staihr. I am employed by Sprint as Senior Regulatory Economist. My business address is 6450 Sprint Parkway, Overland Park, Kansas 66251.

Q. Are you the same Brian Staihr who filed direct testimony in this proceeding on December 4, 2003?

A. Yes I am.

Q. What is the purpose of your rebuttal testimony?

A. In my rebuttal testimony I respond to issues raised in the direct testimonies of BellSouth witnesses Dr. Christopher Pleatsikas (market definition), Ms. Pamela Tipton (competitive trigger analysis), Mr. James Stegeman (optimization in the BACE Model), Dr. Debra Aron (demand-side inputs in the BACE Model), and Dr. Randall Billingsley (weighted average cost of capital in the BACE Model).

Market Definition and Testimony of Dr. Christopher Pleatsikas

Q. In his testimony Dr. Pleatsikas advocates that the Commission should define the market (for purposes of analyzing impairment) as a specific UNE-zone in a specific

component economic area (CEA). For example, UNE Zone 1 in the Orlando CEA is a separate market from UNE Zone 2 in the Orlando CEA, which in turn is a separate market from UNE Zone 2 in the Miami CEA. Please comment.

A. From an economic point of view, one portion of Dr. Pleatsikas' proposal is indeed logical: the subdivision of markets into geographically distinct areas (in his proposal, CEAs). This is reasonable because to do otherwise is to suggest that market forces—supply decisions, demand factors, price movements—in one part of the state affect entry and exit decisions in other parts of the state that may be hundreds of miles away. It is also reasonable because the FCC required that impairment analysis be conducted on a granular basis.

But on several other dimensions Dr. Pleatsikas' proposal is inappropriate and, in some cases, the reasons why his proposal is inappropriate are found in BellSouth's own testimony. For example, Dr. Pleatsikas' initial justification for using UNE zones is that he believes UNE zones reflect the locations of mass-market customers being served. His testimony states, "I understand that CLECs in Florida serve the greatest number of customers in the more urban UNE Zones 1 and 2 than in the more rural UNE Zone 3" (Pleatsikas Direct page 5). Although Dr. Pleatsikas provides no documentation to verify that statement, Sprint's own ILEC experience tends to support it. But Dr. Pleatsikas overlooks the fact that, in his own statement, the distinction is not between UNE zones but rather between urban areas (UNE zones 1 and 2) and rural areas (UNE zone 3). That urban/rural distinction is one of the key reasons why Sprint's proposed market definition (MSA) is a more accurate market definition, because in general MSAs are the more urban areas and non-

MSAs are the more rural areas. If Dr. Pleatsikas believes that actual customer locations are found more often in UNE Zones 1 and 2 than in UNE Zone 3 that fact could be viewed as justification for separating UNE Zones 1 and 2 *collectively* from UNE Zone 3, which is what an MSA-based definition tends to do. But his reference to customer location provides no justification for separating UNE Zone 1 from UNE Zone 2.

Next, Dr. Pleatsikas states that variation in cost is an important factor in determining where a CLEC can serve (Pleatsikas Direct page 5). Clearly loop costs vary for a competitor depending on which wire center the competitor is entering. But the question that must be asked is whether there is any evidence that this variation in loop costs, particularly between UNE Zones 1 and 2, actually has an effect on competitive entry. For example, according to BellSouth's BACE Model the Fort Lauderdale Zone 1 market is made up of nine wire centers. And according to data filed by BellSouth with the Commission there is competitive entry (and unbundled loops) in [redacted] of the nine.[1] In the Fort Lauderdale Zone 2 market there are also nine wire centers, and there is competitive entry (and unbundled loops) in [redacted]. And according to BellSouth's filing there are actually more CLECs competing in Fort Lauderdale Zone 2 than in Fort Lauderdale Zone 1. Furthermore, every competitor that has entered Fort Lauderdale Zone 1 has also entered Fort Lauderdale Zone 2. These facts, when examined, do not provide support for the notion that the higher loop costs in Zone 2 have an effect on entry, nor do they support the notion that competitors view Fort Lauderdale Zones 1 and 2

[1] See BellSouth response to Sprint interrogatories.

as distinct markets. But they very much support the notion that the more urban and suburban regions of Fort Lauderdale tend to be viewed as a single market, which is more in keeping with Sprint's proposed MSA-based market definition.

As mentioned above, Sprint agrees with Dr. Pleatsikas that it is reasonable to separate markets geographically. But his very justification for using a component economic area (CEA) as the unit of analysis is undermined by the proposal to split the CEA by UNE zone. Dr. Pleatsikas writes,

> CEAs were created to be economically meaningful in that they separate various parts of a state into different geographic markets based on economic factors (such as commuting patters and newspaper readership). Using the CEA creates a geographic area with a community of interest (Pleatsikas Direct page 8).

The same could be said for Sprint's proposed unit of geography, the MSA. But the BellSouth proposal to treat different portions of the CEA differently, based on UNE zones, essentially negates this community-of-interest aspect. Whereas using the MSA as the market maintains the community-of-interest aspect.

Lastly, Dr. Pleatsikas suggests that CEAs are preferable to MSAs because they encompass the entire land area of the state, and if MSAs were used then "parts of Florida would be excluded from consideration in any impairment test" (Pleatsikas Direct page 9). First, it is worth pointing out that BellSouth itself has excluded parts of Florida from consideration in this proceeding, as has Sprint. But more

importantly, Sprint's proposal to use MSAs is based on a rather common-sense point of view that if non-impairment can be found anywhere, and the FCC's national finding can be effectively rebutted anywhere, it would be in areas that fall within MSAs (as opposed to outside of MSAs) for the very reason that Dr. Pleatsikas points out in his testimony—most competition is in urban or suburban areas. Furthermore, the overwhelming majority of the wire centers that are served by BellSouth are found in MSAs. To the extent that some party might wish to put forth a non-MSA area for consideration of "no impairment," that party could certainly use RSA (rural service area) designation as the geographic unit. RSAs are well-established, and are often used by wireless companies for regulatory and licensing purposes.

Competitive Triggers and Testimony of Ms. Pamela A. Tipton

Q. BellSouth witness Ms. Pamela A. Tipton suggests in her direct testimony that the FCC's "trigger" criteria for mass market local switching is simply a counting exercise, and that if "there are three or more entities self-provisioning switching to mass market customers" then the triggers are met, regardless of other factors (Tipton Direct pages 4-5). Please comment.

A. It is certainly understandable that BellSouth, or any ILEC hoping to demonstrate non-impairment in a region, would prefer that the Commission treat the trigger analysis as a perfunctory counting exercise. But the Commission should evaluate Ms. Tipton's suggestion on two separate levels: First, if the trigger analysis were intended to be nothing more than a simple counting exercise then one must ask why

the FCC would delegate such a simple task to the states? Second, and more importantly, what are the impacts on competition in Florida of treating the trigger analysis in such a simplistic fashion? Both of these are discussed below.

In terms of analyzing impairment, it is clear that the FCC's position has been that evidence of actual deployment is a means to an end, rather than an end in and of itself. Paragraph 94 of the TRO states,

> As we examine the evidence of facilities deployment by competitive LECs in the specific UNE discussions, we will give it substantial weight, but we do not agree that we must find it conclusive or presumptive of a particular outcome *without additional information or analysis*".[2]

And the TRO goes on to affirm that, when analyzing impairment, state commissions are in the best position "to gather *and assess* the necessary information" and that states are in "the best position *to judge* whether the Act's extraordinary unbundling remedies should be applied."[3] It is for these reasons that the TRO delegated the task of analyzing impairment to the states. If Ms. Tipton was correct, and the trigger analysis was intended to be nothing more than a counting exercise, there would be no assessment or judgment required of the state commissions at all, and the very justification for turning the issue over to the states in the first place would be absent.[4]

[2] TRO paragraph 94, emphasis supplied.
[3] TRO paragraph 188, emphasis supplied.
[4] Another clear example of the TRO relying on state commissions' ability to assess and judge is found in the discussions of intermodal providers. Footnote 1549 states, "In deciding whether to include intermodal alternatives for purposes of these triggers, states should consider to what extent services provided over these intermodal alternatives are comparable in cost, quality and maturity to incumbent LEC services."

Q. You also suggested the Commission should consider the impacts on competition in Florida that would result from treating the trigger analysis as a perfunctory counting exercise. What are those impacts?

A. In my direct testimony I outlined the criteria that CLECs must meet before they can count toward meeting the triggers.[5] By ignoring these criteria, as Ms. Tipton seems to advocate, it is possible that the Commission would create a situation where competitive choices are actually eliminated in some Florida markets. Not only is this directly contrary to the Commission's stated goals in its recent rate rebalancing proceeding, it is contrary to the intent of the TRO itself. In its discussion of the impact of unbundling on competitive switch deployment the TRO clearly states that the FCC's approach "maintains appropriate incentives [for deployment] without *throwing away the competition that exists today*."[6]

Q. Exactly how would Ms. Tipton's suggestion throw away the competition that exists today?

A. Ms. Tipton suggests that the mere presence of three self-provisioning CLECs in a market is enough to satisfy the triggers and thereby remove unbundled mass market switching from the market, without regard to:

- *how many* mass market customers those carriers are actually serving,
- *how much* of the market those carriers are serving,
- how much of the market those carriers are *capable* of serving or willing to serve

[5] For example, trigger-meeting CLECs must be serving a non-de-minimus portion of the mass market, they must be offering service throughout a substantial portion of the market (as opposed to geographically cherry-picking), they must not be using enterprise switches, and they must be actively serving mass market customers and likely to continue to do so.

[6] TRO footnote 1365, emphasis supplied.

- how many customers in that market will *no longer have a choice* of carriers if unbundled local switching is removed.

For example, assume one of Ms. Tipton's proposed markets is made up of 10 wire centers. Using Ms. Tipton's suggestion, we could have a situation where three self-provisioning CLECs are all offering service in just a couple of wire centers in that market, and are not offering service—or even capable of offering service—to the other eight wire centers in the market. These CLECs do not constitute a viable alternate provider for the customers in those eight other wire centers, yet Ms. Tipton would advocate that unbundled switching be removed from the entire market because, as she sees it, the triggers had been met. In my example, the customers in the remaining eight wire centers will be deprived of competitive choice (such as service from a UNE-P based provider) but not because they had an alternative available; they are deprived of a competitive choice simply because someone else somewhere else in the market had an alternative. The effect of accepting Ms. Tipton's proposed approach would be to eliminate much of the competition that exists today in the mere hope that somehow or somewhere there might be competition tomorrow.

Q. Why is it reasonable for this Commission to be concerned with points you raised above, such as how many customers are being served or capable of being served, or how much of the market is capable of being served?

A. First, because this Commission just concluded a long and detailed proceeding regarding rebalancing rates for local service, and the very purpose of that proceeding was to encourage a more robust competitive environment for local

telephone service.[7] Throughout that proceeding the concept of more choices for more Florida residents was a constant theme.[8] Yet it appears that Ms. Tipton would have the Commission conclude that as long as a few customers in a given market have a choice—and maybe only one or two customers at that—then it is alright to eliminate competitive choices for the rest of the customers in that market. To throw away one viable form of competition when large numbers of local telephone customers may not have an alternative would be the antithesis of encouraging such a robust competitive environment.

Second, consider the following as an example: If, as stated in my direct testimony, there are three self-provisioning CLECs in a single wire center then there are *also* three self-provisioning CLECs—the same three CLECs—in the UNE-zone that contains that wire center. And there are also three self-provisioning CLECs—the same three CLECs—in the MSA that contains that wire center, and in the CEA that contains that wire center, and in the LATA that contains that wire center, and in the ILEC-serving-area that contains that wire center. If Ms. Tipton is correct, and it doesn't matter how much of a market is being served, the Commission could theoretically define the market as BellSouth's entire serving territory (which is less than the entire state and therefore meets the FCC's requirements) and subsequently remove unbundled local switching throughout the entire service area just because certain portions of the service area were served by CLECs. A situation could exist where unbundled switching would be eliminated in Miami just because there happened to be three self-provisioning CLECs in Jacksonville! Of course such a

[7] Docket Numbers 030867-TL, 030868-TL, 030869-TL.
[8] See, for example, Rebuttal Testimony of Dr. Aniruddha (Andy) Banerjee in Docket 030869-TL.

result would not take place (we would hope) for the logical reason that the existence of competition in Jacksonville does not in any way demonstrate the viability of competition in Miami. Similarly, the existence of competition in select, high-density portions of an MSA does not in any way demonstrate the viability of competition in other parts of the MSA. Therefore, it is logical for the Commission to consider how much of the market is being served before determining that it will remove competitive choices in that market.

Q. In her direct testimony, does BellSouth witness Tipton provide any evidence as to how much of the markets were being served by the self-provisioning CLECs identified?

A. Not on a market-by-market basis. Ms. Tipton's testimony does include the claim that, in total for BellSouth's serving territory, CLECs are serving "over 100,000 "mass market" customers" using their own switches (Tipton Direct page 3). But this claim is not supported in any way. Although it is not possible to know the exact number of mass market lines that exist in BellSouth's serving area, a reasonable estimate is 5.24 million.[9] This suggests that, based on Ms. Tipton's figure, CLECs are likely serving less than 2% of the mass market customers throughout Florida using their own switches.

[9] According to USAC BellSouth in Florida serves over 6,693,000 lines in Florida. Using nationwide data from the FCC we see that, on average, residential and small business lines (approximating the mass market) make up 78.3% of all ILEC lines. 6,693,000 * .783 = approximately 5,240,600 or 5.24 million.

Q. Is there evidence outside of Ms. Tipton's direct testimony, on a market-by-market basis, regarding *how much* of BellSouth's markets are served by self-provisioning CLECs?

A. There is indeed additional evidence, produced as a result of the Commission Staff's data requests, detailing the numbers of mass market customers served by the self-provisioning CLECs identified by Ms. Tipton in her testimony. This evidence is in various forms and in various stages of completeness, and so one must make careful assumptions when attempting to use the data to discern measures such as the extent of competition in a market. But with this caveat in mind, the data can be used to investigate issues such as whether the identified CLECs really do provide evidence of the technical and economic feasibility of an entrant serving the mass market, as Ms. Tipton has defined it.

For example, Ms. Tipton lists [redacted] as one of the self-provisioning CLECs that meets the trigger for BellSouth's Pensacola Zone 2 market. The Pensacola Zone 2 market is made up of six BellSouth wire centers. According to data filed with the Commission by [redacted], [redacted] does operate [redacted] switches that serve customers in BellSouth's territory. And one of those switches, identified in the LERG as [redacted], appears to provide various forms of service—overwhelmingly to larger business customers—in about [redacted] BellSouth wire centers including the six wire centers that make up Ms. Tipton's Pensacola Zone 2 market. The data provided by [redacted] did not identify how many customers the company actually had in *each* of the [redacted] wire centers; it only identified the total number of customers served by that switch. So the information provided by [redacted] does not confirm or

deny the existence of mass market customers specifically in the Pensacola Zone 2 market. But the information is useful nonetheless because the data reveals that the total number of mass market customers—as defined by BellSouth—served by [redacted] out of that switch is exactly [redacted] customers. And none of these customers are residential customers (this is addressed in more detail below). So at best, if those [redacted] customers happen to be located in the six wire centers that make up the Pensacola Zone 2 market, [redacted] is serving exactly [redacted] mass market customers in BellSouth's Pensacola Zone 2 market, and at worst it is serving zero. According to data provided by BellSouth there are over [redacted] mass market customers in the Pensacola Zone 2 market.[10] This suggests that, again as an absolute upper bound, [redacted] has achieved a market penetration of [redacted]

The reason this information is useful is because, as discussed in my direct testimony, the FCC was well aware that CLECs can manage to serve some mass market customers off of what are otherwise enterprise switches.[11] But this situation was not enough for the FCC to find an absence of impairment, and it appears that this is the exact situation we find with [redacted] in BellSouth's Pensacola Zone 2 market. [redacted] also provided data regarding the utilized capacity of the switch in question, as measured in voice-grade equivalents, and the data shows that less than [redacted] of the utilized capacity of this switch is used to serve mass market customers.

[10] Data taken from BellSouth responses to Sprint's interrogatories.
[11] TRP paragraph 441.

Another way of examining the issue of "how much" of the market is served by the identified CLECs is to look at whether there are entire customer groups who are not being served. Specifically, it is worthwhile to examine whether the CLECs identified by Ms. Tipton are limiting themselves to serving only the business portion of the mass market, and subsequently ignoring the residential market. The TRO is extremely clear that the mass market is made up of both residential and small business customers.[12] If the CLECs identified by Ms. Tipton subdivide the mass market and only offer service to business customers, then the Commission should seriously question whether the evidence presented adequately demonstrates the technical and economic feasibility of an entrant serving the mass market.

Q. *Is there evidence that any of the CLECs identified by Ms. Tipton have, in fact, subdivided the mass market and are only serving business customers?*

A. Yes. Turning again to the data provided in response to the Commission Staff's requests, we find that several companies have apparently subdivided the market and are only providing service to businesses. These include such companies as [redacted] (listed as a trigger-meeting CLEC in Fort Lauderdale, Miami, Jacksonville and West Palm Beach), [redacted] (listed as a trigger-meeting CLEC in Fort Lauderdale, Miami and West Palm Beach), [redacted] (listed as a trigger-meeting CLEC in Fort Lauderdale and Jacksonville), and [redacted] (listed as a trigger-meeting CLEC in Daytona Beach and Pensacola).

[12] TRO paragraph 127.

It is certainly not surprising that many of BellSouth's proposed CLECs limit their service offerings to the business market. As the TRO itself indicates, business customers "usually pay higher retail rates, and may be more likely to purchase additional services such as multiple lines, vertical features, data services and yellow page listings" and therefore tend to be, all else held equal, more profitable to serve.[13] But a CLEC that subdivides the mass market, refuses to serve residential customers, and only serves select business customers should not be viewed by this Commission as evidence of the technical and economic feasibility of an entrant serving the mass market with its own switch. In fact, BellSouth itself—perhaps unintentionally—agrees with and supports this point of view by virtue of the way it conducted its potential deployment analysis filed in this proceeding.

Q. How does BellSouth's potential deployment analysis support the notion that selectively serving a limited number of business customers is not evidence of the technical and economic feasibility of an entrant serving the mass market with its own switch?

A. If BellSouth believed unconditionally that selectively serving only business customers was enough to demonstrate the feasibility of serving the mass market, then BellSouth would have conducted its potential deployment analyses in that manner, because it is extremely likely that BellSouth could have produced even *more* markets that were profitable—based on their assumptions—if they limited their take rate to business customers only. The reason they could do this is because of the way in which BellSouth models the cost of serving the mass market, which is

[13] TRO footnote 432.

to essentially leverage off of the enterprise market. But BellSouth did not conduct their potential deployment analysis in that fashion (business customers only); instead they assumed that both residential and business customers were served.

It is worth noting that in the TRO, the descriptions of the *intent* of the trigger analysis and the *intent* of the potential deployment analysis are extremely consistent. As stated above, the triggers are intended to provide evidence of "the technical and economic feasibility of an entrant serving the mass market with its own switch".[14] The potential deployment analysis is intended to show "whether a competing carrier could economically serve the market without access to the incumbent's switch".[15] And, as the TRO also states, "the market" is the same in both cases. If BellSouth believes that serving "the market" is more than selectively serving a handful of business customers (as it clearly does in its potential deployment analysis) it must also believe that for its trigger analysis.

Q. Aside from the question of "how much" of a market is actually being served, did Ms. Tipton provide evidence in her testimony as to how much of the market the proposed CLECs are even capable of serving?

A. No. But again, there is additional evidence that can be gleaned from the data provided to the Commission Staff to help address this issue. For example, BellSouth lists [redacted] as a trigger-meeting CLEC in the Jacksonville Zone 2 market. As defined by BellSouth, the Jacksonville Zone 2 market consists of seventeen wire centers. But according to information filed by [redacted] with Commission staff, [redacted]

[14] TRO paragraph 501.
[15] TRO paragraph 517.

provides service in only [redacted] of the seventeen wire centers. Similarly BellSouth lists [redacted] as a trigger-meeting CLEC in the same Jacksonville Zone 2 market, but according to data that [redacted] provided to the Commission, [redacted] does not provide service in *any* of the seventeen wire centers that make up the Jacksonville Zone 2 market.

Q. Based on the testimony of Ms. Tipton, and the data provided to the Commission Staff, should we conclude at this time that BellSouth has met the triggers in the markets identified in Ms. Tipton's testimony?

A. No. The data provided to Commission Staff raises far more questions than it answers regarding whether the companies identified by Ms. Tipton demonstrate the technical and economic feasibility of an entrant serving the market with its own switch. In some cases ([redacted] and Jacksonville Zone 2) the entrant does not appear to be serving the market at all. In other cases ([redacted] and Pensacola Zone 2) the entrant is serving such a miniscule portion of the market ([redacted] if that much) that this says nothing about the feasibility of serving the market. In still other cases ([redacted] in Fort Lauderdale) the entrant has subdivided the market and is serving only the business portion. For the Commission to conclude that barriers to entry in the mass market have been overcome, based on such questionable evidence, would be a mistake.

Optimization in the BellSouth Analysis of Competitive Entry (BACE) Model and the Testimony of Mr. James Stegeman

Q. In the testimony of BellSouth witness Mr. James Stegeman, he describes the various forms of optimization that take place in the BACE Model. Please comment on these optimization procedures.

A. Mr. Stegeman explains in his testimony that there are six different ways that the BACE Model optimizes (or chooses among alternatives) in order to eliminate activities that "yield a negative net present value" (Stegeman Direct page 51). Some of these optimization procedures have to do with network planning (for example, the model chooses between co-locating and using EELs in a particular wire center), and Sprint believes such optimization routines are appropriate. But some of the other optimization procedures involve a choice of whether or not to serve a particular type of customer, or a particular area. In essence, they allow the entrant to *ignore* significant portions of the market. While these choices are sometimes made by firms when conducting business cases, they are contrary to the FCC's guidance in the TRO in terms of analyzing potential deployment.

The TRO states that, when analyzing potential deployment, a geographic area should be defined as the market and then, if triggers are not satisfied, the state should analyze potential deployment in "the market in question."[16] Assume the market in question is UNE Zone 2 in the Miami CEA. What must be determined in the potential deployment analysis is whether entry is economic for that market. But the optimization routines in the BACE Model—particularly the routines that allow the entrant to essentially ignore unprofitable areas—have the effect of negating the market definition itself. These routines create a situation where, if the question is:

[16] TRO paragraph 506.

"Can an entrant economically serve UNE Zone 2 in the Miami CEA?" the model answers, "Yes, if the entrant ignores half of the wire centers in that market." While such an answer might guide an entrant to opt for geographically cherry-picking the portions of Zone 2 Miami it wishes to serve, it does not demonstrate the economic feasibility of serving the market, which was defined as the entire zone.

In the following section, I describe adjustments made to various demand-side inputs in the BACE Model, and describe the results the model produces when the input values are changed. In the course of producing these results, Sprint ran the BACE Model with the following optimization routines turned off: the routine that would eliminate unprofitable wire centers (#3 in Stegeman Direct, page 51), the routine that would eliminate all unprofitable mass market customers (#4 in Stegeman Direct, page 51), and the routine that would eliminate unprofitable markets (#5 in Stegeman Direct, page 51). This prevents the model from ignoring large portions of the defined market, and this is consistent with the concept of determining whether a CLEC is capable of economically serving a market, as opposed to economically serving select portions of a market. (It is also consistent with the definition of market as it is used in the trigger analysis of actual deployment.) However, because CLECs can and do tailor their product offerings, it was reasonable to run the model in such a way that assumed the CLEC would attempt to attract the more profitable customers throughout the entire market. To achieve this, Sprint eliminated the lowest quintile of residential customers (as described in the testimony of BellSouth witness Dr. Debra Aron). The result of all of these changes was, in fact, a *higher* overall net present value for BellSouth's

markets than the net present value produced by BellSouth's runs of the BACE Model. This result can be seen in Attachment KWD-6 to the testimony of Sprint witness Mr. Kent Dickerson, by comparing Scenario 1 and Scenario 2 in that attachment. Scenario 1 contains the BACE Model results when the model is run as filed by BellSouth, with the results simply aggregated to an MSA level, a net present value of approximately $320 million. Scenario 2 contains the BACE Model results with the above-mentioned changes made, a net present value of approximately $331.9 million. This adjusted result serves as the foundation, or "base run" for all inputs changes discussed below and discussed in the testimony of Sprint witness Dickerson.

Demand-Side Inputs to the BellSouth BACE Model and Testimony of Dr. Debra Aron

Q. In her direct testimony, BellSouth witness Dr. Debra Aron indicates that she provided a number of the inputs that were used in the BellSouth BACE Model. Have you reviewed some of these inputs?

A. Yes. My review primarily focused on a few key inputs that tend to represent the "demand" side of the business case. (The testimony of Sprint witness Mr. Kent Dickerson addresses some of the key inputs on the "supply" side of the business case.) These "demand-side" variables include inputs that reflect market share, pricing, price movements over time, and other variables that are not cost-related.

Q. In a business case how important are these "demand-side" variables?

A. They are *extremely* important; in fact, they can easily make or break any business case or opportunity analysis. And unfortunately, they are extremely difficult to estimate with any high-level of precision because they are fundamentally different from cost-side variables; demand-side variables are variables over which the company has very little control, or often *no* control. Therefore, it is absolutely necessary that the assumptions and support that are used to justify any demand-side variables are accurate, reliable, and applicable to the situation at hand.

Q. Can you give a simple example of the difficulty involved in accurately estimating a demand-side variable?

A. Certainly. Consider a seemingly straightforward variable such as market share. In order to accurately determine the market share that a new entrant can expect to receive in a market (any market, not necessarily telephone), an economist working on the business case would need to…

- First, estimate the overall size of the market prior to entry.
- Second, estimate the growth of the market over the time horizon being modeled by the entrant.
- Third, determine whether the entrant's market share will more likely be the result of increasing the overall market, or taking away market share from existing firms, or a combination of both. This, of course, may depend on…
    - The degree of substitutability between the entrant's product and the existing firm's product.
    - The existence of any pent up demand for an alternative product or provider.

- The ability of the entrant to successfully differentiate its product from the existing products, which may take the form of...
  - Price differentiation
  - Product bundling differentiation
  - Perceived quality differentiation
  - Product characteristic differentiation

- Fourth, determine the existing firm's expected response to the entrant's attempts to obtain market share. This could take the form of...
  - Competitive pricing
  - Introduction of new bundling or service offers
  - Changes to product characteristics
- Fifth, evaluate the market-specific factors what will affect both the entrant's ability to gain share and the incumbent's ability to win it back. (For example, it may be that the likelihood of customers switching providers is inversely related to the average age of the population, and the market in question may have a higher-than-average proportion of persons over 60.)
- Sixth, repeat the entire process now assuming that the market will be shared by one or more additional entrants.

Obviously the process described above is complex, time-consuming, and research-intensive. But, as stated above, the demand-side variables (such as market share) are extremely important to the outcome of any business case. So it is absolutely necessary to at least attempt to put a structured process behind such numbers as market share in any business case.

Q. Does Dr. Aron's testimony suggest that she relied on such a structured process to arrive at her demand-side variables?

A. No. For example, Dr. Aron advocates (and the BACE Model uses) an end-of-the-time-horizon market share of 15 percent. This figure does not appear to be the result of an investigation into the demand characteristics of the markets being modeled. In fact, the total support offered for the 15 percent market share figure can be summarized as follows:

1. CLECs in Florida, in aggregate, have attained 15% market share in 35 of BellSouth's wire centers (Aron Direct page 25).
2. Cable TV providers have achieved penetration rates for telephony that are higher than 15% (Aron Direct page 26).
3. A CLEC in New York state (AT&T) attained 15% market share (Aron Direct page 27).

I do not doubt the accuracy of these findings, but a quick examination of these facts illustrates that they provide no real support at all for using a 15 percent market share in the BACE Model's business case of an entrant serving the mass market. For example:

Point #1, *"CLECs in Florida, in aggregate, have attained 15% market share in 35 of BellSouth's wire centers."* The problem with using this fact as support is that the BACE model does not model "CLECs in aggregate." It models a single entrant. The fact that multiple CLECs may have, in aggregate, achieved this

market share in some places does not suggest that each and every CLEC, or even any one CLEC, could achieve it. For example, BellSouth witness Tipton's testimony identifies eleven (11) CLECs in the Fort Lauderdale Zone 2 market. Since it is a mathematical impossibility for each of these eleven CLECs to attain 15% market share we must assume that Dr. Aron is not suggesting that any or every CLEC can gain 15% market share. Perhaps her reference (to the aggregate CLEC market share) is meant to suggest that there is 15% market share *available* to the CLEC being modeled. If so, the 15% penetration rate in the BACE Model must assume that the specific entrant being modeled is the *only* CLEC in the market, and that it successfully captures the entire market that is available to CLECs. But it is unclear whether Dr. Aron's assumption is that the other CLECs (such as those listed in Ms. Tipton's testimony) exited the market, or that they never entered the market. And there is no explanation or support provided for such an assumption. Nor is there support for why apparently one CLEC in the BACE Model can attain a market share that it takes multiple CLECs to attain in the real world. While there is nothing wrong with making such assumptions, they must be justified in some way, and this has not been done.

Furthermore, with regard to this reference ("CLECs in Florida, in aggregate, have attained 15% market share in 35 of BellSouth's wire centers") it is unclear whether this 15% in 35 wire centers is limited to mass market customers. It is a well-established fact that the majority of CLEC lines in Florida are used to serve large business customers, not mass market customers. So it is equally likely that the majority of the 15% are also lines serving large business customers. This would, in

turn, suggest a mass-market penetration well below 15%, providing no justification for the 15% input to the BACE Model.[17]

Point #2, *Cable TV providers have achieved penetration rates for telephony that are higher than 15%.* The entrant modeled in the BACE Model is not a cable television provider. The entrant being modeled uses the incumbent's loops. The model does not include either the costs or the revenues associated with the provision of cable television. The TRO is extremely clear that cable television providers have unique advantages in the marketplace, advantages that are not available to other entrants. The TRO states that cable television companies, "because of their unique economic circumstances of first-mover advantages and scope economies, have access to the customer that other competitive carriers lack."[18] As a result, a market share attained by a cable company is not representative at all of the market share that could be obtained by the entrant in the BACE Model. In fact, Dr. Aron's reference to the cable television provider could actually work against her 15% market share assumption. She states that "of the 9.9 million that can obtain cable telephone service, 2.6 million (or 26.2 percent) have selected it" (Aron page 26). Since the entrant being modeled in the BACE Model is clearly not a cable television company, if we assume that there is competition from the cable company this simply means there is less of the market left over for non-cable based providers. Referring back to Point #1 above ("CLECs in Florida,

[17] For example, assume the mass market accounts for 75% of all lines and the enterprise market accounts for the remaining 25%. In a representative wire center of 100 lines (where 75 lines are mass market and 25 are enterprise) a CLEC that has 15% overall penetration has 15 lines in total. If the majority of those 15 lines are enterprise (for example, 8 are enterprise and 7 are mass market) this means the CLEC penetration of the enterprise market is 8/25 or 32%, and the CLEC penetration of the mass market is 7/75 or 9.3%.
[18] TRO paragraph 310.

in aggregate, have attained 15% market share in 35 of BellSouth's wire centers"), if it takes multiple CLECs to attain 15% market share in the absence of cable telephony (as is the case in Florida today), how likely is it that the single CLEC modeled in the BACE Model would achieve 15% market share if cable telephony is likely to become available?

Point #3, *A CLEC in New York state (AT&T) attained 15% market share*. It is a fact that AT&T maintains a unique position in the telecom industry with regard to customer recognition and brand awareness. Indeed, it is well-known among marketing groups that more than a decade after divestiture many local service customers reported (erroneously) that their local service was still provided by AT&T. Dr. Aron's reference to AT&T's New York market share suggests that any new entrant, even one without the ability to leverage this level of recognition and brand awareness, should be able to achieve a similar market share. There is no reason to believe this is so. In fact, the FCC's Local Competition report indicates that there are 26 CLECs in New York state and these 26 companies have a collective market share of 28%.[19] If AT&T accounts for 15% market share, this means the other 25 CLECs collectively serve 13% of the market, and each has, on average, well under 1% market share.

In summary, Dr. Aron's market penetration figure is simply without support. First, it is not the result of a structured process (as outlined above). Second, it disregards market realities such as the existence of other CLECs. Third, it ignores very

[19] Local Competition Report, released December 22, 2003, available at www.fcc.gov.

important questions, such as what is the reason that the CLEC is able to attain such a market share? And fourth, the references that are provided for support have no applicability at all to the situation being modeled in the BACE Model. As stated above, support for demand-side input values, such as market penetration, is extremely important because these inputs have a dramatic effect on the outcome of the business case.

Q. Can you provide an example of the effect that demand-side assumptions can have on a business case?

A. Yes. As shown in an attachment to the testimony of Sprint witness Mr. Kent Dickerson, if Dr. Aron's unsupported market share figure of 15% is replaced in BellSouth's BACE Model with an estimated market penetration of 10%, and no other changes are made to the model, the net present value of the new entrant's business case for BellSouth's markets falls by nearly 50%, from approximately $332 million to less than $174 million (Scenario 2 and Scenario 3 in Attachment KWD-6.)

Q. Is there a reason to believe that 10% is a more realistic penetration rate than Dr. Aron's proposed figure of 15%?

A. Yes, in fact 10% represents an extremely *generous* upper bound for one entrant's market share. To see why, recall that in the previous pages I presented an example of the steps that are required to estimate market penetration in a structured manner. One of the key determinants included in that example was an understanding the number of competitors in the market (a fact that does not appear to be considered in

Dr. Aron's proposal). According to the testimony of BellSouth witness Tipton, the average number of competitors in BellSouth's Florida markets (for which no impairment is claimed) is slightly over six (6). And according to the FCC's Local Competition Report, in the state of Florida, in zip codes where competition exists, the average number of CLECs in a given zip code is between seven and eight (7.5).[20] Because the BellSouth figure obviously excludes non-facilities-based CLECs, we can conservatively assume that, statewide, Florida markets that have competition have approximately seven competitors on average.[21] Dr. Aron has provided no argument as to why the entrant modeled in the BACE Model should have a higher (or lower) market penetration than any other entrant.[22] So we are left with the question as to how the market will ultimately be divided between an incumbent and many (on average, seven) entrants. Considering this question in two different ways we see, in both cases, that a market share of less than 10% per entrant is much more likely than Dr. Aron's proposed 15%.

First, if we look to the long distance industry as one model, we find a market that operated as a monopoly until competition developed, both from other carriers using their own competing facilities (other IXCs) and from other carriers (BOCs) using leased facilities. One would be hard-pressed to identify a more competitive market than the long-distance calling market, yet more than seventeen years after

[20] See FCC Local Competition Report, released December 23, 2003, available at www.fcc.gov.
[21] There are arguments to be made on both sides as to whether that number is expected to increase or decrease over time. According to the FCC the number has increased (from 6 to 7.5) since the Local Competition Report for 2002. For purposes of discussion, it will remain unchanged.
[22] Except, of course, a cable telephony provider whose market share would be higher due to the advantages discussed earlier.

divestiture we find that, according to FCC data, the original monopoly player (AT&T) still retained over 35% market share.[23] The time horizon of the BACE Model is 10 years. If we assume in the local market that the incumbent will retain at least 35% market share for 10 years (an extremely reasonable assumption given that Florida incumbents have retained nearly 87% market share since the passage of the 1996 Telecom Act) there would be, at the absolute most, no more than 65% of the market left that was available to all CLECs. Again, no argument exists as to why the entrant modeled in the BACE Model would achieve a higher market share than any other entrant. This suggests than any entrant would see, on average, a market share of less than [(65%)/(7)] or 9.3%.

A much more likely scenario would follow the suggestion raised by Dr. Aron that cable telephony would become a significant player in this market. Recall that Dr. Aron's testimony stated that approximately 26.2% of households opted for cable telephony, where it was available, in far less than ten years. If we assume that cable telephony enters the market even halfway through our 10 year time horizon, and also assume that 90% of households are passed by cable in any market, we could conservatively estimate that 26.2% of 90% of households, or 23.5%, would opt for cable telephony by the end of the time horizon. If we also assume that the incumbent LEC has managed to retain its 35% market share (again a very conservative assumption) we would find only 41.5% of the market available to other entrants (100% - (35% + 23.5%) = 41.5%). 41.5% divided between 6

[23] See FCC Long Distance Telecommunications Industry Report, released May 14, 2003, available at www.fcc.gov.

entrants (one of the original seven being the cable provider) produces, on average, 6.9% market share per entrant.

It should be noted that neither of these discussions is intended to substitute for the type of accurate, in-depth process that should be used to arrive at a market share estimate for use in a business case. They are only offered as alternative frames of reference. As stated above, it appears that Dr. Aron did not rely on a structured, market-specific process to obtain her 15% estimate. And the slight evidence that was offered in support of that figure was, upon examination, inapplicable to the situation being modeled by the BACE Model. These two examples above are simply offered as support that, in the absence of a structured process for estimating market share, Dr. Aron's 15% input to the BACE Model is significantly overstated.

Q. Are there other demand-side inputs, proposed by Dr. Aron, that are also inappropriate or without support?

A. Yes. Another key demand-side input is what Dr. Aron refers to as the "p-value" or rate of climb. This is, in simple terms, the variable that determines how quickly the entrant achieves its market share. Dr. Aron has advocated, and Bellsouth uses, a p-value of 50% for residential customers. This means, again in simplest terms, that the entrant achieves half of its total market share in a single year, the first year. And it assumes that, by the end of the second year, the entrant has achieved 3/4ths of its total market share.

Q. Is the "p-value" similar to the market share estimate in the sense that it has a significant impact on the outcome of the BACE Model as run by Bellsouth?

A. Absolutely. For example, the "p-value" can take on different values in the BACE Model, from 50% to 25%. As stated above, a 50% "p-value" means that the entrant achieves half of its total market share in the first year. A 25% "p-value" means that the entrant achieves one-fourth of its total market share the first year. BellSouth has run the BACE Model with a "p-value" of 50% for residential customers. If this is changed to 25% the outcome of the model is dramatically affected. As shown in an attachment to the testimony of Sprint witness Mr. Kent Dickerson, changing the "p-value" to 25% causes the net present value of the new entrant's business case for BellSouth's markets to fall by nearly 30%, from approximately $332 million to less than $238 million (Scenario 2 and Scenario 4 in Attachment KWD-6.) It is important to note that changing the "p-value" in this way does not change the *number* of customers the entrant acquires; it only changes *how quickly* the entrant acquires them. A simple change in the speed of acquisition can affect the outcome of the business case by nearly 30%. This is just one more example of how important the demand-side variables are to any business case, and why they must be well-supported and applicable.

Q. What support does Dr. Aron provide for the "p-value" of 50%?

A. None. In discussing the "p-value" Dr. Aron does make reference to an article by economist Richard Caves, in which Dr. Caves states that "the size of a typical, successful entrant (when plotted against time) increases more rapidly when the firm is young and small, and tends to level off (the growth rate decreases) as the firm

becomes older and larger" (Aron Direct page 25). This reference should be addressed on two different levels.

First, this description (faster growth in early years, slower growth in later years) describes only the general shape of the penetration curve (as Dr. Aron acknowledges). It does not justify a particular "p-value", because both a 50% p-value and a 25% p-value will produce a curve with the same general shape: each will produce a curve that depicts faster growth in early years and slower growth in later years. The only difference is that the slope is less steep in the case of the 25% value, and the curve has a longer tail.

Second, the article that Dr. Aron references is indeed discussing what successful entrants do: Successful entrants (in all industries) find a way to grow faster in early years and then the growth tapers off in later years. If an industry is characterized by a large amount of up-front or fixed costs, as telecom is, the affect that this has on the likelihood of success is obvious: The more customers you can manage to acquire more quickly, the better off you'll be because you can cover those up-front costs more quickly. But by using this approach, Dr. Aron has effectively stacked the deck. Essentially she is suggesting, "This is what the CLEC needs to do in order to succeed, so let's assume the CLEC does it." And, to no great surprise, the CLEC succeeds! By assuming the CLEC only takes 1 year to acquire half of its total 10-year market share, the entrant is virtually guaranteed success. But as I stated in earlier pages, demand-side variables are variables over which the company

has little control. The question is whether there is any evidence that CLECs can acquire half of their overall market share in their first year of operation.

Q. Does real-world data offer any support for Dr. Aron's proposed p-value of 50%?

A. No. According to data from the FCC's Local Competition Report 2003, actual CLEC entry into the mass market (residential and small business customers) does not support the notion that CLECs can acquire half of their market share in the first year. The table below lists, on a national scale, the market share that CLECs obtained in the mass market (residential/small business) over a four year period.

CLEC Market Share in the Mass Market

December 1999	December 2000	December 2001	December 2002	June 2003*
2.4%	4.5%	6.6%	10.2%	12.0%

*most recent data available

There is no reason to assume that the 12% depicted in the table above represents an upper-bound, or final figure, on CLEC market share in the mass market. But even if it did, it is clear that CLECs did not come close to achieving half of that figure in the first year of competition. That is why, in the absence of a thorough, structured process for estimating the growth rate of CLEC market share, Dr. Aron's proposed 50% "p-value" must be rejected and a more reasonable figure, such as the alternative 25%, should be considered.[24]

Q. Are there any other demand-side variables utilized by BellSouth that do not withstand scrutiny?

[24] In all likelihood a "p-value" of even 25% is excessively optimistic, based on the same FCC data. But 25% is the lowest option available to enter as an input into the BACE Model.

A. Yes. Perhaps the most interesting of all are the assumptions made regarding the prices of bundles that BellSouth uses in its BACE Model. The BACE Model basically establishes a three–tiered bundle offer for residential customers. The customer can get an unlimited local and long distance service for $57.72 (ResBundleB). The customer can add voicemail and line maintenance for an increased price of $62.50 (ResBundleA). Or the customer can add DSL to that package for a total of $100.09 (ResBundleC).[25] These bundles are the primary products the entrant is projected to sell in zones 1 and 2, and they produce the revenue yield the CLEC is expected to realize on these customers. But the interesting facts are 1) these prices do not reflect the prevailing market prices that we actually see in a competitive environment, and 2) these price points are not projected to change over the entire 10-year time horizon of the model. As a result, the revenues that the CLEC is expected to earn are overstated.

Q. Why do you believe the bundle prices that BellSouth uses in the model do not reflect the prevailing market price levels seen in reality?

A. The $57.72 price for ResBundleB appears to reflect a $49.99 unlimited calling plan charge to the customer, the prevailing $6.50 subscriber line charge and a reasonable addition for terminating access charges assessed in toll carriers terminating to the LEC's end user. This is the lowest-priced bundle and therefore it must represent a lower-bound for the prevailing bundle price in the market. Yet Attachments BKS-1 and BKS-2 show win-back offers that BellSouth has actually extended to its

[25] The prices listed are Zone 1 and 2 prices. The model also has these same bundles of services available in the Zone areas 3 and 4, at slightly different prices. (ResBundleA3 $68.23, ResBundleB3 $55.76 and ResBundleC3 at $102.09)

residential customers in October and November of 2003. In the offer shown in Attachment BKS-1, the customer can purchase a $49.99 plan, which we believe to be consistent with the BACE Model's ResBundleB. However, in BellSouth's win-back the customer also gets free voice mail, and their local service connection fee ($42.50) is waived, and the customer gets a one-time payment of $75 cash back. Assuming an average customer life of 24 months, the monthly savings to the customer (or the reduction in prevailing price) is approximately $9.68.[26] That $9.68 value represents a 16.8% decrease on the prices that BellSouth uses in the BACE model for equivalent service. Similarly, the offer in Exhibit B provides $100 cash back and waives the local service connection charge.

Now, the BACE model does contain a table called the CLEC Baseline Price Discount table. A 10% initial discount is loaded in the table, but it appears to be applied only to portions of the bundles that are discussed above. The local line charges (Installation, Regcharges, and Subscription) are discounted in the bundle, but the other parts of the bundle (Access Charges and Toll) do not appear to be discounted. Because of the closed nature of the model, it is not clear how much the ResBundleB price of $57.72 is affected by this table. But a 10% discount on only portions of the bundle of services will not come close to matching the 16.8% reductions built into BellSouth's win-back offers. Clearly, in order for the CLEC to really compete with the incumbent, the discount would have to, at a minimum, be equal. But in BellSouth's runs of the BACE Model it is not. The prices in the BACE Model actually overstate the prices that would prevail—and do prevail—in

[26] Voicemail value is assumed to be the difference in the price between ResBundleA and ResBundleB ($62.50 - $57.72 = $4.78). The cash back ($75) and waived local service connection charge ($42.50) total $117.50 or $4.90 per month for 24 months.

a competitive market. As a result, the revenues assumed in the model are overstated.

Q. How would the continued development of competition over a 10-year time horizon affect the prices of these bundles?

A. As competition increases over the BACE Model's 10-year time horizon the prices for bundles will move closer toward costs, and the ability of the incumbent to control prices in the market will continue to decrease. Bundles such as the ones described above (and in the model) will continue to be offered, and the level of discount necessary to win the customer's business initially (for the entrant), or win the customer back and retain the customer (for the incumbent) will increase. The market will put downward pressure on prices, and this downward pressure will be exacerbated by the development of VoIP-type service offerings, as well as wireless substitution.

Q. Is this market dynamic reflected in BellSouth's runs of the model?

A. No. The BACE Model has a table called the Bundle Price Curves table, which allows the prices of the bundles to be changed (reduced) yearly over the 10-year period. For BellSouth's runs of the model the table has not been populated, indicating no downward pressure on prices at all.

Q. How much downward pressure should be reflected in the BACE Model?

A. Barring market failures, effective competition often drives the price of goods toward their economic costs. In the case of BellSouth in Florida we have estimates that the economic cost of providing basic local service to residential

customers is well below $30.[27] Even adding to this the costs associated with long-distance service, we would expect to see significant downward pressure from a starting point of approximately $50 (BellSouth's win-back offer price).

Q. Is it reasonable to assume the small business portion of the mass market will also experience price pressure over the 10 year period of the model?

A. Absolutely. The small business market is at least as competitive as the residential market today. Margins on local business services tend to be higher than on residential service, consequently the opportunities for CLECs are greater in the small business market than the residential market. This suggests that the prevailing pricing environment will include discounts from the CLEC and win-back and retention efforts from the ILEC that will produce at least the same level of downward pricing pressure that will develop in the residential market.

Q. So to summarize, the outcome produced by the BACE Model in its current form is the result of overstating the prices (compared to what BellSouth is actually offering in a competitive environment today) and ignoring any downward pressure on pricing over the 10-year time horizon?

A. That is correct.

Q. If the prices in the model are adjusted to account for these two factors, is the effect on the model's results as dramatic as we have seen from other demand-side variables?

[27] The FCC's forward-looking cost model HCPM produces cost estimates that support this statement.

average yearly increase in total non-farm business productivity nationwide was *also* between 2% and 2.5%

A. Adjusting for these two factors produces changes that are even *more* dramatic. Sprint re-ran the BACE Model and incorporated two changes: 1) Adjusted the model's prices so they would more accurately reflect actual market prices by replacing the 10% CLEC discount on bundles (discussed above) with a ten dollar discount that approximated the $9.68 monthly savings that BellSouth is offering customers in its win-back efforts (also discussed above). 2) Incorporated an extremely conservative price decrease of 1.5% per year for the bundled offerings in the model. In an even more conservative step, Sprint only applied this price decrease to select portions of the bundles, since certain other portions already operate in a fully mature competitive market. The result of these two simple changes was to cause the NPV of the entrant's business case to fall by nearly 70%. As Attachment KWD-6 shows in Scenario 2 and Scenario 5, the net present value dropped from nearly $332 million to slightly over $101 million.

Q. Is there a particular justification for a 1.5% annual price decrease to represent competitive pressure on pricing?

A. A 1.5% yearly price reduction on a bundle of services is an extremely *conservative* estimate for price changes in a competitive market. In fact, if the prices reflected nothing except average increases in productivity, which would normally be passed through to end-users in a competitive market, the price decreases would be larger than 1.5% per year.[28] As an alternative, by way of a benchmark, we can examine price changes in competitive telecommunications markets such as wireless calling

[28] According to the Bureau of Labor Statistics the average yearly increase in total business productivity nationwide was between 2% and 2.5% per year over both the past 10 years and the past 20 years. The average yearly increase in total non-farm business productivity nationwide was *also* between 2% and 2.5% per year over both the past 10 years and the past 20 years. www.bls.gov.

or toll calling. According to FCC data the average price of one minute of long distance calling fell from $0.15 in 1993 to $0.08 in 2001, a 47% decrease over eight years.[29] And additional FCC data reveal that the average amount spent per minute of wireless calling fell from $0.47 in 1994 to $0.11 in 2002, a 77% decrease over eight years.[30] By comparison, a 1.5% annual price decrease over a ten-year time horizon amounts to no more than a 15% cumulative price decrease, by any measure a conservative effect.

Q. Please summarize your discussion of the demand-side inputs used in the BellSouth BACE Model.

A. As stated above, achieving accuracy with regard to demand-side inputs is extremely important to any business case because these inputs can affect the outcome of the business case in dramatic ways. Ideally, demand-side inputs such as market share estimates and growth rates should be produced as the result of a structured process that is well-researched and well-supported. Based on her testimony it appears that Dr. Aron engaged in no such process. Alternately, demand-side inputs at a minimum should be applicable to the situation being modeled, supported with evidence, and reflective of marketplace realities. The market share proposed by Dr. Aron is not supported by fact and does not reflect the marketplace realties of, for example, an average of seven competitive entrants per market in Florida. The growth rate ("p-value") proposed by Dr. Aron is not supported in any way and makes assumptions—half of the total market share being captured in the first

[29] FCC 2003 Reference Book on Rates, Price Indices & Household Expenditure for Telephone Service. Available at www.fcc.gov.
[30] 2003 Trends in Telephone Service, available at www.fcc.gov.

year—that are unrealistic and self-serving. The price figures used in the BellSouth runs of the BACE Model are not reflective of real-world pricing or real world competitive dynamics. Sprint has re-run the BACE Model using values for these variables that are appropriate and supported by real-world conditions. The result, when combined with cost-side inputs supported in the testimony of Mr. Kent Dickerson, produces the real-world result of an uneconomic business case for mass market service using UNE-L.

Weighted Average Cost of Capital and Dr. Randall Billingsley

Q. On page 3, lines 13 – 18 of his Direct Testimony Dr. Billingsley states that he obtained his proposed cost of capital using an average of two separate analyses of two separate groups, the firms that make up the Standard & Poor's Composite 500 Index ("S&P 500") and a representative sample of CLECs. Is this a reasonable approach?

A. No, not when the firm being modeled is a new-entrant CLEC. The firms that make up the S&P 500 and the sample of CLECs are simply not comparable in terms of the factors that affect investors' expected returns on capital. Thus, a simple mathematical average of the cost components of these two non-comparable groups does not produce a meaningful result, and certainly not a reasonable estimate of the cost of capital to a new entrant CLEC. Because investors' expected returns are functions of risk, the only justification for averaging the two groups would be if the entrant reflected investment risk that was, for some reason, somewhere between the S&P and CLECs in general.

Q. Historically, how do CLECs and ILECs compare with the firms in the S&P in terms of perceived risk

A. In general, ILECs offer slightly less risk than the S&P as a whole, and both ILECs and the S&P offer significantly less risk than CLECs. As Dr. Billingsley illustrated in his testimony, both the "beta" and the estimated cost of equity are significantly higher for CLECs than for the firms in the S&P 500.[31] This suggests that the perceived risk, on the part of an investor, is higher as well for CLECs.

Q. If the perceived risk for an investor is higher for a CLEC than for an ILEC shouldn't the expected return (in the form of a weighted average cost of capital, or WACC) be higher as well?

A. Yes. To suggest otherwise would be to suggest that a fundamental tenet of capital market theory is incorrect.

Q. Has the FCC recently approved a specific WACC for an ILEC?

A. Yes. In Dr. Billingsley's testimony he discusses the most recent cost of capital figure that the FCC has approved for an ILEC in the Verizon Virginia arbitration case.[32] In that case the FCC supported a weighted average cost of capital for the ILEC of 13.07%. For comparison, the WACC proposed in this proceeding by Dr. Billingsley for the CLEC modeled in the BACE Model is 13.09%.

[31] Dr. Billingsley presents a BARRA beta of 1.66 for CLECs and an estimated cost of equity of 20.78 for CLECs on page 24 of his testimony, compared to a beta of 1 for the S&P 500 and an estimated cost of equity of 14.31 for the S&P 500.

[32] In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc. and for Expedited Arbitration, CC Docket No. 00-218, and In the Matter of AT&T Communications of Virginia, Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc., Cc Docket No. 00-251, Memorandum Opinion and Order released August 29, 2003.

Q. If the FCC supported a WACC of 13.07% for an ILEC, and ILECs represent significantly less risk to investors than CLECs, how realistic is the WACC of 13.09% that Dr. Billingsley supports for use in the BACE Model?

A. It is not realistic, and it is not appropriate. By combining CLEC results with the results that represent the firms in the S&P 500 Dr. Billingsley artificially reduces the WACC.

Q. What would serve as a more realistic WACC for the CLEC modeled in the BACE Model?

A. If we examine the CLEC-specific information in Dr. Billingsley's testimony we find that CLECs have a cost of equity of approximately 20.78% (Billingsley page 24) and a cost of debt of 9.92% (Billingsley page 26). If we use these two, and apply Dr. Billingsley's proposed capital structure of 58.5% debt and 41.5% equity, we achieve a weighted average cost of capital of approximately 14.43%.

Q. Why would you not use the CLEC-specific capital structure proposed by Dr. Billingsley?

A. Because the CLEC-specific capital structure proposed by Dr. Billingsley is based on data reflecting amounts of CLEC debt and equity for existing firms that do not represent a new entrant in today's market. In particular, the relative amount of debt proposed by Dr. Billingsley (roughly 87%) is obviously inappropriate, because many of the very firms represented in Dr. Billingsley's Exhibit RSB-3 had significantly lower relative percentages of debt when they entered the market. An

appropriate capital structure, with relatively less debt, produces a more appropriate WACC of 14.43%.

Q. A weighted average cost of capital of 14.43% is indeed higher than the FCC's recent ILEC WACC of 13.07%. Does this then represent an appropriate WACC for a new entrant CLEC in the BACE Model?

A. Not necessarily, according to previous data filed by Dr. Billingsley before this Commission. In the recent UNE docket (Docket No. 990649-TP) Dr. Billingsley advocated a WACC for an ILEC in the range of 14.66% to 15.34%.[33] Although there may be reason to believe that the overall cost of capital has fallen slightly since that time, it is unlikely that the cost of capital for a start-up CLEC would be less than the upper bound of the range that Dr. Billingsley proposed for the ILEC in the UNE docket. In fact, if that were the case, it could be said that investors believe there is less risk investing in a CLEC today than in investing in an ILEC during the time of the UNE docket. Therefore a more appropriate weighted average cost of capital for the start-up CLEC in the BACE Model would be the top end of Dr. Billingsley's ILEC WACC, or 15.34%.

Q. Have you re-run the BACE Model using this more appropriate WACC?

A. Yes. The effect of adjusting the WACC to a more appropriate level is to reduce the net present value approximately 32%. This can be seen in Attachment KWD-6 (attached to the testimony of Sprint witness Dickerson) by comparing Scenario 2 with Scenario 6. As the table shows, adjusting the weighted average cost of capital

[33] See Order No. PSC-01-1181-FOF-TP in Docket No. 990649-TP.

reduces the net present value from approximately $332 million to approximately $224 million.

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

BELLSOUTH

[redacted]

Dear [redacted]

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Come back today and get unlimited long distance and local service and the BellSouth® Complete Choice® plan — all for one low monthly fee of just $49.99.

It's the perfect calling plan! Now you can call anytime, anywhere in the United States, as often as you want. Just look at all you get:

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- The Complete Choice plan, including Caller ID Deluxe[1]...Call Waiting Deluxe...Call Return (*69)...Three-way Calling®...BellSouth® RingMaster Service®...Call Block[1] and more.
- BellSouth® Voice Mail service...so you never miss a call.
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$75.00 CASH BACK when you sign up for the Complete Choice plan!

Enjoy the convenience of having all your phone services in one place, with one simple, easy-to-read bill, regardless of your individual calling needs. BellSouth has a plan and the services to fit your lifestyle and your budget...local service, long distance, dial-up and high-speed DSL Internet services, wireless, 2-way paging and more. All from the company you know and trust.

Call us today toll free at **1 800 457-5509.**

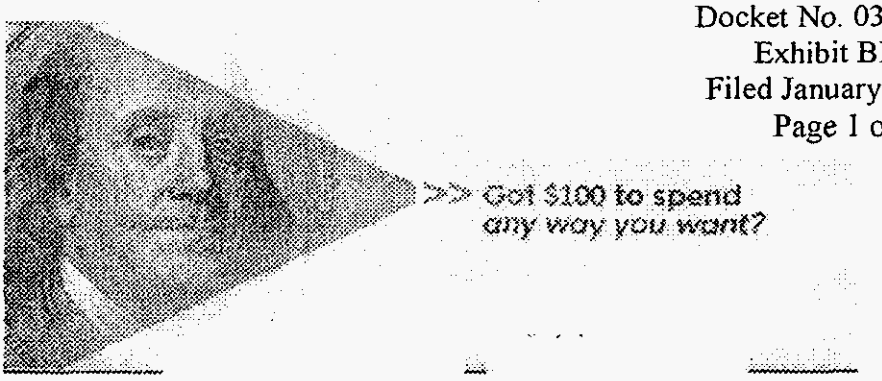
Sincerely,

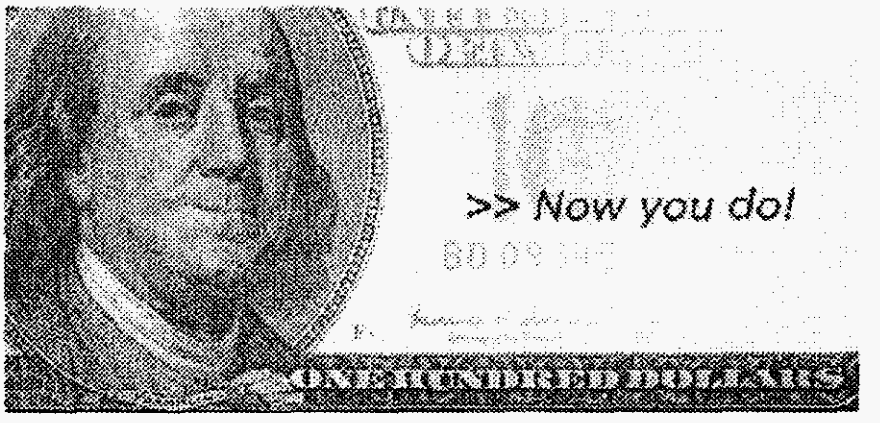
Cherise Cameron

Cherise Cameron
Director, Consumer Marketing

P.S. Come back to BellSouth today and get $75.00 CASH BACK!

[redacted]





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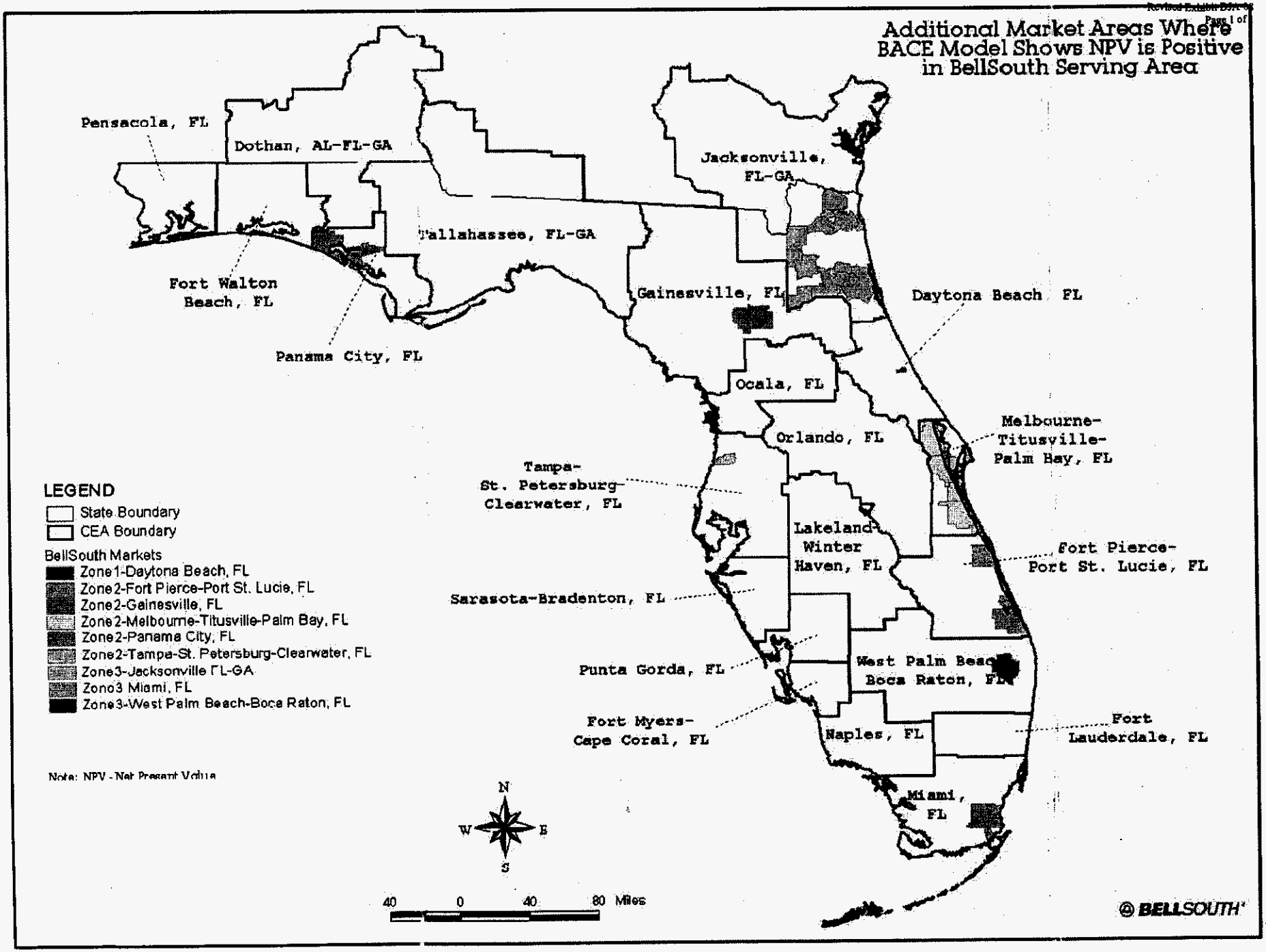
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ADDITIONAL UNIMPAIRED MARKETS IN FLORIDA			
UNE Zone	**CEA**	**Net Present Value**	**NPV for Mass Market**
Zone1	Daytona Beach FL	172,663	77,291
Zone2	Fort Pierce-Port St. Lucie FL	9,791,929	7,353,619
Zone2	Gainesville FL	5,400,071	4,115,540
Zone2	Melbourne-Titusville-Palm Bay FL	15,728,118	12,156,733
Zone2	Panama City FL	1,366,048	609,118
Zone2	Tampa-St. Petersburg-Clearwater FL	296,865	184,112
Zone3	Jacksonville FL-GA	1,683,878	1,048,956
Zone3	Miami FL	297,509	235,529
Zone3	West Palm Beach-Boca Raton FL	2,479,252	2,022,494
	TOTAL:	**37,216,332**	**27,803,392**
OTHER UNIMPAIRED MARKETS IN FLORIDA			
Zone1	Fort Lauderdale FL	36,562,152	26,486,506
Zone1	Jacksonville FL-GA	9,092,693	4,789,399
Zone1	Miami FL	71,907,502	48,132,182
Zone1	Orlando FL	5,452,096	2,589,020
Zone1	West Palm Beach-Boca Raton FL	15,818,731	9,965,760
Zone2	Daytona Beach FL	9,511,422	7,041,500
Zone2	Fort Lauderdale FL	55,494,105	45,088,643
Zone2	Jacksonville FL-GA	27,621,437	21,673,602
Zone2	Miami FL	58,165,658	47,799,313
Zone2	Orlando FL	34,584,848	26,363,512
Zone2	Pensacola FL	8,900,014	6,610,235
Zone2	West Palm Beach-Boca Raton FL	43,168,256	33,804,013
	TOTAL:	**376,278,915**	**280,343,686**

Recd DJA-1
C-64

Additional Market Areas Where BACE Model Shows NPV is Positive in BellSouth Serving Area



SCENARIO	Changes in Inputs	NPV Mass Market	% Change from BellSouth Default
1	BellSouth Default	$322,546,087.00	0%
2	7% Yearly Price Decreases	$9,677,550.00	-97%
3	Billingsley Cost of Capital (20.87% COE, 70% E/D, and 15.36% WACC)	$208,461,570.00	-35%
4	CLEC Market Share Reflecting Impact of BellSouth Win-Back Program (p=0.25, terminal % =1/2 Projected Amount)	$100,272,790.37	-69%

ADDITIONAL UNIMPAIRED MARKETS IN FLORIDA			
UNE Zone	**CEA**	**Net Present Value**	**NPV for Mass Market**
Zone1	Daytona Beach FL	177,932	79,976
Zone2	Fort Pierce-Port St. Lucie FL	12,787,925	9,512,325
Zone2	Gainesville FL	5,419,734	4,130,810
Zone2	Melbourne-Titusville-Palm Bay FL	14,733,850	11,317,743
Zone2	Panama City FL	1,425,923	656,593
Zone2	Tampa-St. Petersburg-Clearwater FL	550,229	368,886
Zone3	Fort Pierce-Port St. Lucie FL	2,514,603	1,708,707
Zone3	Miami FL	1,021,373	852,516
Zone3	Pensacola FL	156,709	28,830
Zone3	West Palm Beach-Boca Raton FL	2,851,801	2,352,859
	TOTAL:	**41,640,078**	**31,009,245**

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See DN
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for ltr.

ORIGINAL

Richard A. Chapkis
Vice President & General Counsel, Southeast Region
Legal Department

verizon

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201 North Franklin Street (33602)
Post Office Box 110
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richard.chapkis@verizon.com

February 20, 2004

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COMMISSION CLERK

Ms. Blanca S. Bayo, Director
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Tallahassee, FL 32399-0850

Re: Docket No. 030851-TP
Implementation of requirements arising from Federal Communications Commission's triennial UNE Review: Local Circuit Switching for Mass Market Customers

Dear Ms. Bayo:

This letter is to inform the Commission that Verizon's Batch Hot Cut Panel will be adopting Mr. Loughridge's portion of the Initial, Rebuttal, and Surrebuttal Panel Testimony filed in this case. (Mr. Loughridge adopted the written testimony of Carleen Gray in those filings for Staff's deposition of the Panel.) If there are any questions regarding this matter, please contact me at 813-483-1256.

Sincerely,

Richard A. Chapkis

Richard A. Chapkis

RAC:tas

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STEVEN E. TURNER

2031 Gold Leaf Parkway
Canton, Georgia 30114

678-493-9700 (Voice)
678-493-9701 (FAX)

KALEO CONSULTING EMPLOYMENT EXPERIENCE:

TELECOMMUNICATIONS AND FINANCIAL CONSULTANT (Jan 1997-Present)

- Provide expert testimony on technical issues surrounding the unbundling and interconnection to incumbent Local Exchange Company (ILEC) networks. The testimony includes analysis of ILEC unbundling and interconnection per the Telecommunications Act of 1996 (Section 271) as well as other technical issues of local market entry. Further, the testimony includes evaluating and conducting unbundled element and interconnection cost studies.
- Provide expert testimony on the level and extent of facilities-based competition in the local market place. This testimony which quantitatively and economically evaluates the extent of competition results in an assessment of ILEC compliance with Section 271 proceedings.
- Develop models to aid companies in developing market entry plans for the local telecommunications market. This assistance includes evaluating what market entry alternatives as well as which geographies provide the best profit opportunities for the new entrant.

AT&T EMPLOYMENT EXPERIENCE:

DISTRICT MANAGER - CONNECTIVITY NETWORK PLANNING - LI&AM (Feb 1996-Dec 1996)

- Managed the development of AT&T's Infrastructure Plans of Record for the Southwest region. These plans entailed defining the right mix of built and leased infrastructure to meet AT&T's local offer needs at the least cost.
- Managed AT&T's dedicated access inventory in the Southwest region. This effort involved identifying the optimum supplier(s) in each market for AT&T's access needs to meet both financial and strategic objectives.

MANAGER - STRATEGIC ACCESS PLANNING - Access Strategic Planning (Nov 1994-Feb 1996)

- Managed the development of strategic models to analyze alternatives for entering the local market. These models considered various technologies for entering local that would optimize the contribution to AT&T from a revenue, expense, and capital perspective.

RE-ENGINEERING MANAGER - Network Operations (Jul 1994-Oct 1994)

- Directed a CCS-NSD management-union team in re-engineering the engineering, provisioning, and maintaining of the Operator Services network. Delivered a re-engineered process that reduced operational expense significantly while mitigating the impacts on customers and employees.

PROJECT MANAGER/SYSTEM ENGINEER - CCS Centralized Test Center (Jan 1992-Jun 1994)

- Coordinated implementation plans and system development for new services and network elements in the Common Channel Signaling (CCS) Network. The planning scope included provisioning, monitoring, and maintaining the T1.5 facilities for the CCS signaling circuits.
- Acquired funding (development, capital, and head count) through writing and defending business cases in support of projects for new services or network elements in the CCS Network. Upon approval, coordinated the implementation of system development and capital projects affecting the CCS Centralized Test Center.

AT&T EMPLOYMENT EXPERIENCE (cont.):

DEPARTMENTAL QUALITY MANAGER - Network Operations (Jan 1990-Jan 1992)

- Developed the Network Operations Quality Management System and implemented it into an organization of 5000 people. Implementation required gaining organizational support for staffing and training 40 Quality Specialists and managing their efforts in transferring the quality technology into Network Operations.

OPERATIONS SUPERVISOR - Regional Network Service Center (Nov 1988-Dec 1989)

- Managed the Regional Network Service Center serving AT&T customers in the Southeastern United States through correcting their service troubles. Responsibilities included leading a team of 20 associates who responded to over 2000 customer troubles per month and escalating with Local Exchange Companies to remove barriers to trouble resolution.

4ESS SWITCH ENGINEER - Network Engineering Services (Dec 1987-Nov 1988)

- Identified current levels of asset utilization, analyzed future needs, and developed a capital budget to purchase and provision the necessary equipment to efficiently meet customer needs. Managed the implementation of over $10M in capital projects.

GENERAL ELECTRIC EMPLOYMENT EXPERIENCE:

RESEARCH AND DESIGN ENGINEER - Simulation and Control Systems (Jun 1986-Dec 1987)

- Designed and developed a major sub-system for a high-speed graphics simulator supporting both defense and commercial customers.
- Designed and developed a Very Large-Scale Integrated (VLSI) Chip with over 80,000 transistors used in the video display sub-system for the high-speed graphics simulator.

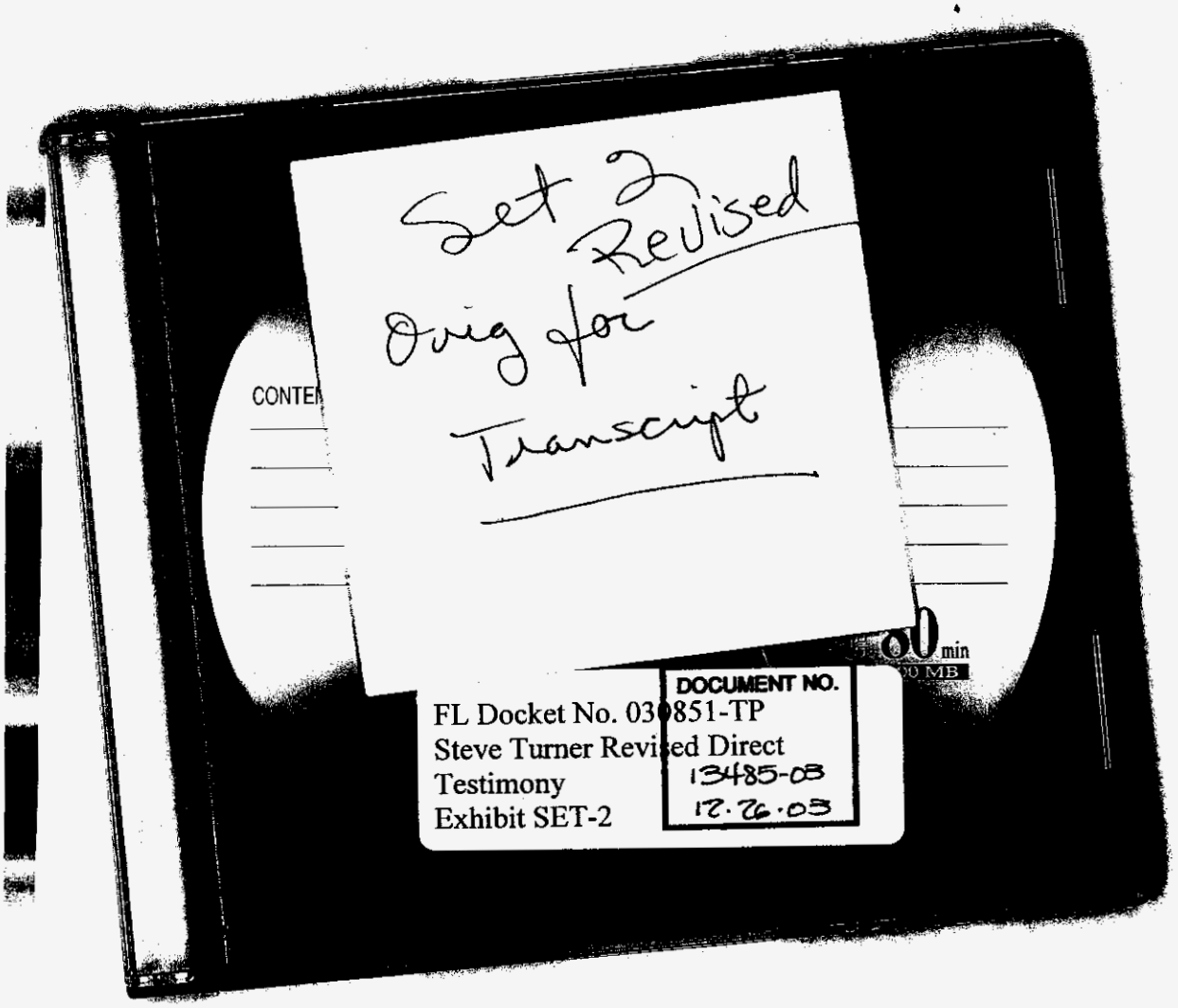
ACHIEVEMENTS:

- Developed the strategic planning system used throughout AT&T Connectivity Planning that identifies the mix of connectivity options (Wireless, CATV, LEC) that AT&T should implement within a market. This model is being used to determine AT&T's local market entry strategy for the entire country.
- Re-engineered the Operator Services operations processes through a collaborative effort of management and union employees yielding $19.9 million in operational expense savings annually while making the new organization more customer responsive.
- Planned and implemented a modification to the CCS Network data collection architecture resulting in operational expense savings of $7.3 million per year.
- Significantly advanced the implementation of Total Quality Management in Network Operations through the Quality Specialist strategy initiative begun in 1990.
- Completed development of a Win Back Program for non-AT&T customers who called the Regional Network Service Center in error. This program generated over $1.6 million in new revenue for AT&T in 1989.
- Designed and developed a Management Information System enabling the measurement of asset utilization in switching equipment at any point in time. The use of the information provided with this system and the resulting changes in engineering practices reduced Network Operations under-utilized switching assets by approximately $250 million.
- Re-engineered the installation process for switching equipment resulting in a 70% reduction in the installation interval.
- Designed and developed the largest VLSI chip with General Electric at that time in only five months.

EDUCATION:

August 1990: **Masters of Business Administration Degree - Finance**
Georgia State University
Atlanta, Georgia

December 1986: **Bachelor of Science Degree - Electrical Engineering**
Auburn University
Auburn, Alabama


Set 2 Revised
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FL Docket No. 030851-TP
Steve Turner Revised Direct
Testimony
Exhibit SET-2
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James C. Smith
Senior Vice President

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1401 I Street, N.W.
Floor 4th
Washington, DC 20005-2225

202.326.8836 Phone
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js5891@sbc.com

January 14, 2003

Via Electronic Submission

Chairman Michael Powell
Federal Communications Commission
445 12th Street, SW, 8th Floor
Washington, D.C. 20554

Re: Ex Parte Presentation
UNE Triennial Review Proceeding – CC Docket No. 01-338
Local Competition Proceeding – CC Docket No. 96-98
Deployment of Advanced Wireline Services – CC Docket No. 98-147

Dear Chairman Powell:

On January 8, 2003, WorldCom acknowledges for the first time, and contrary to its prior claims, that a CLEC may be able to serve residential customers without the UNE-P in certain wire centers.[1] After setting forth a putative analysis of the economics of using a UNE loop strategy to serve residential customers in particular-sized wire centers, it concludes that "UNE-L might prove to be a feasible alternative to UNE-P in some central offices, particularly those with relatively large numbers [25,000 or more] of residential lines."

SBC welcomes WorldCom's acknowledgement that facilities-based residential competition may be feasible after all. We take sharp issue, however, with the methodology and certain of the assumptions underlying WorldCom's analysis.[2] In fact, insofar as WorldCom

[1] Letter from Gil M. Strobel, Lawler, Metzger & Milkman, LLC, to Marlene H. Dortch, Secretary, FCC, January 8, 2003.

[2] In addition to presenting a purported economic analysis of the viability of a UNE loop strategy, WorldCom raises two operational issues. *First,* it claims that incumbent LECs can perform only a few thousand hot cuts per month. SBC already has shown this claim to be untrue, and it is noteworthy that WorldCom does not even purport to refute SBC's showing. Suffice it to say that SBC *today* performs more than a few thousand hot cuts per month; in fact, from June 2001 through May 2002, SBC performed 500,00 hot cuts. Moreover, as detailed in its previous filings, SBC can substantially increase the number of hot cuts it performs with its existing work force with no degradation in service quality. *See* Attachment 5. *Second,* WorldCom claims that it takes fourteen months to obtain and prepare collocation space and that, even where it has existing collocation arrangements, it would take eight months to obtain additional space and install and test new equipment. These time estimates are grossly inflated. As an

bases its analysis on a comparison of UNE-P rates with the costs of a UNE loop strategy, its methodology has been squarely rejected by both the Supreme Court and the D.C. Circuit.[3] It also is "empirically and theoretically incorrect."[4] By contrast, we attach to this letter a legally sustainable, analytically sound analysis of the viability of a UNE loop strategy using appropriate assumptions – some of which actually result in higher estimated CLEC costs than WorldCom's assumptions.[5] As shown in the summary set forth in Table A, this analysis reveals that CLECs can earn a positive margin providing facilities-based residential service in wire centers with 5000 or more lines. To the extent they also serve business customers, they could profitably serve even smaller wire centers. These conclusions, moreover, are further buttressed by marketplace evidence, which shows that CLECs *today* are using their own switches to serve customers in more than three quarters of SBC's wire centers with 5000 or more lines and thus already have incurred many of the costs needed for facilities-based residential service in those wire centers.[6]

In its analysis, SBC compares the costs of a UNE loop strategy, not to the cost of the UNE-P, but to the revenue opportunity available to new entrants.[7] To calculate CLECs' costs, SBC developed a model that assumes the same principal network configuration that WorldCom uses in its cost estimate. Specifically, SBC assumes that a CLEC would connect unbundled loops to collocated GR 303 concentration equipment in each wire center and then use unbundled dedicated transport to haul its traffic to its own switch.[8] Because CLECs, as a rule, offer and

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initial matter, CLECs can and presumably would rely on virtual, not physical collocation to provision residential service, and virtual collocation intervals in SBC's region range from 70 to 110 days. Even if CLECs also relied on physical collocation, the intervals are far lower than suggested by WorldCom, ranging from 90 to 126 days for previously conditioned space and from 90 to 180 calendar days for unconditioned space. Those deadlines can be extended only 20 business days where space is not readily available.

[3] For a fuller explanation of why WorldCom's analysis is inconsistent with legal precedent, *see* Attachment 1.

[4] *See* Attachment 1, which explains, not only why WorldCom's analysis is inconsistent with the law, but also shows that this analysis is analytically flawed and rests on numerous unreasonable assumptions. *See also* letter from Dr. Howard Shelanaky to William Maher, a copy of which is set forth as Attachment 2, which shows that WorldCom's analysis is at odds with sound economic principles.

[5] *See* Attachment 3.

[6] SBC derived this evidence by looking at the percentage of its wire centers with 5000 or more lines in which one or more CLECs had ported a telephone number to their own switch. The Commission has recognized that ported numbers "provide insights into the number of customer lines served by competitors." *See, e.g., FCC Local Competition Report,* August 1999 at 43.

[7] Comparing costs with revenue opportunities for residential customers theoretically could implicate the D.C. Circuit's warning that below-cost, subsidized retail rates are not a source of impairment. Because CLECs pursue only relatively high-end customers, a real-world analysis of the ability of CLECs to earn a margin avoids this concern.

[8] For purposes of its analysis, which focuses exclusively on smaller wire centers in rural areas, SBC assumes that CLECs would use UNE transport. In larger wire centers, CLECs presumably would rely on

promote packages of local and long-distance services, SBC also included the costs of providing long-distance services. Although CLECs already have deployed more than 1300 switches and obtained thousands of collocation arrangements, SBC assumes, conservatively, that a CLEC would deploy a new switch (or switches) in every serving area and would require a new collocation arrangement in every wire center that we modeled.[9]

SBC also used extremely conservative assumptions in calculating the revenue opportunity available to CLECs. Specifically, we assumed that CLECs would serve only residential lines, notwithstanding that they already are serving substantial numbers of business customers with their own switches. Since the revenues available from business customers far exceed the revenues available from residential customers, the exclusion of business revenues from our analysis significantly understates the actual revenue opportunity available to CLECs and therefore overstates the line size required for CLECs profitably to serve a wire center.

To calculate the residential revenue opportunity on a per-line basis, we relied on the retail prices of the residential packages CLECs actually market and sell today. We thus assumed a revenue opportunity of $40 to $60 per line (an average of $50), plus $8 in switched access, EUCL, and universal service revenue. In a previous filing, a copy of which is provided as Attachment 4, SBC shows more fully why these revenue estimates are reasonable. For present purposes, we note that the average of $50 per line that we use is the *lowest* price point of MCI's The Neighborhood offering, which also is priced as high as $70. To calculate the revenue opportunity in the wire center as a whole, we used the same market share assumptions made by WorldCom – specifically, that a CLEC would capture five to ten percent market share in the wire center in question. Given the rapid pace at which CLECs have gained market share in states in which they have actively marketed residential service, and the even greater success they have had in winning business customers, these assumptions, particularly the low-end assumption, are quite conservative.

Based on the cost and revenue assumptions described above, we determined that a CLEC could earn a positive margin in a wire center with 5000 or more lines, assuming, consistent with WorldCom's analysis, that it could obtain a five to ten percent market share in that wire center. Because a five to ten percent market share in a 5000 line wire center represents 250 to 500 lines, we show in *Attachment 3* the per line costs and associated margins for a CLEC with 250 and 500 lines in wire centers in three representative SBC states: California, Michigan, and Texas.

While SBC's analysis shows that CLECs can earn margins when they use their own switches to serve residential customers in wire centers with 5000 or more lines, the fact that CLECs may or may not be able to earn margins in smaller wire centers does not warrant a finding of impairment in those wire centers. The critical issue is not whether CLECs can serve

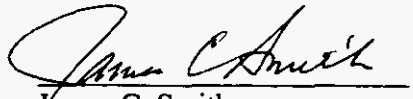
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special access services or their own facilities because they would not be impaired without access to unbundled dedicated transport.

[9] To the extent CLECs can use their existing switches and collocation arrangements, their costs would be lower than assumed in SBC's model.

every wire center profitably, but whether they can viably serve a particular *market*. Because wire centers with fewer than 5000 lines account for a minority of all subscriber lines, notwithstanding that they represent almost half (42.3%) of SBC's wire centers, it is reasonable to assume that any losses a CLEC incurs in those wire centers will be more than offset by profits earned in larger wire centers in those same markets. Stated differently, just as incumbent LECs must offset losses incurred in certain wire centers with profits from others, the same should be expected of CLECs. Thus it would be reasonable for the Commission to conclude that CLECs are not impaired anywhere without access to unbundled switching.

Respectfully Submitted,



James C. Smith
Senior Vice President

Attachments

cc: Scott Bergmann
Jeffrey Carlisle
Daniel Gonzalez
William Maher
Thomas Navin
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Michelle Carey
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Table A

CLEC Margin Analysis

California		CLEC Retail Price Points[1]		
		$40	**$50**	$60
		Margin[2]		
Market Share	5%	-$2.31	**$5.69**	$13.69
	10%	-$0.65	**$8.65**	$16.65

Michigan		CLEC Retail Price Points[1]		
		$40	**$50**	$60
		Margin[2]		
Market Share	5%	-$0.97	**$8.97**	$16.97
	10%	$6.48	**$14.48**	$22.48

Texas		CLEC Retail Price Points[1]		
		$40	**$50**	$60
		Margin[2]		
Market Share	5%	-$3.25	**$4.75**	$12.75
	10%	-$0.03	**$7.97**	$15.97

[1] Price points for bundled package of local, intraLATA toll and long distance service.

[2] Margins account for both operational costs and SG&A (SG&A is estimated as 20% of revenue).

Attachment 1

WORLDCOM'S ANALYSIS OF THE COST OF SERVING RESIDENTIAL CUSTOMERS USING UNE LOOPS IS INCONSISTENT WITH THE ACT AND FUNDAMENTALLY FLAWED

In its January 8, 2003, *ex parte*, WorldCom submitted "empirical facts" concerning the supposed economics of serving residential customers using unbundled local loops and self-provided switching (*i.e.*, UNE-L competition), which it claims show that CLECs generally are impaired without access to unbundled local switching and the UNE-P.[1] In particular, WorldCom submitted an economic analysis that compares CLECs' putative costs of providing residential local service using UNE-L with UNE-P rates, which, it claims, are "a surrogate for the incumbent LECs' costs of serving their retail customers[.]" Based on its finding that UNE-L costs generally exceed UNE-P rates, WorldCom asks the Commission to conclude that CLECs relying on UNE-L would be at a cost disadvantage relative to ILECs and that they are, therefore, impaired without access to the UNE-P. WorldCom's analysis is flatly inconsistent with the statute and binding legal precedent. It also is riddled with faulty reasoning and unsupported and unverifiable data.[2]

As an initial matter, WorldCom's analysis rests on a view of the Act that has been soundly repudiated by both the Supreme Court and D.C. Circuit. Both courts were presented with Commission decisions that defined impairment with reference to the relative cost of providing services with and without UNEs. Both courts rejected this analytical framework. The Supreme Court held that the mere fact that it may be cheaper to use UNEs than UNE alternatives says nothing about whether a competitor reasonably could provide service using the alternative. The D.C. Circuit similarly held that cost disparities alone could not constitute impairment because "average unit costs are necessarily higher at the outset for any new entrant into virtually any business."

Precedent aside, WorldCom's analysis is woefully flawed. Even assuming *arguendo* that a cost disparity between incumbent LECs and new entrants represents impairment, UNE-P rates are hardly a reliable indicator of incumbent LEC costs. To the contrary, as SBC has explained in its prior filings, and as numerous analysts have recognized, UNE-P rates have been set substantially *below* incumbent LEC costs. Indeed, TELRIC does not even purport to reflect actual costs. Rather, it purports to reflect the cost of a hypothetical, optimally efficient competitor using state-of-the-art equipment.

Furthermore, WorldCom's assumption that incumbent LECs with lower cost structures would be able to exclude new entrants by lowering retail rates ignores the realities of local

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[1] Letter from Donna Sorgi, Vice President Federal Advocacy, WorldCom, to William F. Maher (January 8, 2003) (WorldCom Letter), attaching Microeconomic Consulting Research Associates (MiCRA), "The Cost of Serving Residential Customers Using UNE Loops" (MiCRA Analysis).

[2] *See also* Letter from Dr. Howard A. Shelanski to William F. Maher, Chief, Wireline Competition Bureau (January 13, 2003) (Attachment 2), demonstrating that cost differences alone do not constitute impairment, and that, in any event, WorldCom's cost comparison is meaningless because it compares CLECs' putative costs with UNE-P rates rather than ILECs' actual costs.

exchange competition and retail rate structures. In the real world, incumbent LECs are forced to serve many, if not most, residential service customers at a loss. To the extent incumbent LECs earn margins serving other, high-end customers, they depend on those margins to recoup these losses. In contrast, new entrants do not have provider of last resort obligations and thus do not have to recoup losses when they target only high-end customers on whom margins are available. Therefore, the notion that a cost disparity would prevent new entrants from serving the high-end customers they singularly seek out is nonsensical.

In the final analysis, though, WorldCom's methodology proves too much. If it were the case, as WorldCom claims, that a CLEC could not compete wherever a UNE-loop strategy is more costly than the UNE-P, CLECs could not use their own switches to compete even for business customers because the same cheap UNE-P rates apply to business customers. Of course, as shown in the *UNE Fact Report* and the Commission's local competition reports, CLECs are serving millions of business customers using their own switches, thus disproving WorldCom's theory.

WorldCom's analytical framework also is at war with the goals of the Act and this Commission of promoting innovation and investment in alternative facilities. Because UNE-P rates are designed to reflect the costs of a hypothetical, optimally efficient competitor using state-of-the-art technology, they are certain to be lower than the cost structure of any CLEC. As a consequence, given a choice, CLECs inevitably will continue to rely on the UNE-P, rather than invest in their own facilities.

While from a legal and theoretical standpoint, WorldCom's analysis is fatally flawed, so too is its analysis of the purported costs of competing with its own switches. WorldCom's cost estimates are inflated by a host of unexplained and inexplicable assumptions, including, to name a few examples, the assumptions that: (1) it would have to spend $30 million developing an UNE-L OSS system (an assumption that is not credible since WorldCom and many other switch-based CLECs already have UNE-L OSS systems); (2) each and every one of its collocation spaces would have to be expanded at an average cost of $120,000 per collocation space; and (3) each collocation space would be equipped with digitizing equipment capable of serving a minimum of 576 lines.

The bottom line is that WorldCom's analysis is legally, analytically, and factually deficient. Its claim that CLECs are impaired in any wire center with fewer than 25,000 lines is not credible and should be rejected outright by the Commission.

I. WorldCom's Analytical Framework is Contrary to the Act.

In its *ex parte*, WorldCom asserts that, to determine whether UNE-L competition is viable, competitive carriers' costs must be compared to the ILECs' costs of serving customers. It maintains that, if competitors' costs are higher than those of incumbents, the incumbent can reduce its retail price and thus undercut competitive carriers' offerings.[3] In that event, according

[3] WorldCom Letter at 2.

to WorldCom, CLECs would not be able to offer competitive services using their own switches, and thus would be impaired without the UNE-P.[4]

In undertaking this cost comparison, MiCRA (WorldCom's consultant) used UNE-P rates as a "surrogate" for ILEC costs. It offers little justification for this sleight of hand, claiming only that UNE-P rates "are available and verifiable."[5] Not surprisingly, since UNE-P rates are based on the forward looking costs of a hypothetical, optimally efficient competitor using state-of–the-art equipment, rather than ILECs' actual costs, MiCRA concluded that CLECs would be "severely disadvantaged relative to incumbents if they must use UNE-L."[6] MiCRA further concluded that the incumbents' advantage, and the CLECs' impairment, is largely due to ILEC economies of scale that CLECs cannot match.[7]

WorldCom's analytical framework for evaluating impairment is based on a view of the Act and impairment that has been expressly rejected by both the Supreme Court and the D.C. Circuit. In its original *Local Competition Order*, the Commission adopted an interpretation of "impairment" that, for all practical purposes, mirrors WorldCom's analysis here. In particular, the Commission found that an entrant's ability to offer a telecommunications service is impaired "if the quality of the service the entrant can offer, absent access to the requested element, declines and/or the cost of providing the service rises."[8] Thus, like WorldCom, the Commission interpreted the impairment standard "as requiring the Commission . . . to consider whether the failure of an incumbent to provide access to a network element would . . . increase the financial or administrative cost of the service a requesting carrier seeks to offer."[9]

In *Iowa Utils. Bd.*, the Supreme Court squarely repudiated the notion that the "impairment" standard in section 251(d)(2) of the Act is satisfied simply by a showing that a CLEC's costs of providing service would increase if it is denied unbundled access to a network element. Specifically, it found that the Commission's assumption that any increase in cost imposed by denial of a network element constitutes impairment "is simply not in accord with the ordinary and fair meaning of [that] term."[10] It noted that, while an increase in costs might reduce

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[4] *Id.* at 2-5, 7.

[5] *Id.* at 3. Of course, WorldCom's rationale provides no basis for using UNE-P rates as a surrogate for ILEC costs, especially when data concerning ILECs' actual costs are available through ARMIS.

[6] *Id.*

[7] *Id.*

[8] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket 96-98, First Report and Order, 11 FCC Rcd 15499, para. 287 (1996) (*Local Competition Order*), vacated and remanded, *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999).

[9] *Id.*

[10] *Iowa Utils. Bd.*, 525 U.S. at 389.

a firm's profits, such an increase says nothing about a firm's ability to provide the services it seeks to offer:

> An entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment has perhaps been 'impaired' in its ability to amass earnings, but has not *ipso facto* been 'impaired . . in its ability to provide the services it seeks to offer'; and it cannot realistically be said that the network element enabling it to raise its profits to 100% is 'necessary.' In a world of perfect competition, in which all carriers are providing their service at marginal cost, the Commission's total equating of increased cost (or decreased quality) with 'necessity' and 'impairment' might be reasonable; but it has not established the existence of such an ideal world. [11]

Because it found the Commission's cost assumptions were unreasonable, and led to an impairment analysis that failed to comport with the goals of the Act or give substance to the "necessary" and "impair" requirements, the Court vacated the Commission's unbundling rules.[12]

On remand from the Supreme Court, the Commission once again gauged impairment by reference to the relative costs of using UNEs and UNE alternatives. In fact, in the *UNE Remand Order*, it adopted the *precise* theory that WorldCom now advances — namely that UNE rates are a surrogate for incumbent LEC costs and that "[i]f the cost of the alternative element is materially greater than the cost of obtaining the corresponding element from the incumbent, the requesting carrier will not be able to provide service at prices that are competitive with the incumbent's prevailing retail prices."[13] Without addressing whether UNE rates represent a reasonable proxy for incumbent LEC costs, the D.C. Circuit rejected this variation on the Commission's 1996 analysis. It noted that new entrants in virtually any business face higher unit costs and flatly rejected the notion that such cost differentials necessarily create impairment: "To rely on cost disparities [such as economies of scale] that are universal as between new entrants and incumbents in *any* industry is to invoke a concept too broad, even in support of an

[11] *Id.* at 389-90 (adding that, "[w]e disagree with JUSTICE SOUTER that a business can be impaired in its *ability* to provide services — even impaired in that ability 'in an ordinary, weak sense of impairment' . . . when the business receives a handsome profit but is denied an even handsomer one.").

[12] *Id.* at 391 ("Section 251(d)(2) . . . requires the Commission to determine on a rational basis *which* network elements must be made available, taking into account the objectives of the Act and giving some substance to the "necessary" and "impair" requirements. The latter is not achieved by disregarding entirely the availability of elements outside the network, and by regarding *any* 'increased cost or decreased service quality' as establishing a 'necessity' and an 'impair[ment]' of the ability to 'provide . . . services.'") (emphasis in original).

[13] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd. 3696, at paras. 74-74 (1999) (*UNE Remand Order*), *vacated and remanded, U.S. Telecom. Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002) (*USTA v. FCC*).

initial mandate, to be reasonably linked to the purposes of the Act[]."[14] The court further indicated that any analysis of cost differentials must be "based on characteristics that would make genuinely competitive provision of an element's function wasteful," such as those "linked (in some degree) to natural monopoly."[15] WorldCom's theory that any cost advantage enjoyed by an ILEC constitutes impairment thus is flatly inconsistent with the Act.

II. WorldCom's Theory that Any ILEC Cost Advantages Create Impairment is Analytically Unsound

WorldCom's conclusion that any cost disparity between UNE-L and UNE-P constitutes impairment not only is unlawful it also is based on a flawed conception of the local telecommunications market. In particular, its theory that ILECs can and will take advantage of any cost disparity to selectively lower rates to levels that CLECs cannot match disregards the reality of local competition and local rate structures. As the Commission knows, local rates are not set based on the costs of serving particular customers. Rather, they are based on cost averaging and allocation principles designed to ensure universal service at reasonable rates. While ILEC retail rates thus permit ILECs to recover their costs of serving some customers, they are significantly below cost for many others. And, unlike CLECs, ILECs are required to serve all end-users, not just those that can be served profitably. As a consequence, ILECs depend on the revenue they receive from serving high-margin customers to offset losses they incur in serving other customers. WorldCom's assumption that any cost disparity between an ILEC and a CLEC in the residential market would enable the ILEC to undercut the CLEC's prices thus is wrong.

Indeed, WorldCom's theory is belied by the millions of business customers already served through an UNE-L strategy. If, as WorldCom claims, a CLEC could not compete wherever there is a cost disparity between UNE-L and UNE-P, CLECs could not use their own switches to compete even for business customers because the same cheap UNE-P rates apply to business customers. The fact that CLECs are serving millions of customers using UNE loops and their own switches conclusively establishes the fallacy of WorldCom's assumptions.

Moreover, because local rates for particular customers are largely divorced from costs, and CLECs are free to target only high margin customers, any comparison of ILEC and CLEC costs is beside the point. The only relevant inquiry is whether a CLEC's anticipated revenue exceeds its costs, and thus whether it profitably can serve customers using its own switch.

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[14] *USTA v. FCC*, 290 F.3d at 427. The court noted, for example, that, in evaluating local switching, the Commission focused on whether CLECs would enjoy economies of scale comparable to ILECs' "'*particularly in the early stages of entry.*'" *Id.* (emphasis in original), citing *UNE Remand Order*. The court further observed that "average unit costs are necessarily higher at the outset for any new entrant into virtually any business." The court found that, because the Commission did not consider "the presence of economies of scale '*over the entire extent of the market,*'" there was "no particular reason to think" that switching is unsuitable for "multiple competitive supply." *Id.* (emphasis in original), citing 2 Alfred E. Kahn, The Economics of Regulation: Principles and Institutions 119 (1989).

[15] *Id.*

Along with this critique, SBC proffers precisely that type of analysis, which reveals that CLECs can earn a positive margin providing facilities-based residential services in wire centers with 5000 or more lines, and may be able to earn positive margins in much smaller wire centers if those wire centers contain a sufficient number of business lines.

Even assuming, *arguendo*, a cost disparity between ILECs and new entrants has some legal significance, UNE-P rates fail accurately to reflect ILECs' actual costs. Rather, they are intended to recover the forward-looking costs of a hypothetical, optimally efficient competitor, and thus are substantially below an ILEC's actual costs. Indeed, as SBC has shown in prior filings, its operating costs alone (exclusive of any return on its investment) are nearly double the UNE-P rates in many of its states. Moreover, as a hypothetical proxy for the costs of an optimally efficient competitor, UNE-P rates also are bound to be less than the cost structure of any CLEC. WorldCom thus posits an analytical construct that is guaranteed to show "impairment" and is antithetical to the Act's goal of promoting facilities-based competition.

III. WorldCom's Analysis of CLEC Costs Relies on Unsupported and Flawed Assumptions

Not only is WorldCom's analysis legally and analytically unsound, it also relies on many assumptions concerning CLEC costs that are unsupported or demonstrably without foundation.

A. *OSS Costs*

In its CLEC-cost model, MiCRA claims to analyze the incremental cost — relative to UNE-P — to a CLEC of serving residential customers using unbundled local loops "based on the costs of connecting subscribers to the existing WorldCom local network."[16] Included in the model are the supposed costs of building, upgrading, and operating the systems necessary to provision UNE-L based local services and handle back-office operations. These include $30 million (7-year life) for building the OSS system, $1 million annually for system upgrades, and $0.66 monthly per line.

WorldCom offers no explanation as to why it included any of these costs in its analysis. WorldCom — and many other switch-based CLECs — already have deployed the OSS systems necessary to purchase unbundled loops, and they are using those systems today, primarily to serve business customers.[17] Far from imposing additional costs, the expansion into residential markets would only reduce the per-line OSS costs of these CLECs by permitting additional economies of scale and scope.[18]

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[16] MiCRA Analysis at 1.

[17] As reported in the *UNE Fact Report 2002*, "[m]ore than 200 CLECs of all sizes have actually deployed local circuit switches in the Bell companies' regions." *UNE Fact Report 2002*, Local Switching at II-1 (April 2002). Plainly, each of these carriers must have deployed the OSS and back office systems necessary to provide UNE-L or pure facilities based local services.

[18] The fact that a future new entrant might have to construct OSS systems is irrelevant to an impairment analysis. Given the number of CLECs, including AT&T and WorldCom, that already must have

In any event, the costs MiCRA includes in its analysis are completely unsupported. MiCRA offers no explanation of what is included in the one-time $30 million system cost, the $1 million annual cost for system upgrades, or the $0.66 monthly per line cost. As a consequence, neither the Commission nor interested parties has any basis for assessing the reasonableness of MiCRA's assumptions, even as to CLECs that have no UNE loop OSS systems.

B. *Collocation Costs*

As with OSS, WorldCom has grossly inflated collocation costs. As an initial matter, it includes $120,000 per central office in collocation build-out costs, *including in those central offices in which it already has collocation* (Case 1 in the MiCRA analysis). WorldCom fails to explain why *any* build-out cost would be appropriate where it already has collocation in place.

Even in those offices in which WorldCom does not already have collocation arrangements, it would not need to spend anything close to $120,000 in build-out costs. In order to provide mass market UNE-loop based service, a CLEC could virtually collocate the necessary concentration equipment using as little as a single bay to serve 2,048 customers. In the SBC region, that virtual collocation arrangement would cost approximately $31,000.[19]

Even assuming a CLEC would choose physical collocation, instead of virtual, WorldCom's $120,000 build-out estimate seems excessive. WorldCom purports to base this estimate on "actual charges paid for collocation," but, even if true (which is impossible to verify) the collocation arrangements purchased by WorldCom are most likely not the sort of collocation arrangements a facilities-based CLEC would need to serve mass market customers. WorldCom's collocation arrangements thus far have been used to serve business customers with significant data needs.[20] The equipment CLECs typically collocate to serve such customers requires significantly more space and power than the GR-303 and other equipment CLECs would collocate to serve mass-market customers. As such, the "actual charges" WorldCom previously has paid for collocation say nothing about the costs it would incur to collocate the equipment necessary to serve residential customers with its own switch.

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deployed OSS systems for UNE loop service, competition does not depend the ability of new entrants to deploy such systems. An impairment analysis must focus on the viability of *competition*, not the needs of individual CLECs.

[19] A CLEC that focuses heavily on the provision of data services to business customers might prefer physical collocation, but in that case, the incremental costs of using physical instead of virtual collocation properly would be attributable to the business services that drove the decision to use physical, rather than virtual, collocation.

[20] On its face, moreover, WorldCom's cost estimate of $120,000 per central office for collocation is patently unreasonable as an estimate of the average collocation cost a facilities-based CLEC will incur in serving the mass market. Aside from undocumented and occasional anecdotes of high cost collocation arrangements, no CLEC has ever presented the Commission any data that would suggest that the average cost of collocation space throughout the country is anywhere near $120,000.

WorldCom also assumes ongoing monthly costs of $2500 per central office, including in those central offices in which it already uses collocation arrangements to serve business customers. To the extent that WorldCom is already incurring these costs to serve business customers, they should not all be loaded onto any residential customers that would be served out of these offices, yet that is what WorldCom appears to have assumed.[21]

WorldCom does not include with its analysis any of the underlying data it used to calculate its average collocation cost. WorldCom also fails to offer any insight into how it gathered its data, whether the data represent all or only a portion of the collocation purchased by WorldCom (*e.g.*, whether it is limited to collocation purchased by WorldCom over a certain time or in particular ILEC territory or includes all locations purchased any time), the nature of the collocation included in the estimate (*e.g.*, physical or virtual, caged or cageless), or the characteristics of the collocation space included in the estimate (*e.g.*, number of square feet, number of interconnection circuits, number of racks, and power arrangements). It is simply impossible for the Commission to accept WorldCom's collocation cost estimates based on the scant information included in WorldCom's analysis.

C. *Transport Costs*

MiCRA's estimated transport costs likewise are inflated and largely unsupported. MiCRA purports to rely on nationwide average rates for special access and unbundled transport. It does not explain, however, the basis on which it calculates those averages. The only explanation offered is a cite to an October 30 WorldCom *ex parte*, but that *ex parte* does not include or explain the calculation of national average rates. Rather, it purports to set forth separately special access and UNE rates in five states, three of which are in the SBC region. Significantly, the alleged special access rates for each of these three SBC states are inaccurate and inflated.[22]

MiCRA also provides no information concerning its assumptions regarding transport mileage. That omission, as well, makes it impossible to accord any credibility to MiCRA's analysis.

D. *Digitizing Equipment*

WorldCom's estimated cost of digitizing equipment appears improperly to assume that WorldCom would deploy digitizing equipment capable of serving a minimum of 576 lines in

[21] If WorldCom is suggesting that these costs are incremental in nature, it does not so indicate, and it certainly offers no evidence to support any such suggestion. Indeed, $2500 appears to be an inflated number even as to total recurring costs — all the more so, as an estimate of any incremental cost.

[22] For example, SBC's tariffed rate for DS1 transport under a 5 year term plan in Texas is $35 for all three zones; in contrast, Worldcom's October 30, 2002, *ex parte* cites a rate of $40 for zones 1 and 2 and $46 for zone 3.

every central office, irrespective of the number of lines WorldCom serves in that office.[23] In fact, GR-303 equipment can be purchased in blocks of 32 lines. WorldCom therefore assumes that it would purchase far more such equipment than it would actually need in smaller wire centers. For example, in a wire center in which WorldCom was serving 96 lines, GR-303 equipment would cost $20,000, instead of the $36,000 assumed by WorldCom.

IV. WorldCom Concerns Regarding Purported Operational Barriers are Overblown.

In addition to its analysis of the purported economic barriers to UNE-L competition, WorldCom posits two supposed "operational" barriers. *First,* WorldCom claims that incumbent LECs can perform only a few thousand hot cuts per month, and thus cannot provision UNE loops in mass market quantities. In its reply comments, and numerous *ex parte* presentations, SBC has offered overwhelming evidence that it can meet any reasonably anticipated demand for UNE loops; evidence that WorldCom does not even attempt to refute. *Second,* WorldCom asserts that it takes fourteen months to obtain and prepare physical collocation space and that, even where it already has physical collocation, it would take eight months to obtain the additional space, and install and test the new equipment purportedly necessary to provide switch-based residential services. These intervals are grossly inflated for physical collocation, and far exceed the intervals for virtual collocation, which facilities-based CLECs serving mass market customers are likely to use.

A. *Hot Cuts*

In its analysis, WorldCom raises again its canard regarding the supposed "operational barrier" created by the hot cut process. WorldCom claims that the "manual hot cut process is not suitable for mass market customers." In defense of this time-worn claim, WorldCom asserts, without support, that "the incumbents simply cannot handle the necessary volume of transactions—the hot cut process permits a few thousand transactions per month, not the millions needed to bring competition to the mass market." Like every other CLEC who claims that hot cuts cannot be provisioned in sufficient volumes, WorldCom has never presented any data or analysis to support its claim.[24]

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[23] It is impossible to know for sure how WorldCom calculated per line costs of digitizing equipment because it lumps those costs together with switching and OSS costs. Nevertheless, insofar as WorldCom states that digital loop carrier equipment costs $36,000 for each block of 576 lines and characterizes the cost of such equipment as "lumpy," it appears that WorldCom has assumed a minimum capacity of 576 lines in every wire center, irrespective of actual need.

[24] Dividing current hot cut volumes by current UNE-P volumes, assuming that an ILEC can provision no more hot cuts per month than it does today, and then claiming that it will take so many years to provision hot cuts at current UNE-P volumes is *not* an analysis of the ability of an ILECs to scale its hot cut provisioning. It is merely an algebraic exercise without significance. Current hot volumes reflect only CLEC ordering needs and are in no way determinative of the upper bounds of ILEC hot cut provisioning capability.

As SBC has repeatedly informed the Commission, SBC already provisions much more than "a few thousand" hot cuts per month.[25] Indeed, in the span of a year, from June 2001 through May 2002, SBC provisioned approximately half a million hot cuts. Thus, not only is WorldCom's assertion unsupported, it is patently untrue and contrary to the evidentiary record in this proceeding.

The record also demonstrates that SBC's performance in provisioning hot cuts is outstanding. In each of SBC's states, comprehensive performance measures for hot cuts have been established in collaboration with CLECs and state commissions. These measures capture SBC's performance in all critical aspects of hot cut provisioning, including incidences of premature disconnects, compliance with hot cut provisioning intervals, and frequency of trouble reports, and apply irrespective of the volume of hot cut orders submitted by CLECs. The performance results—undisputed by any of the CLECs—demonstrate that in virtually every instance and measure, SBC's performance is better than 95%. As a consequence, it is no surprise that in its SBC 271 Orders, the Commission has found that SBC's hot cut performance provides CLECs a meaningful opportunity to compete. Indeed, in its most recent California Order, the Commission dispensed with the issue in a single, short paragraph. Much as CLECs would like the Commission to believe otherwise, SBC's hot cut performance simply is not an issue.

In addition to current performance, the record demonstrates that SBC is fully capable of scaling its hot cut processes to handle significant increases in volumes.[26] SBC uses sophisticated force models to determine its staffing requirements and can allocate additional resources to meet increases in demand for hot cuts. Indeed, the current volume of hot cuts consume a very small amount—1.3%—of SBC's central office man hours. Thus, by increasing its CO man hours by less than 4%, SBC could quadruple the number of hot cuts it provisions. Such an increase represents more than 2 million hot cuts per year.

In addition, SBC demonstrated—using actual data as to hot cut provisioning and staffing—that if all 1.5 million UNE-P orders from May 2001 through June 2002 had been UNE-L orders requiring hot cuts, SBC could have accommodated the increase in hot cut volume with 6% overtime in Ameritech, 3.7% overtime in SWBT, and .9% overtime in Pacific Bell. SBC's analysis further reflects that, using 10% overtime, SBC could provision nearly 3.7 million hot cuts per year—a volume that is more than sufficient to accommodate any foreseeable increase in hot cuts ordered by CLECs in the event unbundled local switching is eliminated.

The facts demonstrate that SBC is currently provisioning hot cuts in substantial volumes at superior performance and is fully capable of increasing those volumes at the same level of performance. With the record before it, the Commission can not simply presume that SBC will not be able to provision hot cuts in increased volumes if unbundled switching is eliminated. The

[25] *See, e.g.*, Letter of Jarvis Bennett, SBC, to Marlene Dortch, Secretary, Federal Communications Commission (December 18, 2002) (Attachment 7).

[26] SBC does not, as some CLECs have claimed, impose any arbitrary caps or limits on the number of hot cuts it will perform in a central office per day. *See*, Letter from Stephen Gray, President, McLeodUSA to William F. Maher, Chief, Wireline Competition Bureau (December 17, 2002).

data demonstrate that SBC is fully prepared to meet any reasonably forseeable increase in hot cut demand, consistent with hot cut performance requirements.

WorldCom also alleges that because of the manual nature of the hot cut process, "provisioning takes considerably longer for UNE-L customers than for UNE-P customers (or for long distance customers)." As a preliminary matter, as the Commission itself has determined, there is nothing about the manual nature of hot cuts that renders hot cut provisioning inadequate. The basic component of a hot cut—cross connecting copper pairs on a distribution frame—is work that SBC technicians have been performing for decades. There are thus millions of operational cross-connects in SBC's central offices, each one manually placed by an SBC central office technician.

Moreover, it simply is not true that UNE-L provisioning takes "considerably longer" than UNE-P provisioning. For individual voice grade loop orders, the longest SBC loop provisioning interval is 5 days, and in many cases, loop provisioning intervals are even shorter. WorldCom's claim that UNE-L provisioning is "considerably longer" than UNE-P provisioning thus is implausible on its face. This is particularly true given that for its UNE-P-based The Neighborhood service, MCI tells customers that it may take up to three weeks for their service to be transitioned to MCI. Within a window of three weeks, it is ludicrous for WorldCom to suggest that a provisioning difference of 2 or 3 days rises to the level of impairment.

Finally, WorldCom suggests the need for a "project cut-over process" to address its phantom claims of hot cut deficiencies. WorldCom, however, offers no description of how such a process would work or how it would differ from provisioning processes in place today. More, fundamentally, WorldCom offers no basis for its suggestion that such a process would enhance an ILEC's ability to provision hot cuts in greater volumes or reduce the time to provision hot cuts. There simply is no substance to WorldCom's plea for a project cut-over process. Rather, as with its unsupported claims about hot cut volumes, it is nothing more than a smokescreen for its desire to perpetuate indefinitely the availability of UNE-P.

B. *Collocation Intervals*

WorldCom also asserts that obtaining new physical collocation space takes 14 months, and, even where WorldCom already has collocation, it would take 8 months to obtain the additional collocation space and deploy the additional equipment purportedly necessary to serve mass market customers. WorldCom's estimates are grossly inflated, fail to reflect the availability of virtual collocation, and are inconsistent with the assumptions underlying its cost estimates.

As an initial matter, the physical collocation intervals cited by WorldCom bear no relation to ILECs' actual provisioning intervals. For example, the physical collocation provisioning intervals in SBC's states range from a low of 90 to a high of 126 calendar days for conditioned space, and from 90 to 180 calendar days for unconditioned space. And, where states have not established collocation provisioning intervals, the Commission's rules require incumbent LECs to provision caged collocation space in 76 business days if the space already is conditioned and 91 business days where major construction is required. Those deadlines can be

extended no more than 20 business days where space is not readily available. Thus, on their face, the physical collocation intervals WorldCom cites are patently unreasonable.

In any event, CLECs are far more likely to use virtual, rather than physical, collocation to serve residential customers for several reasons. As discussed above, physical collocation generally is more expensive than virtual collocation, especially for the types of equipment used to provide mass market services. Physical collocation also offers no inherent advantages over virtual collocation for such equipment. In addition, the provisioning intervals for virtual collocation are shorter than for physical collocation. For example, SBC's intervals for virtual collocation range from a low of 70 days in Texas to no more than 110 days in California. The intervals that WorldCom cites thus far exceed a reasonable estimate of the time necessary to obtain any collocation space and deploy any equipment necessary to provide UNE-L based residential services.

Moreover, the collocation intervals WorldCom cites are impossible to square with the assumptions underlying its cost estimates. As described in more detail in its November 18, 2002, *ex parte* presentation, nine of the 14 month collocation interval WorldCom cites are devoted to pre-application activity; specifically, obtaining outside plant permits, identifying equipment and space requirements, and completing and submitting a collocation application. WorldCom does not specify how much of this time it assumes would be devoted to each activity, but it must attribute the vast majority of this time to obtaining outside plant permits because the other activities easily could be completed in virtually no time at all. And construction of fiber backhaul facilities accounts for much of the five remaining months in WorldCom's 14 month interval. WorldCom's three business cases, however, assume that CLECs either already have their own transport facilities (Case 1) or will purchase transport from the ILEC as unbundled dedicated transport or as a special access service (Cases 2 and 3). WorldCom's business cases thus assume that a CLEC will have no need to obtain a permit for outside plant or to construct transmission facilities. Consequently, even if a CLEC might need to obtain additional collocation to provide UNE-L based service, and in many cases it will not, it can do so in far less than 14 months.

Attachment 2

Jay Bennett
Executive Director-
Federal Regulatory

SBC Telecommunications, Inc.
1401 I Street, N.W.
Suite 1100
Washington, D.C. 20005
Phone 202 326-8889
Fax 202 408-4801



Via Electronic Submission

January 14, 2003

Memorandum of Ex Parte Communication

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
TW-A325-Lobby
Washington, D.C. 20554

Dear Ms. Dortch:

Re: *CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*

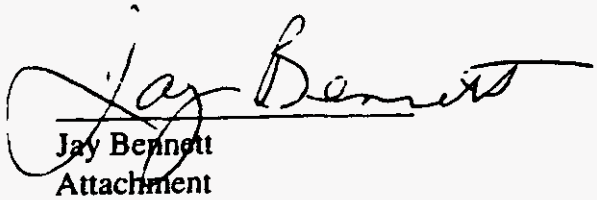
CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

CC Docket No. 98-147, Deployment of Wireline Services Offering Advanced Telecommunications Capability

Today Dr. Howard Shelanski sent the attached letter to Wireline Competition Bureau Chief William Maher, Jr. The letter was submitted on behalf of BellSouth, Qwest, SBC and Verizon.

We are submitting the original and one copy of this Memorandum to the Secretary in accordance with Section 1.12 of the Commission's rules. Please include a copy of this submission in the record of the above-listed proceedings. You may contact me at (202) 326-8889 should you have any questions.

Sincerely,



Jay Bennett
Attachment

cc: C. Libertelli
M. Brill
D. Gonzalez
J. Goldstein
L. Zaina
W. Maher, Jr.
J. Carlisle
S. Bergmann
R. Lerner
M.Carey
T. Navin
J. Veach
J. Miller
R. Tanner
B. Oslon
S. Wilkie
R. Pepper

January 14, 2003

William F. Maher, Chief
Wireline Competition Bureau
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Response to WorldCom's January 8, 2003 *Ex Parte* filing

Dear Mr. Maher:

This letter makes two broad points in response to WorldCom's ex parte filing of January 8, 2003 on the cost of serving residential customers over UNE loops. In its filing WorldCom argues that it will in many cases be "impaired" by the substitution of UNE-L for UNE-P because under UNE-L it will be at a cost disadvantage to the ILECs. I do not here address the details or mechanics of the calculations that WorldCom submits in support of its contention. My purpose is to address two fundamental concerns with WorldCom's argument. First, and most importantly, WorldCom offers no theory of "impairment" beyond implicitly equating it with any disparity in costs. WorldCom's premise therefore appears to be that CLECs should be considered "impaired" any time ILECs have demonstrable cost advantages over new entrants. That premise is incorrect, as I will discuss below. Second, even to the extent cost disparities are relevant to the Commission's impairment analysis, WorldCom's analysis does not do the comparisons necessary to demonstrate the scale or scope of any such disparities.

Cost differences do not in themselves necessarily constitute impairment

Cost disparities are common, if not the norm, among competing businesses. Firms that vie for customers in most markets differ in their scale, scope, efficiency, and investment strategies. New entrants, in particular, will almost always have to incur costs that incumbents no longer face. Few businesses involve only short run, variable costs without any fixed or sunk costs. Yet new competitors enter many industries viably and successfully even though they lack cost parity with incumbents. It would be a weak and economically meaningless definition of impairment that hinged on such normal and ultimately non-determinative cost differences. New entrants often survive and thrive despite cost disadvantages because they have offsetting comparative advantages that help them over the long run; because the industry structure permits positive margins even for firms with comparatively higher costs; because demand is heterogeneous such that they find sufficient numbers of customers even though their product or service might not be identical in price/quality to incumbents' product or service; and/or because initial cost disparities may erode over time.

Docket No. 030851-TP
Steve Turner Exhibit No. 3
Page 23 of 80
SBC Letter to Chairman Powell

Consider the first of the above factors. A new firm can make technological and other strategic decisions with less constraint than an incumbent can. This is true even, as in local exchange service, if the entrant uses part of the incumbent's existing infrastructure. The entrant can pick and choose which markets to enter, which customers to target within those markets, and to some degree which kinds of technological inputs to use in serving those customers. The less the new entrant relies on the incumbent's facilities, the greater the entrants' freedom to choose new, incrementally more efficient inputs and system architectures to provide competing service. That the entrant must incur some costs that the incumbent does not or has short run costs that are initially higher than the incumbent's does not mean that the entrant is at an overall or long-run disadvantage to the incumbent. The Commission has in the past clearly recognized this point. In its 1991 AT&T Streamlining Order the Commission stated the following:

> "Some parties argue that AT&T enjoys market power by virtue of its size and superior resources, financial strength, and technical capabilities. Any such advantages that AT&T may have, however, do not necessarily confer market power. The issue is not whether AT&T has advantages, but, if so, why, and whether any such advantages are so great as to preclude the effective functioning of a competitive market. An incumbent firm in virtually any market will have certain advantages -- including, perhaps, resource advantages, scale economies, established relationships with suppliers, ready access to capital, etc. Such advantages do not, however, mean that these markets are not competitive, nor do they mean that it is appropriate for government regulators to deny the incumbent the efficiencies its size confers in order to make it easier for others to compete. Indeed, the competitive process itself is largely about trying to develop one's own advantages, and all firms need not be equal in all respects for this process to work." 6 FCC Rcd 5880 (1991) at para. 60.

Precisely the same reasoning applies in this context and to the Commission's determination of what constitutes impairment. The simple fact of cost disparities, cannot, as WorldCom implies in its filing, suffice to show economic impairment. This point has more recently been emphasized by the United States Court of Appeals in *United States Telecom Ass'n v. FCC*, 290 F.3d 415, 426-427 (D.C. Cir. 2002) (*USTA v. FCC*) (finding that impairment cannot be based on the kinds of cost disparities usually faced by new entrants in a given sector of the economy).

It is important to note that cost disparities do not necessarily take on additional significance just because some of the asymmetries relate to sunk costs or to scale economies. WorldCom argues that sunk costs create barriers to entry and are thus particularly impairing. It is certainly true, as WorldCom argues, that the higher the sunk costs the greater the risk of entry into a market. Yet exit from a market is rarely costless and the risk of stranding costs is a normal part of business in most industries. In fact, it is a risk that incumbents face as well. WorldCom nonetheless appears to believe that any sunk cost for a new entrant constitutes impairment. Indeed, in footnote 10 of its filing WorldCom suggests that even where a piece of equipment can be redeployed, there is impairment because the costs of initially installing the equipment cannot be recovered. But these are clearly the kind of normal set-up costs that new firms incur all the time. To recognize such costs as "impairment" simply because they are sunk does not make economic sense.

Similarly, the existence of scale advantages for the incumbent does not necessarily create meaningful impairment for new competitors. The Commission recognized as much in the above-quoted excerpt from its 1991 AT&T streamlining order, as did the Court of Appeals in *USTA v. FCC*.

See 290 F.3d at 427. To be sure, scale economies may become so substantial that they make competition practically impossible, as in the case of natural monopoly. But, again, new entrants will often if not usually be at a scale disadvantage to incumbents and scale disparities over even a large range need not pose a substantial or long-term barrier to entry. The mere fact that an entrant might not, for example, initially be able to deploy a switch as efficiently as an ILEC is to be expected and cannot in itself prove material "impairment."

In the end, WorldCom's filing ignores the many reasons why cost differences alone do not constitute competitive impairment. Their premise that the Commission must set policy so as to eliminate any disadvantages for CLECs in cost or service quality is, as an economic matter, empirically and theoretically incorrect. It has moreover been rejected by the Supreme Court. The Commission had originally found, in paragraph 285 of the 1996 Local Competition Order, that impairment exists if the quality of the service the entrant can offer, absent access to the requested element, declines and/or the cost of providing the service rises. The Supreme Court specifically rejected the Commission's statement and explained that "[i]n a world of perfect competition, in which all carriers are providing their service at marginal cost, the Commission's total equating of increased cost (or decreased quality) with "necessity " and "impairment" might be reasonable; but it has not established the existence of such an ideal world." 525 U.S. at 389-90. To the extent WorldCom here again argues that any cost disparity or service disadvantage constitutes impairment, the Commission must reject WorldCom's premise.

Even where cost differences do matter, WorldCom does not provide the necessary analysis to demonstrate such differences

WorldCom bases its case with an economic analysis purporting to show that under a UNE-L regime ILECs will have lower costs than CLECs. It bears emphasizing that, as an economic matter, cost comparisons are only one aspect of any meaningful examination of competitive impairment, which would focus more broadly on whether markets are contestable. WorldCom's submission does not address the evidence that local markets are not only contestable, but actually contested. WorldCom's impairment analysis focuses solely on comparing estimated CLEC costs under UNE-L with estimated ILEC costs, for which the model uses UNE-P rates as a proxy. But even if such a cost comparison, standing alone, were appropriate to evaluate impairment, WorldCom's version of that comparison is not helpful. WorldCom's calculation by definition does not incorporate any real-world ILEC operating costs or even any estimates of such costs. It instead incorporates proxy costs generated by a model of a hypothetical, rather than real, network.

WorldCom argues that its analysis is conservative because the TELRIC rates it uses to proxy ILEC costs are higher than the ILEC costs generated by the HAI model WorldCom uses to measure its own costs. Yet it is possible for a model (or different models) to proxy one carrier's costs well and another's poorly. More importantly, WorldCom cannot deny that TELRIC is a hypothetical network model that specifically eschews measurements of an ILEC's real-world operating costs. Indeed, that hypothetical nature of TELRIC was the central issue in *Verizon v. FCC*, in which the Supreme Court upheld TELRIC pricing. Once that hypothetical nature of TELRIC is acknowledged, then WorldCom's economic analysis becomes irrelevant to the question of impairment. There is nothing conservative about comparing one hypothetical model with another if an ILEC's real costs are in fact much higher than TELRIC prices for UNE-P. And one would be hard pressed to assume a correspondence between an ILEC's operating costs and UNE-P prices given the great differences in the latter that exist across jurisdictions. Yet actual competitive impairment depends on actual market factors, including issues relating to actual ILEC costs and actual CLEC costs. WorldCom's model addresses neither.

WorldCom devotes much of its analysis to arguing that UNE-L would impose higher costs than UNE-P on CLECs. Only by the circular logic of equating UNE-P with ILEC costs, and moreover by ignoring actual empirical evidence of entry by means other than UNE-P, does that comparison possibly say anything about competitive impairment. WorldCom never undertakes another calculation that would be useful to making competitive predictions: whether, under current retail rates, UNE-L would provide positive margins for CLECs. WorldCom's implicit answer is that current retail rates do not matter because the ILEC will use its alleged cost advantage to lower retail prices. But even if one assumes a material cost disparity to exist, one cannot simply assume the real-world feasibility of downward pricing by the ILECs, especially in the residential context to which WorldCom restricts its analysis. Indeed, such assumptions of downward pricing responses are particularly unwarranted where they are based on a TELRIC proxy that likely understates ILEC costs and therefore overstates the margins available to be decreased.

Respectfully submitted

/s/ Howard A. Shelanski
Howard A. Shelanski

Attachment 3

SBC's Analysis Of The Economic Viability Of Facilities-Based UNE-L Residential Serving Arrangements

SBC developed a model to determine the economic viability of serving residential customers using a local serving arrangement consisting of CLEC switching and UNE loops ("UNE-L"). Specifically, SBC compares the cost of a UNE-L-based serving arrangement with the revenue stream a CLEC could reasonably anticipate when serving residential customers.

To calculate CLECs' costs, SBC developed a model that assumes the same principal network configuration that WorldCom uses in its cost estimate. Specifically, SBC's model calculates the recurring and non-recurring cost of obtaining and using unbundled loops, collocation, GR-303 DLC concentration equipment, switching, and transport.[1] Although CLECs already have deployed more than 1300 switches and obtained thousands of collocation arrangements, SBC assumes, conservatively, that a CLEC would deploy a new switch (or switches) in every serving area and would require a new collocation arrangement in every wire center that SBC modeled. Because CLECs, as a rule, offer and promote packages of local and long-distance services, SBC also included the costs of providing long-distance services.

SBC evaluated profitability under various assumptions regarding the number of lines a CLEC could expect to serve in each wire center. The analysis shows that using conservative assumptions, a CLEC could earn a positive margin in a wire center with 5000 lines. The model assumes, consistent with WorldCom's analysis CLEC market shares of five to ten percent. Because a five to ten percent market share in a 5000 line wire center represents 250 to 500 lines, SBC calculated the per line costs and associated margins for a CLEC with 250 and 500 lines in wire centers in three representative SBC states with the highest UNE-P volumes: California, Michigan, and Texas.[2]

In its analysis, SBC compares the costs of a UNE loop strategy, not to the cost of the UNE-P, but to the revenues a CLEC could reasonably expect in each wire center. In calculating this revenue opportunity, SBC used extremely conservative assumptions. Most notably, SBC used only *residential* revenue, notwithstanding that CLECs already are serving large numbers of business customers with their own switches. Since the revenues available from business customers far exceed the revenues available from residential customers, the exclusion of business revenues from SBC's analysis significantly understates the actual revenue opportunity available to CLECs and therefore overstates the line size required for CLECs profitably to serve a wire center.

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[1] For purposes of its analysis, which focuses exclusively on smaller wire centers, SBC assumes that CLECs would use UNE transport. In larger wire centers, CLECs presumably would rely on special access services or their own facilities because they would not be impaired without access to unbundled dedicated transport.

[2] Although SBC does not include the per line cost at line counts higher than 500, such costs are even lower.

SBC based its revenue calculations on the retail prices of the residential services CLECs market and sell today. SBC thus assumed a revenue opportunity of $40 to $60 per line (plus $8 in switched access, EUCL, and universal service revenue). In a previous filing, a copy of which is provided as Attachment 4, SBC shows more fully why these revenue estimates are reasonable. As an example, however, the average of $50 per line that SBC used is the *lowest* price point of MCI's The Neighborhood offering, which also is priced as high as $70.

To calculate the revenue stream available to CLECs in a wire center as a whole, as noted above, SBC used the same market share assumptions made by WorldCom. Specifically, SBC assumed that, on average, a CLEC would capture five to ten percent market share per wire center. Given the rapid pace at which CLECs have gained market share in states in which they have actively marketed residential service, and the even greater success they have had in winning business customers, these assumptions, particularly the low-end assumption, are quite conservative. Based on these 5% and 10% market share assumptions, SBC's calculations show that CLECs can earn positive margins when they use their own switches in wire centers with 5000 or more lines and offer the same service packages they are offering today.

I. Cost

The SBC model calculates the per line cost of each of the following components of a UNE-L-based local serving arrangement:

A. *UNE Loop*

SBC's model calculates the monthly recurring and amortized monthly non-recurring cost of the two-wire analog loops and cross-connects that a facilities-based CLEC would purchase to serve mass-market customers. In order to calculate UNE loop costs, SBC's model uses the actual UNE loop rates established by the California, Michigan, and Texas Commissions.

SBC determined that 56% of its wire centers with 10,000 lines or less are in the Zone 3 (highest) deaveraged UNE loop pricing zone, and 44% are in either the Zone 1 (lowest) or Zone 2 (middle) deaveraged UNE loop pricing zones. SBC's model thus uses a blended recurring UNE loop rate, reflecting 56% of the Zone 3 loop rate and 44% of the Zone 2 loop rate in each state.[3] In Michigan and Texas, the model also adds the recurring monthly charges for loop-to-collocation cross connects. (There is no such charge in California).

California:

Zone 3 Recurring Loop Rate	Zone 2 Recurring Loop Rate	Blended Recurring UNE Loop Rate
$19.64	$11.27	(.56*19.64)+(.44*11.27) = $15.96

[3] SBC's loop cost calculation is thus conservative because it uses only the Zone 2 loop rate for the 44% component of the blended rate, even though some wire centers represented by the 44% are in Zone 1.

Michigan:

Zone 3 Recurring Loop Rate	Zone 2 Recurring Loop Rate	Cross Connect	Blended Recurring UNE Loop Rate
$12.54	$8.73	$0.13	(.56*12.54)+(.44*8.73) + 0.13 = $10.99

Texas:

Zone 3 Recurring Loop Rate	Zone 2 Recurring Loop Rate	Cross Connect	Blended Recurring UNE Loop Rate
$18.98	$13.65	$1.24	(.56*18.98)+(.44*13.65) + $1.24 = $17.87

For non-recurring loop costs, the SBC model reflects current CLEC ordering activity for both coordinated hot-cut ("CHC") and frame due time ("FDT") loop cutovers. The model thus calculates non-recurring loop costs based on the percentage of CHC and FDT ordering activity in each state. For California, the model reflects that 32% of a CLEC's total hot cut orders will be CHCs and 68% will be FDTs. In Texas, it reflects that 43% of a CLEC's total hot cut orders will be CHCs and 57% will be FDTs.[4] Currently, there are no separate charges for CHCs in Michigan (or any of the Ameritech states). However, to be conservative, the model assumes that there may be such charges in the future. SBC therefore used the Texas percentages of CHCs and FDTs, as well as the Texas CHC and FDT rates, for calculating Michigan hot cut costs.

The model also includes all additional UNE loop non-recurring charges, including service order charges, that may be assessed for each UNE loop service order submitted by a CLEC. In addition, although WorldCom failed to provide any support for its estimated $10 internal CLEC cost associated with hot cuts, SBC's model conservatively includes an additional $10 to reflect such costs. Finally, similar to WorldCom's estimate, SBC's model assumes that UNE loop non-recurring costs are amortized over 18 months.[5] The following are the per line, monthly amortized non-recurring costs used in SBC's model:

California	$3.77
Michigan	$3.16
Texas	$2.82

[4] By reflecting current CHC and FDT ordering activity, the model is overly conservative in its assumptions. For mass-market customers, CLECs likely will rely on FDT cutovers, and the overall ratio of FDT to CHC cutovers would thus be much greater.

[5] For all monthly amortizations, SBC used a 12.19% interest rate.

The total monthly per line loop costs calculated by the model are thus:

California	(15.96 + 3.77) = $19.73
Michigan	(10.99 + 3.16) = $14.15
Texas	(17.87 + 2.82) = $20.69

B. *Collocation*

The SBC model assumes that a facilities-based CLEC will purchase virtual collocation. CLECs can collocate GR-303 equipment in virtual collocation, and physical collocation offers no advantage over virtual collocation for serving mass-market customers using GR-303 equipment. Virtual collocation also tends to cost less than physical collocation, especially for the equipment and configurations that likely would be used by CLECs to serve mass-market customers, and virtual collocation generally has shorter provisioning intervals than physical collocation.

Using SBC's tariffed virtual collocation rates, the model calculates the cost of the virtual collocation arrangements that a facilities-based CLEC would actually use for the GR-303 concentration equipment necessary to serve mass-market customers. The SBC model, moreover, is overly conservative in that it assumes a CLEC will have to purchase virtual collocation in each SBC wire center, and it does not discount the cost of collocation to account for the fact that many CLECs already are collocated in many of SBC's wire centers and in ILEC wire centers throughout the country.[6]

The following are the virtual collocation costs by line count used in SBC's model:

California:

Lines	Non-recurring Cost	Monthly Recurring Cost
250	$4,775	$539.16
500	$4,775	$539.16

Michigan:

Lines	Non-recurring Cost	Monthly Recurring Cost
250	$8,743.21	$1,152.06
500	$10,475.11	$1,164.78

[6] The *UNE Fact Report* calculates that by year-end 2001, CLECs had purchased almost 25,000 collocation arrangements throughout the country, and that BOC end offices serving more than 80% of all BOC access lines have one or more collocators. *UNE Fact Report* at II-16.

Texas:

Lines	Non-recurring Cost	Monthly Recurring Cost
250	$9,937.54	$542.97
500	$12,349.10	$555.85

Consistent with WorldCom's collocation costs estimates, collocation were amortized over 10 years. The resulting amortized monthly collocation costs per line are:

California:

Lines	Amortized Monthly Cost Per Line
250	$2.43
500	$1.22

Michigan:

Lines	Amortized Monthly Cost Per Line
250	$5.11
500	$2.63

Texas:

Lines	Amortized Monthly Cost Per Line
250	$2.75
500	$1.47

C. *CLEC GR-303*

SBC's model includes the Engineered, Furnished & Installed ("EF&I") cost of the hardware, software, and cabling and wiring associated with GR-303 DLC concentration equipment in a configuration representing a 4:1 concentration ratio. Specifically, the model reflects actual prices of GR-303 equipment produced by a major manufacturer and the installation costs for that equipment in virtual collocation space in a configuration similar to that used by SBC's CLEC affiliate. A CLEC entering the mass-market on a significant scale could obtain similar prices and installation costs. SBC amortized GR-303 costs over 9 years to obtain a monthly per line cost.

Lines	Per Line GR-303 Cost	Amortized Monthly Per Line GR-303 Cost
250	$84.98	$1.30
500	$50.38	$0.77

D. *CLEC Switch*

SBC's cost calculation for switching is based on a switch equipped to serve 16,128 customers with a 4:1 concentration ratio for both GR-303 and trunking.[7] SBC also assumed an 85% switching fill factor consistent with WorldCom's analysis. As with collocation, SBC's switch costs are conservative because the model does not discount switch costs to reflect the fact that CLECs already have deployed a substantial number of switches.[8]

The calculated per line monthly switch cost includes initial switch investment as well as EF&I costs and annual charge factors for building, land, power, maintenance, and other switch-associated deployment costs. The calculations are based on a switch cost estimator used by SBC's CLEC subsidiary. The switching cost data are based on SBC Telecom's contract with a major switch vendor and thus represent real-world costs that a facilities-based CLEC would incur in purchasing switches.

The cost of the switch modeled is $2,061,188, to which SBC added the cost of multiplexing equipment in the amount of $99,297 to account for the DS1 level signal for transport. The total cost of the switch in SBC's model is thus $2,160,485. This includes installation, transportation, cabling and wiring, and miscellaneous equipment, and is representative of the real installation costs a CLEC would incur for this switch configuration. On a per line basis, with 85% fill, the cost is $158.00. Adding in all associated switch deployment costs, SBC's model calculates the total cost of switching to be $216.60 per line in California, $198.32 per line in Michigan, and $205.22 per line in Texas. SBC also calculated switch maintenance and other operating costs of $1.19 per line per month in California, $0.99 per line per month in Michigan, and $1.08 per line per month in Texas. Amortizing over 10 years, SBC calculated the total monthly switch cost to be $4.32 per line per month in California, $3.68 per line per month in Michigan, $4.05 per line per month in Texas.

E. *Transport*

For purposes of this analysis, which focuses on relatively small, predominately rural and suburban wire centers, SBC calculated the cost of transport based on unbundled dedicated transport prices. As with collocation and switching, the model is conservative in that it does not discount the cost of transport to reflect the fact that CLECs may have their own transport networks and thus would not need to purchase additional transport from SBC. SBC used the unbundled dedicated transport rates established by the California, Michigan and Texas Commissions. SBC assumed 25 air miles of transport.

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[7] The switch reflected in the cost model has the capacity to grow to serve over 100,000 customers. Adding additional lines would reduce the cost per line for switching. Thus, a switch equipped to serve 32,256 lines would cost $3,115,036, or $96.57 per line. At 64,512 lines, the cost would drop to $77.88 per line.

[8] The *UNE Fact Report* demonstrates that CLECs already have deployed more than 1,300 circuit switches throughout the country and are currently using those switches to serve customers in BOC wire centers accounting for nearly 86% of all BOC access lines. *UNE Fact Report* at II-1, II-6.

For non-recurring transport costs, the model assumes that only one LSR is required for all DS1s needed to provision each line count. The non-recurring transport costs are amortized over 18 months.

The monthly transport costs used in the model are:

California:

Lines	Amortized Monthly Cost Per Line
250	$5.49
500	$5.49

Michigan:

Lines	Amortized Monthly Cost Per Line
250	$2.89
500	$2.87

Texas:

Lines	Amortized Monthly Cost Per Line
250	$5.11
500	$4.98

F. *Miscellaneous Costs*

In order to provide a complete picture of CLEC costs, SBC included SG&A costs of 20% of revenue. Consistent with its December 11, 2002, *ex parte* presentation, and to properly compare costs with the revenue opportunities available to CLECs selling bundles of local and long distance services, SBC also included long distance costs of $5.00.

G. *Total Cost*

Adding together all of the above cost components, SBC calculated the total per line costs of providing a package of local and long-distance services using a UNE-L serving arrangement to be:

California:

Lines	Amortized Monthly Cost Per Line (@$40)	Amortized Monthly Cost Per Line (@$60)
250	$50.31	$54.31
500	$47.35	$51.35

Michigan:

Lines	Amortized Monthly Cost Per Line (@40)	Amortized Monthly Cost Per Line (@$60)
250	$47.03	$51.03
500	$41.52	$45.52

Texas:

Lines	Amortized Monthly Cost Per Line (@40)	Amortized Monthly Cost Per Line (@$60)
250	$51.25	$55.25
500	$48.03	$52.03

II. Revenue Opportunities

Consistent with its November 18, 2002, *ex parte* presentation, SBC used a low total revenue estimate of $48.00 and a high total revenue estimate of $68.00. As SBC thoroughly documented in its December 11, 2002, letter to the Commission, these estimates are fully consistent with the local and long distance service package sold by CLECs to residential customers. SBC thus assumes that CLECs would continue offering the same services at the same prices they sell today using the UNE-P. Notably, WorldCom has recently raised the maximum price of the Neighborhood from $59 to $69. SBC's analysis does not take this increase into account, but if CLECs increased the prices of their packages, their margins obviously would grow concomitantly larger. As noted, the conservative nature of SBC's revenue estimates is further underscored by the fact that SBC assumed that CLECs would serve only residential customers, notwithstanding that business revenues tend to be much higher.

III. Margin Analysis

In order to determine the economic viability of UNE-L based service arrangements, SBC compared the cost of such arrangements with the revenue opportunities available to CLECs. At 250 and 500 lines, SBC compared the total cost per line of using a UNE-L serving arrangement with the low and high revenue estimates. SBC then calculated the margin for each line count for both the low and high revenue estimate.

The results demonstrate that CLECs can earn positive margins when they use their own switches and UNE-L-based serving arrangements for residential service in wire centers of 5,000 or more lines. *See Table A, supra.*

Attachment 4

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December 11, 2002

Via Electronic Delivery

Ms. Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street, SW – Lobby Level
Washington, D.C. 20554

Re: *Ex Parte Presentation*
In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338; 96-98; and 98-147

Dear Ms. Dortch:

On November 18, 2002, SBC proposed to the Commission a transition plan under which it would continue to make available the functional equivalent of UNE-P for two years after the elimination of unbundled switching from the Commission's UNE list. SBC showed further that, under this plan, CLECs would be able to earn reasonable margins on residential retail service.[1] Specifically, SBC demonstrated—using realistic estimates of CLEC residential retail rates, non-retail revenue opportunities (access, SLC, etc.), and CLEC costs—that its proposed $26 rate would allow CLECs the opportunity to earn healthy margins of 15% to 34% for the customers they typically serve, and even higher margins when serving the heaviest users of vertical features and long distance services.[2] SBC further explained that these margins are more than sufficient, considering that CLECs incur virtually no incremental capital investment when using UNE-P functionality to provide local residential service. Two days later, AT&T disparaged SBC's compromise proposal, calling it a "competitive dead-end."[3]

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[1] *See Letter from Jay Bennett, Executive Director—Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, Federal Communications Commission*, November 19, 2002 ("SBC Proposal").

[2] *Id.*, Att. at 8.

[3] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, Federal Communications Commission*, November 21, 2002, at 1 ("AT&T 11/21 Letter").

That AT&T was so quick to attack SBC's proposed transition plan should come as no surprise. AT&T has told analysts that, consistent with its strategy of "maximizing cash," it will not offer local residential service unless it can earn at least a 45% gross margin on such service.[4]

AT&T obviously could not complain to the Commission about the unavailability of 45% margins on virtually no investment. Instead, it attacked SBC's proposed transition plan with a spreadsheet that purports to show that AT&T would face "negative margin opportunities" if the Commission adopted SBC's plan. As shown below, AT&T's spreadsheet is a model of hypocrisy and disingenuous advocacy. It fails to reflect the service packages that AT&T and other UNE-P CLECs actually sell in the marketplace or the revenue streams available from the high-value customers they target. It also contains incorrect data even for the fictitious business model it represents.[5]

- AT&T Failed to Include Long Distance and Access Revenue Associated with Its Provision of Long Distance Services

The most glaring deficiency in AT&T's spreadsheet is its failure to account for long distance and access revenue associated with the combined local and long distance retail packages that AT&T and other CLECs sell to residential customers. Indeed, AT&T omits not only interLATA long-distance and access revenue, but intraLATA toll and access revenue as well, from its margin analysis. These omissions cannot be squared with the retail services AT&T and every other UNE-P CLEC actually market and sell to residential customers.

AT&T's lead UNE-P-based residential offering in SBC's states is its "Local and Long Distance Together" service. AT&T is aggressively promoting this combined local and long distance service in television commercials, print advertisements, and mass mailings. Attached hereto as Exhibit 1 are numerous examples of marketing materials used by AT&T to tout this service in SBC's states where UNE-P is most heavily used by CLECs: Michigan, Illinois, Ohio, Texas, and California. As those materials show, AT&T not only promotes the convenience of its combined offering of local and long distance service by telling customers they can "get all [their] calls" with AT&T and to "get it all" with AT&T, but also sends checks to consumers that, if cashed, will switch *all* of a customer's services—local, local toll, and long distance—to AT&T.

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[4] *Transcript*, Q2 2002 AT&T Earnings Conference Call—Final at 19 (July 23, 2002)("AT&T Earnings Transcript").

[5] On November 25, WorldCom submitted an *ex parte* letter echoing AT&T's claim that SBC's compromise proposal would offer negative margins. Like AT&T, WorldCom bases its claim on retail prices for basic POTS service. But even WorldCom concedes, albeit tacitly, that this argument is a red herring, when it follows this claim with a discussion of local and long-distance packages. The fact of the matter is that SBC *showed* that CLECs could earn healthy margins with packages of local and long distance services priced at $40-$60 per month. MCI does not even purport to challenge this showing, and it certainly does not explain why it could not continue to offer The Neighborhood – which is priced at either $50 or $60 today – under SBC's proposal.

There are several reasons CLECs focus their marketing on bundled service packages. One is that customers want them. As AT&T itself told the Commission: "Consumers buy bundles—Local and LD together just makes sense to them."[6] Another is that bundles help CLECs reduce churn. A customer that purchases a bundled service package is less likely to switch to another carrier than a customer who purchases stand-alone services. A third reason is that under a UNE-P regime, CLECs that provide both local and long distance services reduce the cost of their long distance offerings by eliminating originating access costs. In addition, UNE-P CLECs eliminate terminating access charges for long distance calls between their own subscribers and collect terminating access charges for long distance calls from customers of other long distance carriers. Significantly, and in specific recognition of the importance CLECs have attached to this benefit of the UNE-P, SBC's transition proposal treats access charges just as they would be treated under a UNE-P regime.

None of this is new. Five years ago, AT&T's Senior Vice President and General Counsel, John Zeglis, recognized the value proposition of using UNE-P functionality to provide bundled services when he laid out to the investment community the tremendous margins available to AT&T by using the UNE-P to provide packages of services to residential customers.[7] After showing that a 26% resale discount "[g]ives you a chance to market a combined local and long-distance package,"[8] he went on to discuss how the UNE-P makes much higher margins possible. He used as an example "a consumer that buys $25 of long-distance and five dollars of local toll service per month."[9] He noted that, by using the UNE-P to serve that consumer, AT&T could earn $20 in local service fees, $3.50 for the subscriber line charge, $30 in toll charges, and save $10 in access charges to boot – all told, a $63.50 value.[10] He then went on to note that "none of this is the right way to look at the new AT&T's business. "We are more than an all distance business. On top of that all distance stack of revenue we intend to add Internet service, information services, we intend to add anything that requires local connectivity."[11]

To be sure, AT&T's access costs, and thus its savings, are lower today than they were at the time of the Zeglis presentation, and long-distance prices have come down as well. The bottom line, though, is the same: it makes much more sense for AT&T to sell packages of services, rather than stand-alone POTS service, to consumers, and that is what AT&T does. Indeed, in AT&T's Second Quarter 2002 Earnings Conference Call, Betsy Bernard, AT&T's

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[6] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, Federal Communications Commission,* October 4, 2002, Att. 3 at 3.

[7] *Transcript,* AT&T Investment Community Meeting at 5 (March 3, 1997).

[8] *Id.*

[9] *Id.*

[10] *Id.*

[11] *Id.*

Consumer Services President and CEO, characterized AT&T's combined long distance and local package as its "lead initiative."[12]

Nor is AT&T alone in using the UNE-P to sell combined residential local and long distance services. Virtually every UNE-P CLEC targets the same residential customers that AT&T targets. MCI's local offering, The Neighborhood, for example, is a combined offering of residential local, intraLATA toll, and long distance service.[13] Other UNE-P CLECs, such as TalkAmerica and Birch, also offer residential local service as part of a combined local and long distance service.[14]

Because AT&T, WorldCom, and other UNE-P CLECs promote bundles of local and long distance service, rather than stand-alone local, residential service, it should come as no surprise that these bundled packages are primarily what customers buy from them. SBC regularly conducts interviews with customers who have left SBC for other carriers, and the most recent of those interviews reveal that more than 80% of SBC customers who switch to a CLEC subscribe to that CLEC not only for local service, but also for local toll and long distance services. In short, common sense and marketplace evidence indicates that AT&T and other CLECs use UNE-P to sell residential customers combined retail offerings of local and long distance services. It is, therefore, inappropriate for AT&T not to include in its CLEC margin calculations toll revenue and access revenue and cost savings associated with long distance services.

SBC estimates that by omitting long distance revenue, AT&T underrepresented its potential revenue by at least $15 per line, and probably more. In attempting to counter evidence that UNE prices in the SBC region do not permit SBC to recover its costs, AT&T has argued that any such losses are offset by an average of $11.69 per line in interLATA toll revenues.[15] Presumably, the high-margin customers AT&T targets for its bundles of local and long distance service generate even higher long-distance revenues. Taking AT&T's figure at face value, however, would require an upward adjustment of $11- $12 per line per month to account for the interLATA toll revenue AT&T obtains from such customers. In addition, this figure must be revised to account for intraLATA toll revenue, which SBC estimates is $3-4 per line per month, for a total upward adjustment in the range of $15 to account for long distance revenue.

Moreover, AT&T not only understated its *customer* long distance revenue, but also appears to have omitted entirely the access revenue and cost savings it realizes when it provides long distance services. As Mr. Zeglis indicated, AT&T not only gains terminating access revenue as a UNE-P CLEC, it also avoids all originating access and some terminating access costs for its local customers who subscribe to AT&T long distance services—in other words, the

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[12] *AT&T Earnings Transcript* at 11.

[13] *See* Ex. 2.

[14] *See* Ex. 3.

[15] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene H. Dortch, Secretary, Federal Communications Commission*, September 30, 2002, Att. 1 at 6 ("AT&T 9/30 Letter").

very customers AT&T targets and the services it sells. SBC estimates that by failing to reflect the fact that it uses UNE-P to sell bundled packages of local and long distance services, AT&T omitted an additional $1.50 or more in access revenue and cost savings from its margin calculations.[16] Thus, on the whole, AT&T understated its revenue estimates by $16.50 or more by failing to reflect the packages of local and long distance services that it sells to its customers.

- AT&T Also Underestimated Its Local Revenues

AT&T's analysis also underestimates the revenues available from the local component of the services offered by CLECs. Specifically, AT&T's analysis does not reflect the fact that AT&T successfully targets high-end customers – that is, customers who purchase multiple vertical features and other services in addition to basic POTS and long distance services. [17]

The revenue estimates used by AT&T in its November 21st *ex parte* are the same as the estimates used by AT&T in its September 30, 2002, *ex parte* submission to the Commission.[18] Belying its claim that its spreadsheet was "built using actual, verifiable data,"[19] AT&T has never fully identified the source of its data or the manner in which they were collected, nor has it made this information available to the Commission. Thus, while AT&T claimed in its September 30th *ex parte* that its features revenue data come from a "TNS Telecoms Bill Harvesting database,"[20] AT&T has never actually provided the data that it allegedly obtained from the TNS database and used in its September 30th *ex parte* calculations. Nor has it identified specifically what information it used from the TNS database, the characteristics of that information (*e.g.*, when it was harvested, how it was harvested, etc.), or whether AT&T performed any calculations or revisions to the information in the database.

The reason AT&T has never provided this or any of the data it used in constructing its margin calculations is self-evident. The customers whose bills ostensibly were harvested are not AT&T's own local customers. Indeed, AT&T would have no reason to rely on TNS data, as opposed to its own, if it actually were providing a revenue estimate for its own customers. Instead, AT&T apparently has purported to provide average local service revenue per line for all residential customers, including the low-end customers that AT&T and other CLECs eschew. Aside from the fact that this number is significantly lower than SBC's own data regarding average local revenues across its entire residential customer base, these data are obviously

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[16] Moreover, Legg Mason noted that even AT&T's access revenue estimates are understated in that they do not reflect the high value profile of AT&T's targeted long distance customers. *AT&T Pleads its UNE-P Case*, Legg Mason Report at 2 (September 18, 2002).

[17] Moreover, SBC estimates that AT&T's estimates of subsidy and other regulatory revenue are too low. SBC estimates that AT&T's figures should be at least $1.25 per line higher.

[18] *See AT&T 9/30 Letter*, Att. 1 at 5.

[19] *AT&T 11/21 Letter* at 1.

[20] *Id.* at 3.

irrelevant to any calculation of the revenue opportunity available to AT&T and other CLECs under the SBC proposal.[21]

If AT&T had provided estimates of the local revenue streams it obtains from the customers it actually serves, those estimates would be higher because of the revenue generated by vertical features and other non-POTS services purchased by AT&T's customers. As Betsy Bernard has admitted, AT&T's strategy in the marketplace is to use the UNE-P to retain its "high valued customers" and to attract other such customers from its competitors.[22] Ameritech data shows that AT&T and other CLECs are, in fact, successful in this endeavor. A study by Ameritech of the average local revenue that Ameritech had received from residential customers who switched their service to a UNE-P CLEC was significantly higher than Ameritech's average local revenue for all of its residential customers.[23]

That is not say that AT&T has not *tariffed* basic POTS offerings. But what AT&T tariffs and what it aggressively promotes are two very different things. For example, AT&T claims to offer basic local service for $15.00 in Texas,[24] but AT&T does not actively market this offering. In fact, a consumer who accesses AT&T's web site would search in vain for any mention of it.[25]

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[21] SBC estimates that its average revenue per line for local service, including local line and usage charges, EUCL and regulatory assessments, vertical and non-regulated services, and access charges are between $30 and $35, significantly higher than the $27 average estimated by AT&T.

[22] *AT&T Earnings Transcript* at 10. Prior to joining AT&T, David Dorman likewise talked about how the UNE-P would be used by CLECs to target high-end customers:

> So if you do something new and innovative, such as building a fiber coaxial network, you must unbundle it into pieces and offer those pieces to your competitors on any technically feasible basis for your incremental cost. It's hard to imagine a more perfect way to stifle competition. Why would you want to spend billions of dollars building a new network if your competitors can say: "I don't want all that other stuff. I just want the wires from her house and his house because they spend $200 a month. And I don't want your wires to low-income areas because those people only spend about $5 a month."

Telecom's Tragic Reform Tale, The Big, The Bad and The Ugly at 5 (March 16, 1998).

[23] *See Letter from Brian J. Benison, Associate Director, SBC, to Marlene H. Dortch, Secretary, Federal Communications Commission*, September 6, 2002, Att. 1 at 16.

[24] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, Federal Communications Commission*, October 4, 2002, Att. 3 at 7.

[25] From www.att.com, a consumer who clicks on "consumer" can then click on "local service." From there, a Texas consumer who enters his or her phone number is presented with three AT&T local offerings: a $25.00 per month package of local service plus three features (which AT&T mentions in its October 4th *ex parte*), a $27.00 per month package of local service plus 5 features, and a $32.00 per month package of local service plus 10 features (neither of which AT&T mentions). AT&T also fails to mention that the $80.00 check it offers to consumers to switch to its $25.00 package also requires them to choose AT&T for long distance services). Even if a consumer had the wherewithal to search for AT&T's

The fact is that regardless of the local services that may be available to customers who know enough to ask AT&T about them, AT&T markets, sells, and obtains revenue from service packages that include high value vertical features and other non-POTS services.

AT&T's spreadsheet does, in fact, claim to reflect revenue from basic service plus features, but the local service revenue estimates used by AT&T in its spreadsheet are impossible to square with the rates of the local service plans AT&T promotes in SBC's states. AT&T actively markets two residential local service plans with features in Michigan, one for $31.00 per month, and the other for $27.00 per month—much higher than the $24.18 average revenue per line estimate used by AT&T in its spreadsheet.[26] Similarly, AT&T used in its spreadsheet an average revenue per line in Ohio of $20.78 and in Texas of $19.96, but the prices for the local service packages that it promotes in Ohio are $25.00, $26.00, and $29.00; and the prices for the local service packages that it promotes in Texas $25.00, $27.00, and $32.00.[27]

AT&T's spreadsheet thus not only omits revenue associated with long distance and access services, it also understates the revenue from the local component of the services AT&T and other UNE-P CLECs market and sell.

Looking at the whole picture, a review of CLEC prices for combined packages of local and long distance services demonstrates that SBC's estimate of $40 to $60 in revenue is a conservative estimate of the revenues available to CLECs. MCI's The Neighborhood is priced at either $50.00 or $60.00, depending on the state—well within the range used by SBC.[28] SBC's range also is consistent with AT&T's unlimited Local Plus Long Distance Offers (local service plus AT&T Unlimited long distance plan), which in California, Michigan, Illinois, Ohio, and Texas are priced between $43 and $50, plus 7¢ per minute for long distance calls to non-AT&T customers.[29] SBC's revenue estimates are thus far more appropriate than the understated local only revenue estimates used by AT&T.

- AT&T Distorted the SG&A Calculation

Finally, the SG&A estimates used by AT&T demonstrate that AT&T will go to any lengths in its attempt to mislead the Commission about the profitability opportunities it enjoys using UNE-P functionality to target high end residential customers. In its November 18th

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tariffed local service offerings in Texas to try and find a basic local service rate, he or she would find that AT&T's "[t]ariffs are not posted on the web for this state at this time." *See* Ex. 4. The figures in AT&T's October 4th *ex parte* are also misleading in another respect. AT&T fails to mention that consumers pay (and thus AT&T obtains as revenue) an additional $.07 per minute for all calls under the One Rate plan and for all calls to non-AT&T subscribers under the AT&T Unlimited plan.

[26] *See* Ex. 5.

[27] *Id.*

[28] Ex. 2.

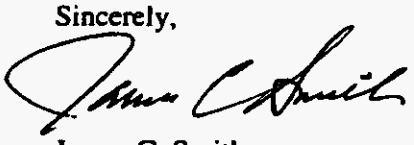
[29] *See* Ex. 5.

presentation, SBC used a 20% of total revenue estimate for SG&A costs. This is a common industry standard estimate of SG&A costs.[30] AT&T claims that the SG&A costs in its spreadsheet are "per SBC low estimate." But instead of calculating SG&A as 20% of its own revenue estimates per state, AT&T used the number ($9.60) that SBC calculated using its higher (and more reasonable) revenue estimates, and AT&T hard-coded that in each line of its calculations as the SG&A cost per state. In doing so, AT&T effectively used an SG&A estimate that is, on average, 35% of its own revenue estimates. AT&T cannot have it both ways. It cannot argue that SBC's revenue estimates are overstated but then calculate SG&A based on those estimates, and its suggestion that 35% SG&A costs are "low" is absurd. Indeed, this kind of claim is indicative of the overall lack of credibility of AT&T's analysis.

- Conclusion

It is unfortunate that rather than engage in serious discussion on the merits of a UNE-P transition plan, AT&T has chosen the path of tired rhetoric and misleading and inaccurate statistics. SBC stands by its proposed transition plan and its estimates of the potential CLEC margins available under its plan. SBC believes that its plan offers the Commission a realistic and meaningful approach to a national transition plan for a sustainable model for local competition.

Sincerely,



James C. Smith

Enclosures

[30] Moreover, SBC's estimate was overly conservative in that SBC applied the 20% to total revenue, including toll revenue, and SBC included a separate cost estimate for the provision of long distance service, which likely already includes some or all of the SG&A costs of providing long distance service.

cc: Chris Libertelli – *via electronic delivery and facsimile*
Jordan Goldstein – *via electronic delivery and facsimile*
Matthew Brill – *via electronic delivery and facsimile*
Dan Gonzalez – *via electronic delivery and facsimile*
Lisa Zaina – *via electronic delivery and facsimile*
Michelle Carey – *via electronic delivery and facsimile*
Tom Navin – *via electronic delivery and facsimile*
Brent Olson – *via electronic delivery and facsimile*
Rob Tanner – *via electronic delivery and facsimile*
Jeff Carlisle – *via electronic delivery and facsimile*
Rich Lerner – *via electronic delivery and facsimile*
Scott Bergmann – *via electronic delivery and facsimile*
Jeremy Miller – *via electronic delivery and facsimile*
William Maher – *via electronic delivery and facsimile*
Joan Marsh – *via facsimile and first class mail*

Attachment 5

Jay Bennett
Executive Director –
Federal Regulatory

SBC Telecommunications, Inc.
1401 I Street, N.W., Suite 1100
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December 18, 2002

VIA ELECTRONIC SUBMISSION

Ms. Marlene H. Dortch
Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Ms. Dortch:

Re: **Memorandum of Ex Parte Communication**
CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers

CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

CC Docket No. 98-147, Deployment of Wireline Services Offering Advanced Telecommunications Capability

On December 17, 2002, Jim Smith (Senior Vice President – FCC), Gary Phillips (General Attorney and Assistant General Counsel) and Jim Lamoureux (Senior Counsel) met with Daniel Gonzalez, Senior Legal Advisor to Commissioner Martin to describe the facts of SBC's hot cut performance. SBC described the scalability of its hot cut performance and explained that the record in this proceeding demonstrates that the hot cut process does not pose an impairment to competitors.

The attached materials were distributed during the meeting and are consistent with information that SBC has previously submitted into the record of the above-listed proceedings.

Pursuant to Section 1.1206(b) of the Commission's rules, this *ex parte* is being electronically filed. I ask that this *ex parte* be recognized with the proceedings identified above.

Please call me should you have any questions.

Sincerely,



Attachment

cc: D. Gonzalez

SBC Hot Cuts



The Facts

December 17, 2002

Docket No. 030851-TP
Steve Turner Exhibit No. 3
Page 50 of 60
SBC Letter to Chairman Powell

CLEC Claims of a Hot Cut "Problem" Have No Basis in the Record

- Quality: SBC provisions hot cut orders on a timely basis, with minimal disruption to end users
- Scalability: Moving forward, SBC has the capacity to meet any reasonably foreseeable increase in demand for hot cuts at the same superior level of performance
- Cost is not an impediment

Docket No. 030851-TP
Steve Turner Exhibit No. 3
Page 51 of 80
SBC Letter to Chairman Powell

Quality: Hot Cuts Are Not "Inherently" Risky



- Assertion rejected by Commission in its KS/OK 271 Order (¶ 207)
- Work performed by central office technicians for decades
- Millions of operational cross-connects in place today in SBC central offices -- each "manually" placed by central office technicians

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

Quality: Performance Metrics

- Comprehensive performance metrics for hot cuts are in place today in each of SBC's states -- key measures of quality and timeliness include premature disconnects, hot cut intervals and provisioning trouble reports
- Established through state collaborative processes based on needs of CLECs and reasonable operational requirements
- These metrics apply irrespective of the number of orders submitted by a CLEC

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SBC Letter to Chairman Powell

Quality: SBC's Hot Cut Performance

- In each of its SWBT 271 Orders, the FCC found that SBC provisions hot cuts in a manner that allows CLECs a meaningful opportunity to compete
- SBC provisioned approximately 500,000 hot cuts from June 2001 through May 2002, and the results demonstrate that quality of performance is not an issue

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

The Record Shows that SBC Can Scale its Hot Cut Processes

- SBC is prepared to meet any increase in hot cut demand, consistent with existing performance standards, resulting from the elimination of the UNE-P
- SBC uses sophisticated force models to determine staffing requirements
  - On a day-to-day basis, SBC can allocate additional resources, as needed, to meet any spikes in demand
- SBC does not cap the number of hot cuts it can or will perform

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

The Record Shows that SBC Can Scale its Hot Cut Processes

- Hot cut work from June 2001 to May 2002 required only 1.3% of SBC's CO man-hours
  - SBC could *quadruple* the number of hot cuts it performs by increasing the total number of central office man-hours by less than 4% - an increase that could be handled through overtime
  - Berringer/Smith declaration: if all UNE-P orders from June 2001 to May 2002 had instead been UNE-L orders, Ameritech could handle increased hot cut volume with 6% overtime, SWBT with 3.7% overtime, and Pacific with .9% overtime

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

Scalability: CLEC Misrepresentations of the Record

- 500,000 hot cuts provisioned from 6/1/01 to 5/31/02 does not represent SBC's provisioning capacity (CompTel/Pace, 10/31/02)
- SBC has never suggested that it could only provision 1 million loops in a year (Z-Tel 12/16/02 and CompTel/PACE 10/31/02)
- Inflated claims of time to match current UNE-P volumes (*e.g.* 8 years) are based on past volumes rather than capacity

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

Scalability: SBC Historical Experience in Handling "Spikes" in Volume

- SBC regularly experiences spikes in ordering activity -- e.g., at the start and end of the school year, as families and college students establish and disconnect telephone service
  - At beginning of University of Michigan's school year, retail orders in the Ann Arbor Main CO increased from a norm of 150 retail orders for new service per day to 800 per day
- SBC handled this and other similar spikes all over its region seamlessly

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

UNE-P Peak Volume Data Shows Future UNE-L Demand is Manageable

- In 2002, the peak weekly volumes for the COs with the highest UNE-P demand were approximately:
  - in Michigan - 2,290
  - in Texas - 420
  - in California - 450
- Since SBC could process an average increase of 650 orders *per day* in the Ann Arbor example, there should be no question that SBC can successfully process the volumes of UNE-L orders which follow the elimination of UNE-P

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

Cost: Hot Cut Charges are Not a Barrier

- Cost of a Hot Cut is Not a Source of Impairment
- Prices are established using TELRIC methodology
- SBC waives labor charges for FDT loop cutovers
- Weighted average loop cutover charge in CA from Jan-Sept 2002 was less than $30.00 per line
  - only SBC state where such information was available
- Consistent with 11/20/02 WorldCom estimates:
  - CA less than $20
  - average of 8 SBC states (AR, CA, IL, KS, MI, MO, OK, TX) approximately $34.00

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Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

Conclusions

- Record evidence demonstrates SBC's excellent hot cut performance at significant volumes today
- The record also shows that processes, metrics, and capacity to scale are in-place today
- The FCC cannot assume impairment based on unsubstantiated speculation about capacity to scale

Docket No. U30851-14
Steve Turner Exhibit No. 3
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SBC Letter to Chairman Powell

Attachment 6

CA Summary by CLEC Line Size

All $ Amounts are Per Line/Per Month									
	UNE Loop Zone Weightings	Tranpsort Zone/Type/OPP	Transport Recurring + Non Recurring	UNE Loop Recurring + Non Recurring	Total Collo	Amortize CLEC GR303	Total CLEC Switch Amortized Investment + Operating Expense		Total CLEC Facility Expense
250 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	RURAL/UDT	$ 5.49	$ 19.73	$2.43	$3.73	$4.32		$ 35.71
500 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	RURAL/UDT	$ 5.49	$ 19.73	$1.22	$1.99	$4.32		$ 32.75

Revenue		
Local & LD Offering	Other (Access, SLC, etc.)*	Total Revenue
$ 40.00	$ 8.00	$ 48.00
$ 60.00	$ 8.00	$ 68.00

Other Expenses		
LD Costs*	Est. SG&A @ 20%	LD Costs + SG&A@20%
$ 5.00	$ 9.60	$ 14.60
$ 5.00	$ 13.60	$ 18.60

CLEC Margin Analysis @ $40 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 48.00	$ 35.71	$ 14.60	$ (2.31)	-5%
500 Lines	$ 48.00	$ 32.75	$ 14.60	$ 0.65	1%

CLEC Margin Analysis @ $60 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 68.00	$ 35.71	$ 18.60	$ 13.69	20%
500 Lines	$ 68.00	$ 32.75	$ 18.60	$ 16.65	24%

UDT (Statewide - no Geographic Deaveraging)

Factors	
Loop Concentration Ratio	4
# of UDT Transport Miles	25
NRC Amortization Period(months)	18

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K] = [H]+[J]
UNBUNDLED DEDICATED TRANSPORT(UDT)												
STATE		Fixed Mileage	Variable Mileage	Cross Connect	Multiplexing	TOTAL DS1 UDT TRANSPORT per DS1 (UNCHANNELIZED)	# of Whole DS1's	# OF VG Channels	UDT RECURRING TRANSPORT PER CHANNEL RATE	NRC per Order	Amortized per Channel	UDT Recurring + Non Recurring Monthly per Line
CA		$ 32.32	$ 46.00	$ 38.78	$ 255.58	$ 372.68	3.00	250	$ 4.47	$ 4,572.58	$ 1.02	$ 5.49
CA		$ 32.32	$ 46.00	$ 38.78	$ 255.58	$ 372.68	6.00	500	$ 4.47	$ 9,145.00	$ 1.02	$ 5.49

DS1 UDT Rates CA Generic Interconnection Agreement

	MRC	NRC
Fixed Mileage	$ 32.32	$ 67.62
Variable Mileage	$ 1.84	$ 57.35
Multiplexing	$ 255.58	$ 80.12
Cross Connect	$ 19.39	
Service Order		$ 0.16

UNE 2W Analog Loop MRC and NRC Costs

Factors	
Number of Loops per LSR	1
NRC Amortization Period(months)	18
CHC Amortization Period(months)	18
% of Coord. Hot Cuts (CHC)	32%

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
STATE		2W Analog Loop	2W Loop to Collo Cross Connect	**Total Recurring UNE Rate**	Install Service Order NRC	Loop Connect NRC	Cross Connect NRC	Disconnect Service Order NRC	Loop Disconnect NRC	Total NRC	NRC Amortization (over 18 months)	Coordinated Hot Cuts (CHC)	CLEC Internal CHC/FDT Costs	CHC Amortized	**UNE Recurring + Non Recurring (monthly per line)**
CA	URBAN	$ 8.38	$ -	$ 8.38	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	$ 12.16
CA	SUBURBAN	$ 11.27	$ -	$ 11.27	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	$ 15.05
CA	RURAL	$ 19.64	$ -	$ 19.64	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	$ 23.42
	BLEND = 0% URBAN, 44% SUBURBAN, 56% RURAL.														
CA	BLEND	$ 15.96	$ -	$ 15.96	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	$ 19.73

CLEC GR303 Equipment and Collo

Factors	
Annual Interest Rate	12.19%
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

		[A]	[B]	[C]	[D] = [B] + [C]		[E]	[F]	[G]	[H] = [D]+[G]
STATE	Line Size	Collo NRC Per Line	Amortized NRC(per Line per Month)	Collo Monthly Recurring(per Line per Month)	Total Collo per Line Per Month		CLEC GR303 Equip Capital per Line	Residual Value(exclude from Amortization)	Amortize Non-Residual portion of CLEC GR303(per Line per Month)	Total Collo + Amortized GR303 per Line Per Month
CA	250	$ 19.10	$0.28	$ 2.16	$2.43		$84.98	$ -	$1.30	$3.73
CA	500	$ 9.55	$0.14	$ 1.08	$1.22		$50.38	$ -	$0.77	$1.99

CLEC Switch Investments

Factors	
Annual Interest Rate	12.19%
Number of Years	10
Number of Pmts./Year	12
Residual Value	0%

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
STATE	CLEC Switch Investment(per Line)	CLEC Switch Support Investment	Total CLEC Switch Investment(per Line)	Residual Total CLEC Switch Investment (per Line)		Total CLEC Switch Investment Maintenance & Other Expense	Amortize Non-Residual portion of Total CLEC Switch Invesment	Total CLEC Switch Amortized Investment + Operating Expense per Line per Month
CA	$ 158.00	$ 58.60	$ 216.60	$0.00		$1.19	$3.13	$4.32

Assumptions

Unbundled Dedicated Transport (UDT)

All UDT rates are from the CA Generic Interconnection Agreement
25 Air miles of transport assumed.
NRC assumes only one LSR required for all DS1s within each Line Size Configuration
NRCs per DS1 do not vary with number of DS1 on each order.
Total NRC is spread across 18 months.

UNE Loop

2W Analog Loop, Cross Connect and NRC rates from the CA Generic Interconnection Agreement
Service Order NRC is divided by 1 Loops per LSR.
Coordinated Hot Cuts are based on 1 Loop per CHC
WorldCom's $10 CHC internal costs are included and applied to both CHC and FDT activity.
CHC related NRCs are spread across 18 months.
Remaining NRCs are spread across 18 months.
Blended Loop Rate = 0% URBAN, 44% SUBURBAN, 56% RURAL.

Collo/GR303

Virtual Collocation is assumed
Collocation MRC and NRCs do not vary based on Line Size Configuration
GR303 Digital Loop Concentration equipment costs are variable based on Line Size Configuration

CLEC Switch

Cost estimate for a switch equipped to serve 16,128 GR303 customers assuming 4:1 concentration ratio on both GR303 and Trunking
Per line per month expense includes Switch Investment w/EF&I and Annual Charge Factors(ACF) for Building Land, Power, Maintenance and Other Expenses.

FACTORS

Amortization
Applied to Collo, GR303 and CLEC Switch

Annual Interest Rate	12.19%
Number of Years Switch	10
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

Loop Concentration Factor(all states)	4
# of UNE Loops per LSR	1
UNE NRC Amoritzation(months)	18
UNE % of Coord. Hot Cuts (CHC)	32%
CLEC SG&A	20%

MI Summary by CLEC Line Size

All $ Amounts are Per Line/Per Month									
	UNE Loop Zone Weightings	Transport Type	Transport Recurring + Non Recurring	UNE Loop Recurring + Non Recurring	Total Collo	Amortize CLEC GR303	Total CLEC Switch Amortized Investment + Operating Expense		Total CLEC Facility Expense
250 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	UDT	$ 2.89	$ 14.15	$5.11	$6.41	$3.86		$ 32.43
500 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	UDT	$ 2.87	$ 14.15	$2.63	$3.40	$3.86		$ 26.92

Revenue		
Local & LD Offering	Other (Access, SLC, etc.)*	Total Revenue
$ 40.00	$ 8.00	$ 48.00
$ 60.00	$ 8.00	$ 68.00

Other Expenses		
LD Costs*	Est. SG&A @ 20%	LD Costs + SG&A@20%
$ 5.00	$ 9.60	$ 14.60
$ 5.00	$ 13.60	$ 18.60

CLEC Margin Analysis @ $40 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 48.00	$ 32.43	$ 14.60	$ 0.97	2%
500 Lines	$ 48.00	$ 26.92	$ 14.60	$ 6.48	13%

CLEC Margin Analysis @ $60 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 68.00	$ 32.43	$ 18.60	$ 16.97	25%
500 Lines	$ 68.00	$ 26.92	$ 18.60	$ 22.48	33%

UDT (Statewide - no Geographic Deaveraging)

Factors	
Loop Concentration Ratio	4
# of UDT Transport Miles	25
NRC Amortization Period(months)	18

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K] = [H]+[J]
UNBUNDLED DEDICATED TRANSPORT(UDT)												
STATE		Fixed Mileage	Variable Mileage	Cross Connect	Multiplexing	TOTAL DS1 UDT TRANSPORT per DS1 (UNCHANNELIZED)	# of Whole DS1's	# OF VG Channels	UDT RECURRING TRANSPORT PER CHANNEL RATE	NRC per Order	Amortized per Channel	UDT Recurring + Non Recurring Monthly per Line
MI		$ 20.12	$ 9.00	$ 0.54	$ 178.18	$ 207.84	3	250	$ 2.49	$ 1,781.90	$ 0.40	$ 2.89
MI		$ 20.12	$ 9.00	$ 0.54	$ 178.18	$ 207.84	6	500	$ 2.49	$ 3,426.98	$ 0.38	$ 2.87

DS1 UDT Rates MI MPSC Tariff # 20

	MRC	NRC
Fixed Mileage	$ 10.06	$ -
Variable Mileage	$ 0.36	$ -
Multiplexing	$ 178.18	$0.00
Cross Connect	$ 0.27	$ -
Admin Charge Install (Per Service Order)	$ -	$ 136.82
Design & Central Office Connection Charge - Per Circuit - Install	$ -	$ 339.17
Carrier Connection Charge Per Termination - Install	$ -	$ 209.19

UNE 2W Analog Loop MRC and NRC Costs

Factors		
Number of Loops per LSR		1
NRC Amortization Period(months)		18
CHC Amortization Period(months)		18
% of Coord. Hot Cuts (CHC)		43%

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
STATE		2W Analog Loop	2W Loop to Collo Cross Connect	**Total Recurring UNE Rate**	Install Service Order NRC	Loop Connect NRC	Cross Connect NRC	Disconnect Service Order NRC	Loop Disconnect NRC	Total NRC	NRC Amortization (over 18 months)	Coordinated Hot Cuts (CHC)	CLEC Internal CHC/FDT Costs	CHC Amortized	**UNE Recurring + Non Recurring (monthly per line)**
MI	URBAN	$ 8.47	$ 0.13	$ 8.60	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 11.76
MI	SUBURBAN	$ 8.73	$ 0.13	$ 8.86	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 12.02
MI	RURAL	$ 12.54	$ 0.13	$ 12.67	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 15.83
	BLEND = 0% URBAN, 44% SUBURBAN, 56% RURAL.														
MI	BLEND	$ 10.66	$ 0.13	$ 10.99	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 14.15

CLEC GR303 Equipment and Collo

Factors	
Annual Interest Rate	12.19%
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

		[A]	[B]	[C]	[D] = [B] + [C]		[E]	[F]	[G]	[H] = [D]+[G]
STATE	Line Size	Collo NRC Per Line	Amortized NRC(per Line per Month)	Collo Monthly Recurring(per Line per Month)	Total Collo per Line Per Month		CLEC GR303 Equip Capital per Line	Residual Value(exclude from Amortization)	Amortize Non-Residual portion of CLEC GR303(per Line per Month)	Total Collo + Amortized GR303 per Line Per Month
MI	250	$ 34.97	$0.51	$ 4.61	$5.11		$84.98	$ -	$1.30	$6.41
MI	500	$ 20.95	$0.30	$ 2.33	$2.63		$50.38	$ -	$0.77	$3.40

CLEC Switch Investments

Factors	
Annual Interest Rate	12.19%
Number of Years	10
Number of Pmts./Year	12
Residual Value	0%

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
STATE	CLEC Switch Investment(per Line)	CLEC Switch Support Investment	Total CLEC Switch Investment(per Line)	Residual Total CLEC Switch Investment (per Line)		Total CLEC Switch Investment Maintenance Expense	Amortize Non-Residual portion of Total CLEC Switch Invesment	Total CLEC Switch Amortized Investment + Operating Expense per Line per Month
MI	$ 158.00	$ 40.32	$ 198.32	$0.00		$0.99	$2.87	$3.86

Assumptions

Unbundled Dedicated Transport (UDT)

All UDT rates are from the MPSC Tariff #20
25 Air miles of transport assumed.
In AIT the Fixed Mileage rate is applied at both ends of the IOF pipe.
NRC assumes only one LSR required for all DS1s within each Line Size Configuration
NRCs per DS1 do not vary with number of DS1 on each order.
Total NRC is spread across 18 months.

UNE Loop

2W Analog Loop, Cross Connect and NRC rates from MPSC Tariff #20
Service Order NRC is divided by 1 Loops per LSR.
Coordinated Hot Cuts % and rate are set to TX values as a proxy
Worldcom's $10 CHC internal costs are included and applied to both CHC and FDT activity.
CHC related NRCs are spread across 18 months.
Remaining NRCs are spread across 18 months.
Blended Loop Rate = 0% URBAN, 44% SUBURBAN, 56% RURAL.

Collo/GR303

Virtual Collocation is assumed
Collocation MRC and NRCs are variable based on Line Size Configuration
GR303 Digital Loop Concentration equipment costs are variable based on Line Size Configuration

CLEC Switch

Cost estimate for a switch equipped to serve 16,128 GR303 customers assuming 4:1 concentration ratio on both GR303 and Trunking
Per line per month expense includes Switch Investment w/EF&I and Annual Charge Factors(ACF) for Building Land, Power, Maintenance and Other Expenses.

FACTORS

Amortization
Applied to Collo, GR303 and CLEC Switch

Annual Interest Rate	12.19%
Number of Years Switch	10
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

Loop Concentration Factor(all states)	4
# of UNE Loops per LSR	1
UNE NRC Amoritzation(months)	18
UNE % of Coord. Hot Cuts (CHC) TX value	43%
CLEC SG&A	20%

TX Summary by CLEC Line Size

All $ Amounts are Per Line/Per Month									
	UNE Loop Zone Weightings	Tranpsort Zone/Type	Transport Recurring + Non Recurring	UNE Loop Recurring + Non Recurring	Total Collo	Amortize CLEC GR303	Total CLEC Switch Amortized Investment + Operating Expense		Total CLEC Facility Expense
250 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	RURAL/UDT	$ 5.11	$ 20.70	$2.75	$4.05	$4.05		$ 36.65
500 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	RURAL/UDT	$ 4.98	$ 20.70	$1.47	$2.24	$4.05		$ 33.43

Revenue		
Local & LD Offering	Other (Access, SLC, etc.)*	Total Revenue
$ 40.00	$ 8.00	$ 48.00
$ 60.00	$ 8.00	$ 68.00

Other Expenses		
LD Costs*	Est. SG&A @ 20%	LD Costs + SG&A@20%
$ 5.00	$ 9.60	$ 14.60
$ 5.00	$ 13.60	$ 18.60

CLEC Margin Analysis @ $40 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 48.00	$ 36.65	$ 14.60	$ (3.25)	-7%
500 Lines	$ 48.00	$ 33.43	$ 14.60	$ (0.03)	0%

CLEC Margin Analysis @ $60 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 68.00	$ 36.65	$ 18.60	$ 12.75	19%
500 Lines	$ 68.00	$ 33.43	$ 18.60	$ 15.97	23%

RURAL UDT

Factors	
Loop Concentration Ratio	4
# of UDT Transport Miles	25
NRC Amortization Period(months)	18

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K] = [H]+[J]
UNBUNDLED DEDICATED TRANSPORT(UDT)												
STATE		Fixed Mileage	Variable Mileage	Cross Connect	Multiplexing	TOTAL DS1 UDT TRANSPORT per DS1 (UNCHANNELIZED)	# of Whole DS1's	# OF VG Channels	UDT RECURRING TRANSPORT PER CHANNEL RATE	NRC per Order	Amortized per Channel	UDT Recurring + Non Recurring Monthly per Line
TX	RURAL	$ 44.49	$ 77.76	$ 15.02	$ 81.15	$ 218.41	3.00	250	$ 2.62	$ 11,196.77	$ 2.49	$ 5.11
TX	RURAL	$ 44.49	$ 77.76	$ 15.02	$ 81.15	$ 218.41	6.00	500	$ 2.62	$ 21,219.77	$ 2.36	$ 4.98

DS1 RURAL UDT Rates TX T2A

	MRC	NRC-First	NRC-Addt'l
Fixed Mileage	$ 44.49	$ 174.43	$ 130.08
Variable Mileage	$ 3.11	$ 174.43	$ 130.08
Multiplexing	$ 81.15	$ 96.84	$ 48.51
Cross Connect	$ 7.51	$ 57.08	$ 40.49
Service Order		$ -	$ -

UNE 2W Analog Loop MRC and NRC Costs

Factors	
Number of Loops per LSR	1
NRC Amortization Period(months)	18
CHC Amortization Period(months)	18
% of Coord. Hot Cuts (CHC)	43%

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
STATE		2W Analog Loop	2W Loop to Collo Cross Connect	**Total Recurring UNE Rate**	Install Service Order NRC	Loop Connect NRC	Cross Connect NRC	Disconnect Service Order NRC	Loop Disconnect NRC	Total NRC	NRC Amortization (over 18 months)	Coordinated Hot Cuts (CHC)	CLEC Internal CHC/FDT Costs	CHC Amortized	**UNE Recurring + Non Recurring (monthly per line)**
TX	URBAN	$ 12.14	$ 1.24	$ 13.38	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	$ 16.20
TX	SUBURBAN	$ 13.65	$ 1.24	$ 14.89	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	$ 17.71
TX	RURAL	$ 18.98	$ 1.24	$ 20.22	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	$ 23.04
	BLEND = 0% URBAN, 44% SUBURBAN, 56% RURAL														
TX	BLEND	$ 16.63	$ 1.24	$ 17.87	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	$ 20.70

CLEC GR303 Equipment and Collo

Factors	
Annual Interest Rate	12.19%
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

		[A]	[B]	[C]	[D] = [B] + [C]		[E]	[F]	[G]	[H] = [D]+[G]
STATE	Line Size	Collo NRC Per Line	Amortized NRC(per Line per Month)	Collo Monthly Recurring(per Line per Month)	Total Collo per Line Per Month		CLEC GR303 Equip Capital per Line	Residual Value(exclude from Amortization)	Amortize Non-Residual portion of CLEC GR303(per Line per Month)	Total Collo + Amortized GR303 per Line Per Month
TX	250	$ 39.75	$0.57	$ 2.17	$2.75		$84.98	$ -	$1.30	$4.05
TX	500	$ 24.70	$0.36	$ 1.11	$1.47		$50.38	$ -	$0.77	$2.24

CLEC Switch Investments

Factors	
Annual Interest Rate	12.19%
Number of Years	10
Number of Pmts./Year	12
Residual Value	0%

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
STATE	CLEC Switch Investment(per Line)	CLEC Switch Support Investment	Total CLEC Switch Investment(per Line)	Residual Total CLEC Switch Investment (per Line)		Total CLEC Switch Investment Maintenance & Other Expense	Amortize Non-Residual portion of Total CLEC Switch Invesment	Total CLEC Switch Amortized Investment + Operating Expense per Line per Month
TX	$ 158.00	$ 47.22	$ 205.22	$0.00		$1.08	$2.97	$4.05

Assumptions

Unbundled Dedicated Transport (UDT)

All UDT rates are from the TX T2A Pricing Appendix
25 Air miles of transport assumed.
NRC assumes only one LSR required for all DS1s within each Line Size Configuration
NRCs per DS1 vary with number of DS1 on each order, based on the 'First and Additional' structure.
Total NRC is spread across 18 months.

UNE Loop

2W Analog Loop, Cross Connect and NRC rates from the TX T2A Pricing Appendix
Service Order NRC is divided by 1 Loops per LSR.
Coordinated Hot Cuts are based on 1 Loop per CHC
Worldcom's $10 CHC internal costs are included and applied to both CHC and FDT activity.
CHC related NRCs are spread across 18 months.
Remaining NRCs are spread across 18 months.
Blended Loop Rate = 0% URBAN, 44% SUBURBAN, 56% RURAL.

Collo/GR303

Virtual Collocation is assumed
Collocation MRC and NRCs are variable based on Line Size Configuration
GR303 Digital Loop Concentration equipment costs are variable based on Line Size Configuration

CLEC Switch

Cost estimate for a switch equipped to serve 16,128 GR303 customers assuming 4:1 concentration ratio on both GR303 and Trunking
Per line per month expense includes Switch Investment w/EF&I and Annual Charge Factors(ACF) for Building Land, Power, Maintenance and Other Expenses.

FACTORS

Amortization
Applied to Collo, GR303 and CLEC Switch

Annual Interest Rate	12.19%
Number of Years Switch/Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

Loop Concentration Factor(all states)	4
# of UNE Loops per LSR	1
UNE NRC Amoritzation(months)	18
UNE % of Coord. Hot Cuts (CHC)	43%
CLEC SG&A	20%

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February 4, 2003

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW, Room TWB-204
Washington, DC 20554

Re: Notice of Written Ex Parte Communication, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338, 96-98 and 98-147

Dear Ms. Dortch:

On January 14, 2003, SBC filed an ex parte submission with the Commission that purported to offer a refutation of an analysis of UNE-L cost impairment offered by WorldCom and to propose its own preferred margin-based method for determining impairment.[1] SBC's effort succeeds at neither. First, even accepting SBC's error-ridden and understated analysis of CLEC cost impairment demonstrates that CLECs will be incapable of competing for customers served by analog lines if they must use UNE-L to reach these customers. Second, the margin method proposed by SBC to evaluate impairment is improper as both a matter of law and of economics. This submission provides a detailed evaluation and refutation of the positions taken in SBC's ex parte.[2]

[1] *See* ex parte letter from James C. Smith, SBC to Chairman Michael Powell, January 14, 2003 and ex parte letter from Gil M. Strobel, representing WorldCom to Marlene H. Dortch, January 8, 2003. Note that AT&T filed evaluations of CLEC economic impairment in an ex parte submission from Joan Marsh, AT&T to Marlene H. Dortch, on January 17, 2003. To the best of AT&T's knowledge, SBC has not attempted any refutation of this analysis.

[2] Although SBC has filed a further ex parte on these issues (letter from James C. Smith to Michael Powell, January 28, 2003, this latest submission makes no effort to correct any of the data or methodological errors that were present in its January 14, 2003 submission save correcting (without comment) an arithmetic error in this earlier submission. Similarly, BellSouth has also filed an undocumented viewgraph presentation (ex parte letter from Glenn T. Reynolds to Marlene Dortch, January 17, 2003) in which it appears follow the

Although SBC calculates that a CLEC seeking to use UNE-L to access unbundled loops faces a substantial cost disadvantage of roughly $10 per line per month relative to its own costs, it claims that impairment should be evaluated only on the basis of a cursory margin analysis that (i) incorporates a panoply of telecommunications services, not just the local services that a CLEC may seek to offer; and (ii) assumes that this cost impairment can be dismissed so long as there is a small segment of extremely high revenue customers who (at least hypothetically) offer the CLEC sufficient margin to cover its calculated $10 cost disadvantage. SBC's hypothetical "impairment" analysis is factually wrong in its calculation of actual cost impairment levels, wrong in its hypothetical assumptions about customer revenues, and, most important, wrong on the law and the underlying basic economics.

This analysis is divided into three parts. First, it evaluates the accuracy of SBC's development of the cost impairments suffered by CLECs seeking to provide voice service to customers served by analog loops. It finds that SBC makes numerous basic errors in its financial analysis. These include use of incomplete or inaccurate data, misunderstanding standard analytic practice for converting capital costs into monthly recurring costs, and errors in simple arithmetic. As a result of these numerous errors, SBC's overall cost impairment calculation of $10 per line per month is significantly understated relative to the amount that would result if SBC's most basic errors were corrected. Second, this analysis shows that SBC's contention that CLEC impairment be measured with respect to expansive profit margins for a high-volume customer segment, rather than local service costs for all POTS customers, has no basis in economics and is properly precluded by the plain language of the Telecommunications Act. Furthermore, the analysis also demonstrates that only a very tiny fraction of the total residence market generates revenue levels that are as generous as SBC hypothesizes. Finally, the analysis examines SBC's actual calculation of hypothetical CLEC profit margins. It demonstrates that even if, *arguendo,* one accepts SBC's inadmissible impairment test, simple correction of either SBC's overstatement of the revenues available to CLECs or understatement of CLEC costs necessary to earn these putative revenues, demonstrates that CLECs will be unable to profitably address the residence market using UNE-L.

SBC's Inaccurate Calculation of Overall Cost Impairments

Attachment A to this paper demonstrates that SBC has made a number of significant errors in calculating the individual cost impairments that CLECs must suffer if they attempt to use their own switch to serve customers with voice-grade loops. The net effect of SBC's errors and omissions in calculating the cost of the "extra" network that CLECs must employ to access and extend their customers' loops is to substantially understate the CLECs' overall cost impairment. These errors and omissions result from SBC's failure to: (i) account for all of a competitor's collocation equipment and space requirements; (ii) employ accurate CLEC capital carrying costs including taxes; (iii)

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same flawed procedures and employ similarly exaggerated hypothetical revenue data as SBC's submissions.

account for all of a competitor's operating and maintenance costs associated with this additional "backhaul" network; and (iv) recognize that CLEC backhaul networks can never be 100% "filled." SBC's failure to account correctly for all of these costs leads to an estimate of CLEC cost impairments that is probably too low by half.[3]

But despite SBC's inaccurate and understated execution of its cost impairment analysis, it nevertheless yields impairment figures that are of very great competitive significance. When added together, the individual components of SBC's analysis add up to about $10 per line per month -- even before its patent data and methodological errors are corrected.[4] Given the significance of the uncorrected SBC figure, the remainder of this analysis then assumes *arguendo* that SBC's $10 cost impairment figure is correct.

SBC-calculated CLEC cost impairments

	California		Michigan		Texas	
Impairment	250 Lines	500 Lines	250 Lines	500 Lines	250 Lines	500 Lines
Collocation	$2.43	$1.22	$5.11	$2.63	$2.75	$1.47
Digital loop carrier	$1.30	$0.77	$1.30	$0.77	$1.30	$0.77
Backhaul transport	$5.49	$5.49	$2.89	$2.87	$5.11	$4.98
Hot cut	$1.52	$1.52	$1.58	$1.58	$1.58	$1.58
Total cost impairment	**$10.74**	**$9.00**	**$10.88**	**$7.85**	**$10.74**	**$8.80**

SBC's Faulty Impairment Test

SBC states that the cost impairment it has calculated should be irrelevant for the purposes of satisfying the Telecom Act. Rather, SBC claims that impairment should be measured only with respect to the overall profit margins that a CLEC might receive from a broad portfolio of services sold to a particular customer segment. In particular, SBC argues that a CLEC is not impaired in providing the services it seeks to provide so long as it could earn a positive profit margin from serving a hypothetical set of high volume customers that purchase an expansive suite of local and long distance services. SBC's proposed "impairment" test is wrong as to the law, wrong as to economics and even wrong in its "facts" about available customer revenues.

"Profit margins" are not a rational test for impairment - As noted by the Commission and elsewhere, profit margins are not the proper basis upon which to determine whether interconnection pricing is consistent with the Telecommunications'

[3] SBC's error is especially large with respect to the 250 or 500 line backhaul networks that it investigates. Such "thin" backhaul networks are likely to have extra costs that are disproportionately higher than those incurred to provide "thicker" networks that would be used to serve more dense areas.

[4] SBC's basic arithmetic error has been corrected in deriving these figures.

Act's pro-competitive intent and instruction that prices for unbundled network elements (and ultimately the retail services provided using those inputs) should be based on cost. The reason for this is simple. Because of the incumbents' monopoly position, current ILEC retail pricing frequently bears little relation to costs. Indeed, on average, current ILEC retail prices for telecommunications services are set well above cost.[5] Thus, measuring CLEC impairment on the basis of current price-cost margins is a trap for the unwary.[6] Competitors that enter based on such price bait and lacking cost parity will soon be squashed when the ILEC decides to exercise its cost advantage and reduce prices to the point at which entrants are made unprofitable.[7] Critically, this is not just an academic concern. When faced with CLEC entry in Michigan, Illinois and California, SBC itself has dramatically reduced its retail prices – and focused these reductions on the high volume retail customer segments that it claims are the most profitable.

Indeed, SBC appears to recognize that a margin-based impairment test would violate basic economic principles. Thus, it offers two reasons to justify its otherwise prohibited use of this test. First, SBC asserts that impairment should be measured with respect to margins rather than costs because TELRIC costs are lower than what the ILECs' claim to be their "actual" costs. Second SBC claims that even if a CLEC enters at an impaired level of cost, it will not be driven from the market because the ILEC cannot exercise downwards pricing power – presumably because regulatory commission rules prevent ILECs from offering residence customers price cuts. These arguments are sheer nonsense.

The first argument is nothing more than a thinly disguised version of the ILECs' six-year refrain that "TELRIC is too cheap." That argument, however, was fully put to rest by the Supreme Court in *Verizon* v. *FCC*.[8] In that case, the Court found that TELRIC pricing is lawful and that the kind of embedded cost methodology that the incumbents sought to impose would "defeat the competitive purpose of forcing efficient choices on all carriers whether incumbents or entrants."[9] Further, the Court held that

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[5] *See* Lee Selwyn, "Subsidizing the Bell Monopolies: How Government Corporate Welfare Programs are Undermining Telecommunications Competition," Economics and Technology, April 2002 (finding that RBOC switched service revenues exceed their efficient costs by $29 billion per year). Note that such pricing practices are completely consistent with economic theory. The managers and owners of firms that do not face close discipline from competitive suppliers always seek to raise their retail prices above competitive levels in order to return supracompetitive profits to their owners. *See* Jean Tirole, *The Theory of Industrial Organization*, MIT Press, 1988, pp. 62-94.

[6] *See* Robert D. Willig, "Determining 'Impairment' Using the *Horizontal Merger Guidelines*' Entry Analysis," in ex parte letter from C. Fredrick Beckner, III representing AT&T to Marlene Dortch, November 14, 2002; Robert H. Bork, letter to Michael K. Powell attached to ex parte letter from C. Fredrick Beckner, III representing AT&T to Marlene Dortch, January 10; 2003; Laurence J. Kotlikoff, "Natural Monopoly and the Definition of 'Impairment'," attached to ex parte letter from Penelope K. Alberg, AT&T to Marlene Dortch, January 22; 2003 and ex parte letter from Gil M. Strobel, representing WorldCom to Marlene H. Dortch, January 27, 2003.

[7] *See* Jean Tirole, *The Theory of Industrial Organization*, MIT Press, 1988, pp. 367-375.

[8] *Verizon Communications, Inc.* v. *FCC*, 122 S.Ct. 1646 (2002).

[9] *Id.* at 1673.

TELRIC is quite capable of providing incumbents with a reasonable return.[10] Indeed, the Court noted that the ILECs' claim of confiscation was peculiar, because they did not offer a *single* instance of a specific confiscatory rate.[11] Accordingly, there is no evidence that TELRIC is in fact too cheap, and every reason to believe that TELRIC rates are fully compensatory, lawful, procompetitive and necessary to support new entry.

SBC's second argument is simply incredible, and flatly refuted by SBC's own actions in lowering local rates in response to competitive entry in California, Michigan and Illinois. Furthermore, Section 254(k) of the Telecom Act requires state regulators to *eliminate* implicit subsidies in telephone rates. SBC has not identified a single State commission that would prohibit it from reducing local rates, nor could it likely do so. The Commission cannot credit SBC's inference that it operates as a charity – collecting from the heavy-use customers and subsidizing the lower-use ones. Seven years ago, the Telecommunications Act directed that any implicit subsidies in retail rates must be made explicit, and SBC has not named any specific remaining subsidy flow to support its claim. Indeed, acting as a rational business, SBC has designed its current retail tariff structure to return the maximum possible total profit and competitive advantage.[12]

And in all events, the best proof that SBC's argument is made of whole cloth is its own actions in the marketplace. SBC has shown that it is fully capable of eliminating any artificial (non-cost-based) profit margin when it feels the need. In Michigan, in Illinois and in California, SBC has responded to residential UNE-P entry by reducing dramatically the local retail rates it charges residential customers – particularly the higher volume segment of these customers.

SBC's improper market definition - SBC appears to believe that a CLEC is not impaired under the Telecommunications Act with regard to a particular UNE if there exists *any* identifiable demand *segment* that offers a profit sufficient to subsidize its acknowledged $10 per line monthly cost impairment. This view has no grounding in either the Telecommunications Act or in any accepted view of economic public policy. The stated goal of the Telecommunications Act is to bring pro-competitive benefits to "all Americans," not just a few selected ones. And the market segment that SBC claims to have shown to be open to competition by cost-impaired UNE-L CLECs – assuming that SBC does not close its price umbrella -- is small indeed.

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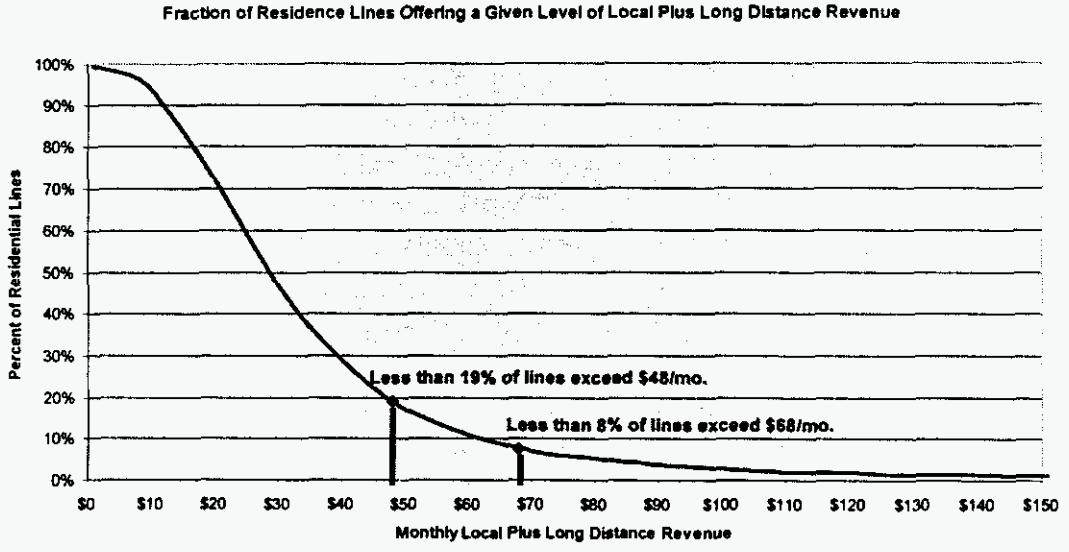
[10] *Id.* at 1677.

[11] *Id.* at 1679, 1680.

[12] An example of the ILECs' ability to exercise their downward pricing power to maximize overall profits may be found in their low Centrex rates. Although the ILECs surely would prefer it if they were able to maintain prices for these Centrex local services at parity with their equivalent single and multiline business services, the ILECs have determined that their overall profitability will be higher if they provide Centrex services at deep discounts relative to equivalent business line rates.

SBC only attempts to show that CLECs could serve a residential customer base that offers revenues of $48 to $68 per line per month for local and long distance services.[13] However, SBC has never, either in its initial proposal regarding such hypothetical revenues or in its instant ex parte, provided any documentation of the extent to which these hypothetical revenue figures comport with actual residence customer demand patterns.[14]

In fact, the proportion of customers SBC identifies as addressable by CLECs notwithstanding a $10 cost impairment is tiny. Analysis of data collected by TNS Telecoms show that fewer than 19% of all residence lines provide $48 in monthly local plus long distance revenue, and fewer than 8% provide $68 in revenue.[15] The following chart shows the small fraction of residential customer lines that would be addressable to UNE-L competitors under SBC's proposed definition of impairment – as well as the huge fraction that would be redlined from competition based on SBC's definition.



Source: TNS Telecoms Bill Harvesting® data

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[13] SBC tries to lighten the appearance of its burden by repeatedly referring to this target market as offering only $40 to $60 per line per month in revenues – without highlighting its further assumption that these figures do not include an additional $8 in assumed SLC and access revenues.

[14] SBC's initial treatment of putative CLEC revenues was provided in an ex parte letter from James C. Smith to Marlene Dortch, dated December 11, 2002. AT&T responded in an ex parte letter from Joan Marsh to Marlene Dortch, dated January 15, 2003. In its instant submission, SBC reinforces the point that its customer revenue figures are entirely hypothetical by declining to present any data or evidence vouching for these figures. Instead, SBC simply states that its entire justification for these figures was provided in its December 11, 2002 ex parte. But this response fails to acknowledge that SBC's December 11 ex parte was itself devoid of documentation or that AT&T's January 15 ex parte provided a documented refutation of the validity of these creamy revenue figures, and that SBC has provided no rebuttal to that showing.

[15] *See* ex parte letter from Joan Marsh, AT&T to Marlene Dortch, January 15, 2003.

Perhaps in recognition that it lacks any data to demonstrate that the fraction of lines offering over $48 or $68 encompasses more than a niche portion of the total residential market, SBC adduces two "reasons" for why its use of these creamy figures may be "excused."

First, it suggests that even though the typical residential customer line may offer an unprofitably smaller amount of revenue, these are not the customer lines that CLECs have acquired under UNE-P. Rather, SBC asserts, CLECs have been able successfully to "cherry-pick" only high-volume customers from the residential market segment. This undocumented allegation was refuted by AT&T in its January 15, 2003 ex parte, and data AT&T has been able to collect since that date make this refutation even more compelling. In the earlier ex parte, AT&T demonstrated that in Michigan, TNS data showed average CLEC residential customer local plus long distance revenues to be slightly less than the average residential customer revenues earned by SBC.[16] Over the past two weeks, AT&T has been able to conduct a similar analysis of TNS data for Illinois – and the results agree with those from Michigan. CLEC residential customers generate no more local plus long distance per-line revenue as do residential customers that have stayed with SBC service. Thus, SBC cannot support its use of $48 to $68 in customer revenues by implying that such revenue ranges represent typical CLEC customers.

Second, SBC argues that even if $48 to $68 per month does not represent the typical residential customer, or even current CLEC customers, it represents CLECs' aspirational customers. To support this claim, SBC references MCI's Neighborhood calling plans and claims that these plans return revenues (exclusive of SLC and access) that are a minimum of $50 to $70 per line.[17] First, this is false. While MCI is obviously happiest when it acquires a customer that selects its highest volume rate option (called "Neighborhood Complete") – which in states with reasonable UNE-P rates (*e.g.*, Michigan, Illinois, California, New York, etc.) sells for $49.99 plus SLC; MCI also offers much lower-cost alternative plans called "Neighborhood Advantage."[18] These less expensive plans cost only $21.99 in California and $27.99 in Michigan and Illinois. At an additional cost of $0.07 per minute for long distance, a California customer would need to use over 400 minutes per month of long distance (over four times the national average) before it would find the higher-priced "Neighborhood Complete" plan to be advantageous. In Michigan and Illinois, a customer would need to use over 314 minutes per month of long distance (over three times the national average) before it would find the higher-priced plan to be advantageous. Thus, SBC's focus on MCI's highest volume plans is misplaced and provides only a far upper bound as to potential CLEC customer revenues.

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[16] Michigan was the first state AT&T chose for this analysis because it has been one where UNE-P has perhaps been its most successful at providing residential customers with competitive alternatives.

[17] *See* SBC January 14, 2002 ex parte at p. 3.

[18] MCI's Neighborhood Complete plan offers unlimited local *and* long distance calling and multiple additional features. Neighborhood Advantage also offers unlimited local calling and multiple features, but generally does not include long distance charges. *See* http://www.mci.com/Res_Neighborhood_LTS.html .

SBC makes a similar allegation that AT&T chooses to serve only customers generating at least $50 per month in revenues.[19] AT&T of course seeks to gain as many of the highest value customers as it can, just as every ILEC seeks strongly to retain such customers. However, as the TNS Telecom Bill Harvesting® data show, such direct conflict between CLECs and ILECs over this desired customer segment has not to date shown the CLECs to be more successful at winning a higher volume customer mix than the ILECs. Moreover, for a large carrier like AT&T, it is critical to obtain volumes of customers, both large and small, when it enters new markets. Thus, AT&T, like WorldCom, has residential offers that are designed to appeal to all revenue segments. This is the only way for entrants to be successful over the long term and to fulfill the Act's intent to bring the benefits of competition to all Americans.

[19] *See* ex parte letter from Brian J. Benison, SBC to Marlene Dortch, dated January 27, 2003 (noting that AT&T executive John Polumbo stated that high value customers are AT&T's focus and target).

SBC's incorrect margin calculation

Even if SBC were correct that margins, not costs, should measure impairment, and even if SBC were correct that only the profit margins from the highest possible volume customer segment should be used to determine whether CLECs are impaired for the entire market, SBC is still is incorrect in its calculation of impairment levels.

SBC's impairment analysis runs as follows:

SBC calculation of CLEC impairment

		California		Michigan		Texas	
	Impairment	250 Lines	500 Lines	250 Lines	500 Lines	250 Lines	500 Lines
1	UNE Loop + hot cut	$19.73	$19.73	$14.15	$14.15	$20.69	$20.69
2	Collocation	$2.43	$1.22	$5.11	$2.63	$2.75	$1.47
3	Digital loop carrier*	$1.30	$0.77	$1.30	$0.77	$1.30	$0.77
4	Backhaul transport	$5.49	$5.49	$2.89	$2.87	$5.11	$4.98
5	CLEC switch	$4.32	$4.32	$3.68	$3.68	$4.05	$4.05
6	Cost of long distance	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00
7	SG&A costs @ $48 rev	$9.60	$9.60	$9.60	$9.60	$9.60	$9.60
8	SG&A costs @ $58 rev	$11.60	$11.60	$11.60	$11.60	$11.60	$11.60
9	SG&A costs @ $68 rev	$13.60	$13.60	$13.60	$13.60	$13.60	$13.60
10	**Total cost @ $40 rev****	**$47.87**	**$46.13**	**$41.73**	**$38.70**	**$48.50**	**$46.56**
11	**Total cost @ $50 rev****	**$49.87**	**$48.13**	**$43.73**	**$40.70**	**$50.50**	**$48.56**
12	**Total cost @ $60 rev****	**$51.87**	**$50.13**	**$45.73**	**$42.70**	**$52.50**	**$50.56**
13	SBC assumed revenue**	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00
14	Implied net margin*	$0.13	$1.87	$6.27	$9.30	($0.50)	$1.44
15	SBC assumed revenue**	$58.00	$58.00	$58.00	$58.00	$58.00	$58.00
16	Implied net margin*	$8.13	$9.87	$14.27	$17.30	$7.50	$9.44
17	SBC assumed revenue**	$68.00	$68.00	$68.00	$68.00	$68.00	$68.00
18	Implied net margin*	$16.13	$17.87	$22.27	$25.30	$15.50	$17.44

* Figures corrected for SBC arithmetic double-count of collocation costs in DLC cost

** Note that SBC-stated revenue figures of $40/$50/$60 do not include $8 of SLC and access revenue

However nearly every row in the above table is inaccurately or inappositely developed by SBC.[20] These errors are set forth in detail in Attachment A and summarized below.

Row 2: Because of under-resourcing of collocation needs and failure to account correctly for capital carrying costs, maintenance costs, operations costs and underfill, SBC's calculated collocation cost figure is likely no more than half of what is appropriate.

Row 3: SBC's DLC costs are exceedingly low and do not include the costs of other collocation equipment the CLEC would require, such as DS0 point-of-termination panels, DSx-3 termination panels, and assorted test equipment, etc. In addition, correct capital carrying costs, maintenance costs, operations costs and underfill are not accounted for in SBC's calculations. An accurate figure would be roughly three times higher than SBC's stated figure.

Row 5: SBC omits completely the costs a CLEC would incur for an interoffice transport network necessary for its customers to complete calls to customers served from other local switches. Overall figure is likely $1 to $2 too low.

Row 6: The cost of long distance is dramatically understated. The $5 figure used by SBC was AT&T's estimate of just an *ILEC's* incremental cost to offer national average quantities of long distance (about 97 minutes per month for residence lines). A customer generating $48 to $68 in monthly local plus long distance revenue is almost surely using far more than 97 minutes of long distance per month. A more accurate long distance cost figure for customers generating these high revenue levels would be $10/month in long distance cost for a $48 customer and $20/month for a $68 customer.

Rows 7-9: AT&T does not agree that 20% SG&A costs are accurate for a CLEC entering a new market and seeking to acquire new customers. More than likely, these costs are significantly higher.

When just the cost errors detailed above are corrected, even SBC's high-volume local plus long distance customer margin impairment analysis shows that for all except the highest of the high-revenue customers in Michigan, a CLEC would earn a *negative* net margin, and thus not enter the local business in California, Michigan and Texas if it was unable to use UNE-P. And if SBC's hypothetical high-volume customers are discarded and the analysis focuses upon a residence line offering TNS' national average local plus long distance revenue of $41 per month, net margins are significantly *negative* in *all* of SBC's examples.

[20] These errors are in addition to SBC's arithmetic error in double-counting collocation costs which has been corrected in the above table.

Corrected SBC-style calculation of CLEC impairment

	Impairment	California 250 Lines	California 500 Lines	Michigan 250 Lines	Michigan 500 Lines	Texas 250 Lines	Texas 500 Lines
1	UNE Loop + hot cut	$19.73	$19.73	$14.15	$14.15	$20.69	$20.69
2	Collocation	$4.86	$2.44	$10.22	$5.26	$5.50	$2.94
3	Digital loop carrier*	$3.90	$2.31	$3.90	$2.31	$3.90	$2.31
4	Backhaul transport	$5.49	$5.49	$2.89	$2.87	$5.11	$4.98
5	CLEC switch	$5.82	$5.82	$5.18	$5.18	$5.55	$5.55
6	Cost of LD @ $48 rev	$10.00	$10.00	$10.00	$10.00	$10.00	$10.00
6	Cost of LD @ $50 rev	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00
6	Cost of LD @ $60 rev	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
7	SG&A costs @ $48 rev	$9.60	$9.60	$9.60	$9.60	$9.60	$9.60
8	SG&A costs @ $58 rev	$11.60	$11.60	$11.60	$11.60	$11.60	$11.60
9	SG&A costs @ $68 rev	$13.60	$13.60	$13.60	$13.60	$13.60	$13.60
10	**Total cost @ $40 rev****	**$59.40**	**$55.39**	**$55.94**	**$49.37**	**$60.35**	**$56.07**
11	**Total cost @ $50 rev****	**$66.40**	**$62.39**	**$62.94**	**$56.37**	**$67.35**	**$63.07**
12	**Total cost @ $60 rev****	**$73.40**	**$69.39**	**$69.94**	**$63.37**	**$74.35**	**$70.07**
13	SBC assumed revenue**	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00
14	Implied net margin*	($11.40)	($7.39)	($7.94)	($1.37)	($12.35)	($8.07)
15	SBC assumed revenue**	$58.00	$58.00	$58.00	$58.00	$58.00	$58.00
16	Implied net margin*	($8.40)	($4.39)	($4.94)	$1.63	($9.35)	($5.07)
17	SBC assumed revenue**	$68.00	$68.00	$68.00	$68.00	$68.00	$68.00
18	Implied net margin*	($5.40)	($1.39)	($1.94)	$4.63	($6.35)	($2.07)
	Average TNS revenue	$41.00	$41.00	$41.00	$41.00	$41.00	$41.00
	Implied net margin*	($12.00)	($7.99)	($8.54)	($1.97)	($12.95)	($8.67)

* Figures corrected for SBC arithmetic double-count of collocation costs in DLC cost

** Note that SBC-stated revenue figures of $40/$50/$60 do not include $8 of SLC and access revenue

Conclusion

Regardless of whether SBC's understated calculation of CLEC cost impairment is accepted or corrected, CLECs who are forced to use current collocation, hot cut and backhaul architectures to gain access to ILEC voice-grade loops will be at a substantial cost disadvantage relative to the ILEC. Even using SBC's understated $10 figure for cost impairment results in the CLEC's disadvantage amounting to over 33% of CLEC average local revenues and over 24% of CLEC average local plus long distance revenues. These

are assuredly *not* "minor" disadvantages that can be made up in competitive markets. They simply will foreclose any competition by CLECs to serve analog line customers.

Consistent with Commission rules, I am filing one electronic copy of this notice and request that you place it in the record of the above-referenced proceedings.

Sincerely,



Joan Marsh

cc: William Maher
Jeff Carlisle
Michelle Carey
Brent Olson
Rich Lerner
Scott Bergmann
Thomas Navin
Jeremy Miller
Rob Tanner

ATTACHMENT A

SBC's Calculation of CLEC Cost Impairment Is Understated and Wrong

SBC follows fairly standard practice in dividing the extra costs that a CLEC faces to access an unbundled analog line into four categories: collocation costs, digital loop carrier (DLC) costs, backhaul transport costs and hot cut costs.[21] However, the validity of SBC's cost calculations varies substantially over these different categories. For some categories it fails to provide the source data and technical assumptions that it uses to develop the identified costs. For other categories, SBC appears to omit completely certain baseline costs that a CLEC must incur in order to successfully connect unbundled loops to its switch, and it also makes patent errors in other data assumptions, financial analysis methods and basic arithmetic.

Collocation costs - As a threshold matter, it is impossible to verify SBC's proposed virtual collocation cost figures because SBC provides no breakout of the virtual collocation resources that it assumes are needed for a CLEC to collect, digitize, concentrate, multiplex and otherwise prepare loops for backhaul.[22] While it is possible that SBC's cost-out provides for all of this required equipment, this seems doubtful. The only snippet of technical information concerning collocation space that SBC offers is a claim that DLC equipment serving 2,048 customers could be located within a single bay. While SBC does not state what DLC equipment it believes meets this specification, the most common model of DLC that SBC currently uses is Alcatel Litespan-2000. However, such DLC equipment is capable of serving only 672 lines out of a single bay.[23] Thus, this suggests that SBC may be underestimating, possibly by a factor of *three*, a CLEC's collocation resource requirements.

In addition, the only piece of CLEC equipment that SBC mentions as being housed in this virtual collocation space is a GR-303 DLC. But as AT&T has documented, there must also be room to accommodate DS0 point-of-termination panels, DSx-3 termination panels, and assorted test equipment.[24] For small collocations of the type that SBC examines, necessary space accommodations for this additional equipment could itself

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[21] In this submission, SBC continues its practice of avoiding calling digital loop carrier equipment digital loop carrier (DLC) equipment. In its November 14 submission, SBC called DLC "loop converters" or "CLEC equipment." Here, SBC introduces another two names for DLC, "GR 303 concentration equipment" and "digitizing equipment." But, SBC also finally uses the term, "GR-303 DLC concentration equipment" on page 5 of its Attachment 3.

[22] A list of the most significant of these elements required for physical collocation was provided by AT&T in its January 17, 2003 ex parte.

[23] Litespan-2000 documentation states that a 7-foot bay can accommodate four shelves of Litespan-2000 equipment. The first shelf would have to hold a common control assembly, the next three shelves could hold channel bank assemblies – each capable of supporting up to 224 lines. This yields a first bay capacity of 672 lines. *See* http://www.alcatel.com/doctypes/opgdatasheet/pdf/datasheet/lsp2000.pdf and DSC Practice, Litespan® General System Description, OSP 363-205-200, Issue 13, June 1998, Part 1 – Litespan-2000.

[24] AT&T January 17, 2003 ex parte.

require as much virtual collocation resource as is needed for just the DLC. Furthermore, SBC's assumption that CLECs will use virtual collocation imposes other costs that SBC does not account for. These include the CLEC's costs of (i) either maintaining its own remote monitoring and alarming equipment or paying SBC to perform this function; and (ii) paying SBC to train its central office personnel to provision, test and maintain its equipment, or to pay SBC to provide "escort" service if it wants its own technicians to perform these functions. Thus, without a more detailed accounting of what collocation resources SBC is including in its cost analysis, it is impossible to determine whether it has calculated correctly the complete virtual collocation costs that a CLEC would need to incur to use unbundled analog loops.[25]

In any event, there are several reasons why SBC's claimed "amortized monthly cost per line" figures for collocation are significantly understated – even if SBC has calculated correctly and fully incorporated total CLEC capital costs for a virtual collocation adequate to serve 250 or 500 lines.

First, SBC uses faulty financial assumptions to convert nonrecurring costs (NRCs) into an amortized monthly equivalent. SBC's cost of capital assumption for a CLEC is 12.19% -- barely above the 11.25% that the Commission ascribes to the ILECs. Given the substantially greater risks faced by new entrant CLECs (especially ones that must employ UNE-L rather than UNE-P), as well as the acknowledged scarcity of capital for competitors, a more appropriate CLEC cost of capital is at least 15%, and possibly much higher. This error alone causes SBC to underestimate collocation NRC costs by 11.5%. SBC also fails to account for income taxes that would have to be paid on the equity component of this return.[26] Assuming a composite federal, state and local income tax rate of 40% and a 60% equity component would raise calculated NRC costs by another 25%. Thus, accounting for taxes and a more realistic cost of capital would produce amortized monthly costs of NRCs that are about 36% higher than the levels calculated by SBC.

Second, SBC divides its calculated figures for per-month amortized NRCs and monthly recurring costs by the full line capacity of the facility (*e.g.*, 250 or 500 lines). This is valid only if a CLEC can run its collocation facilities at 100% of their capacity. In the real world, of course, this is nonsense. The collocation facilities SBC has costed are "lumpy." That is, they vary on a coarser than per-line basis (*i.e.*, per frame, per 10 amp fuse, etc.). Thus, unless a CLEC always has just enough customers to fill completely all of its leased facilities, a unit cost developed by dividing total costs by 100% of potential capacity will overstate, perhaps severely, the actual per-sold-customer line cost. Indeed,

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[25] To get a flavor for the variety and magnitude of the charges that ILECs impose for virtual collocation, it is useful to examine an ILEC virtual collocation tariff. Attached as an Exhibit to this filing is a copy of SBC's virtual collocation tariff for Missouri (accessed at: http://www.sbc.com/Large-Files/RIMS/Missouri/Local_Access/mo-la-03.pdf). This virtual collocation tariff was chosen because it has the most compact and readable format of the several that are available on SBC's website.

[26] It is possible that SBC's reasoning for ignoring income taxes is that it is assuming that CLECs will operate under 100% debt financing. Given the current unwillingness of the bond market to supply capital to the CLECs, this is fanciful.

even if a CLEC could control its customer counts in each ILEC LSO so as always to match exactly the facilities capacity it has in that LSO, it is still not possible to run a network at 100% of capacity. Spares must be available for maintenance and testing, and to accommodate ordinary customer churn. Such buffer needs typically limit effective to fill to 94%, and, indeed, the Commission's Synthesis model assumes that fill on DLC common equipment will be no higher than 82.5%. Accounting for this necessary but unsalable capacity would further increase SBC's estimates of per-line collocation costs.[27] Furthermore, SBC does not appear to include any costs that the CLEC might incur to operate and manage its virtual collocation facilities.

Thus, even assuming that SBC has included all of the virtual collocation resource costs that a CLEC would incur (and it seems likely that SBC has included only a *third* of these costs), just correcting SBC's procedures for translating these costs into amortized monthly per-line figures would raise SBC's stated figures by about 36%. And if SBC has under-resourced a CLEC's collocation requirements, the truly correct figure could be three times again higher.

Digital loop carrier costs - SBC states that the costs it presents for DLC are the EF&I cost of the hardware, software, cabling and wiring associated with GR-303 DLC concentration equipment employing a 4:1 concentration ratio. It also states that that these costs reflect the actual prices paid by SBC's own CLEC affiliate for similar equipment installed in virtual collocation space. And it claims the above capital costs amount to $50.38 per line ($0.77 per line per month on an amortized basis) for a 500 line facility and $84.98 per line ($1.30 per line per month on an amortized basis) for a 250 line facility.

These figures are extraordinarily low. First, these DLC capital costs do not appear to be consistent with prior figures SBC has advocated, and they are vastly lower than the costs assumed in the Commission's Synthesis model. On November 14, 2002 SBC submitted an *ex parte* communication in this docket that claimed the capital cost of a 100-line DLC system was $150/line, and implied that the cost of a 500 line system would be somewhat less, perhaps in the $100 range.[28] The figures that SBC provides here are only about half as large. Indeed, a 500-line DLC system is priced by the Commission's Synthesis model at between $200 and $275 per line in capital costs.[29] AT&T also believes that in the numerous state public utility commission meetings where SBC as advocated particular

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[27] AT&T is not aware of any regulatory proceeding in which SBC has advocated that per-line telecommunications costs be developed on the basis of 100% fill.

[28] *See* ex parte letter form Jan Bennett, SBC to Marlene Dortch, November 14, 2002.

[29] Because the Synthesis model assumes that DLCs are placed in remote terminals rather than located in central offices, a modest portion of total Synthesis model costs (attributable to the protective cabinet and a few other items) might be unnecessary in the current application. Unadjusted, the Synthesis model estimates the per-sold-customer line cost of a 500 line GR-303 DLC at about $275. Elimination of the unnecessary items in this cost estimate is not likely to reduce the implied cost below $200 to $225 per-sold-customer line. Indeed, just the per-line cost of DLC channel cards in the Synthesis model is $75 – already 50% higher than SBC's quote for a completely equipped DLC.

DLC costs, it has never proposed capital cost figures nearly as low as it has here. Even the HAI model -- a model that SBC has denigrated in every regulatory proceeding where it has been introduced -- would generate over $138 in per line capital investments for a 500-line DLC as costed by SBC. Because SBC does not provide any piece-by-piece accounting for its DLC costs, it is impossible to determine exactly the source of its error, but conservatively, SBC's estimate of DLC costs is no more than half of what a CLEC would need to spend for such equipment.

In any event, even if SBC were correct that DLC-specific capital costs are as inexpensive as it claims here, SBC's quoted figure understates the *total* capital costs of collocated CLEC equipment because it does not appear to account *at all* for the other equipment that a CLEC must collocate (*e.g*, DS0 POT panels, DSx-3 panels, etc.) in order to collect unbundled analog loops. Furthermore, SBC's conversion of these DLC and other capital costs into an amortized monthly per-line cost suffers from the same understatements (due to understated cost of capital, omission of taxes, failure to account for necessary underfill, etc.) that affect its development of virtual collocation costs.

Backhaul transport costs - SBC's calculation of backhaul transport cost is much more detailed than its development of other impairment costs. These figures are credible given the assumptions SBC has made (*e.g.*, 25 miles of DS1 transport, one LSR, etc.) about the character of facilities being acquired.

Hot cut costs - Although SBC's description of its hot cut capabilities is hyperbolic, its calculation of direct ILEC charges for hot cuts is reasonable.[30] AT&T does believe, however, that current inefficient ILEC hot cut practices will cause CLECs to incur internal costs that exceed $10/loop to coordinate and accept these cross-connects.

Summation of impairment costs - SBC appears to make a basic arithmetic error in summing a CLEC's individual impairment costs to calculate "Total CLEC Facility Expense" in its Attachment 6. In particular, SBC double-counts the cost of collocation by accounting for it in its own individual column, and then also adding its cost into the column listing GR-303 expense. This SBC arithmetic error explains why SBC's Attachment 6 shows different costs for DLC in different states – when these costs are not specific to any jurisdiction. This double-count error also infects SBC's "CLEC Margin Analysis" reported in Table A. In all of the subsequent analysis performed in this submission, AT&T corrects for the effects of this SBC arithmetic error.

[30] AT&T strongly disagrees with SBC's self-assessment of its hot cuts capacities and quality. But since these issues are extraneous to the current exercise we will not address them here.

EXHIBIT

SBC-Missouri virtual collocation tariff attached and accessed via the internet at:

http://www.sbc.com/Large-Files/RIMS/Missouri/Local_Access/mo-la-03.pdf

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION

1.0 GENERAL DESCRIPTION

This Section of the Access Service Tariff provides for Virtual Collocation for the purpose of interconnecting to SWBT for the transmission and routing of telephone exchange service and exchange access pursuant to 47 U.S.C. §251 (c)(2), and for access to SWBT's Unbundled Network Elements ("UNEs") pursuant to 47 U.S.C. §251 (c)(3) of the FTA 96 when the virtually collocated telecommunications equipment (hereafter referred to as equipment) is provided by the Collocator. In a Virtual Collocation arrangement, the Collocator designates the equipment to be placed at SWBTS's premised. The Collocator, however, does not have physical access to such premises. Instead, the equipment is under the physical control of SWBT, and SWBT is responsible for installing, maintaining and repairing such equipment, except where collocation is provided pursuant to the alternative virtual collocation attangement set forth in section 14.0. SWBT will offer Virtual Collocation even when physical collocation space is available.

Upon request from a collocator, SWBT will provide one of the following maintenance alternates for its virtual collocation offering:

(1) In all of SWBT's premises SWBT will offer virtual collocation wherein SWBT maintains and repairs the virtually collocated equipment consistent with the rates, terms and conditions as provided for in Paragraphs 1.1 through 13.4 of this tariff section.

(2) In CEVs, huts and cabinets where physical collocation space is not available, a Collocator may opt for virtual collocation wherein the Collocator maintains and repairs the virtually collocated equipment as described in Paragraph 14.0 following and consistent with the rates, terms and conditions as provided for throughout this entire tariff section. SWBT may at its option, elect to offer this maintenance alternative in one or more of its central offices, and in one or more of its CEVs, huts and cabinets where physical collocation space is available. As described in Paragraph 14.0, this maintenance alternative is contingent on the provision of a security escort paid for by the Collocator. In the event the FCC determines that SWBT may not require a security escort paid for by the Collocator, then this virtual collocation maintenance alternative as described in this Paragraph 1.0 (2) and in Paragraph 14.0 is null and void and all virtual collocation will be maintained as described in Paragraph 1.0 (1) above.

Virtual Collocation in the Central Office is available for interconnection with SWBT for the transmission and routing of telephone exchange service and exchange access as well as SWBT-provided UNEs. Virtual Collocation in CEVs, Huts and Cabinets is available for interconnection with SWBT-provided UNEs.

Rates for the individual UNEs the Collocator wants to gain access to for virtual collocation purposes can be found in the individual Collocator's Interconnection Agreement with SWBT.

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

1.0 GENERAL DESCRIPTION (Continued)

SWBT will exercise physical control over any equipment deployed for the purpose of Virtual Collocation.

A description of the rate categories applicable to Virtual Collocation for the purpose of interconnecting to SWBT within SWBT's Central Offices is contained in 13.1 and 18.4, Rate Elements for SWBT Central Offices. A description of the rate categories applicable to Virtual Collocation for the purpose of interconnecting to SWBT within SWBT's CEVs, Huts and Cabinets is contained in 13.2, Rate Elements for SWBT CEVs, Huts and Cabinets.

1.1 Virtual Collocation for Interconnection to SWBT for the Transmission and Routing of Telephone Exchange Service and Exchange Access, and for Interconnection with SWBT-Provided UNEs when the Equipment is Provided by the Collocator.

Virtual Collocation provides for interconnection between SWBT and the facilities of a virtual Collocator and is available for the transmission and routing of telephone exchange service and exchange access in SWBT Central Offices and for interconnection with SWBT-provided UNEs in SWBT Central Offices and CEVs, Huts and Cabinets.

Virtual Collocation is available at SWBT wire centers as specified in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4 and in SWBT CEVs, Huts and Cabinets. Upon request, SWBT will provide a listing of locations of SWBT CEVs, Huts or Cabinets.

The rate elements provided in this tariff section are required when Collocators use virtual collocation equipment to access UNEs. Such access is provided through cross connects purchased from the Collocator/SWBT Interconnection Agreement. Unbundled network elements including associated cross connects are obtained from the Interconnection Agreement between the Collocator and SWBT. Cross connects associated with UNEs establish the circuit between the virtually collocated equipment and these cross connects are the point at which services provided and purchased from the SWBT/Collocator Interconnection Agreement begin. Virtually collocated equipment is available as follows:

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

1.0 GENERAL DESCRIPTION (Continued)

Virtual Collocation for Interconnection to SWBT for the Transmission and Routing of Telephone Exchange Service and Exchange Access, and for Interconnection with SWBT-Provided UNEs when the Equipment is Provided by the Collocator. (Continued)

(A) A Collocator shall purchase from the vendor the equipment to be virtually collocated subject to the provisions as set forth in 1.1 (B) below and the equipment conforming to industry safety standards as described in SWBT's Technical Publication.

The Collocator may locate all equipment necessary for interconnection to SWBT under 47.U.S.C. 251 (C) (2) or accessing SWBT's unbundled network elements under 47.U.S.C. 251 (C) (3) of the FTA 96. In addition, SWBT currently will permit the collocation of DSLAMs, routers, ATM multiplexers, remote switching modules, and certain other equipment, the types of which and conditions upon which such will be permitted must be mutually agreed upon by SWBT and Collocator, in SWBT Eligible Structures. This tariff does not constitute, and shall not be asserted to constitute, an admission or waiver by any party of any rights, remedies or arguments with respect to the issue of what types of equipment Collocators may place in SWBT's premises or any other issue whatsoever before the Missouri Public Service Commission, the Federal Communications Commission, or any other regulatory body or state or federal court. The collocator will certify in writing to SWBT that the equipment is necessary for interconnection or access to unbundled network elements. In the event that SWBT believes that the collocated equipment is not of a type that is necessary for interconnection or access to unbundled network elements, is not of a type that SWBT permits as referenced above, or will not be or is not being used for interconnection or access to unbundled network elements, SWBT shall notify the Collocator and provide Collocator with ten (10) days to respond. In the event SWBT believes that the collocated equipment is not necessary for interconnection or access to unbundled network elements or determines that the Collocator's equipment does not meet Bellcore NEBS Level 1 Safety requirements, the Collocator will be given ten (10) business days to comply with the requirements or remove the equipment from the collocation space. If the parties do not resolve the dispute, SWBT or Collocator may file a complaint at the Commission seeking a formal resolution of the dispute. If it is determined that the Collocator's equipment is not Bellcore NEBS Level 1 Safety compliant, the Collocator will be responsible for removal of the equipment and all resulting damages.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

1.0 GENERAL DESCRIPTION (Continued)

1.1 Virtual Collocation for Interconnection to SWBT for the Transmission and Routing of Telephone Exchange Service and Exchange Access, and for Interconnection with SWBT-Provided UNEs when the Equipment is Provided by the Collocator. (Continued)

(B) Regarding safety, Collocator equipment or operating practices representing a significant demonstrable technical or physical threat to SWBT's personnel, network or facilities, including the Eligible Structure, or those of others are strictly prohibited. Regarding safety, and notwithstanding any other provision hereof, the characteristics and methods of operation of any equipment or facilities placed in the virtual collocation space shall not create hazards for or cause damage to those facilities, the virtual collocation space, or the Eligible Structure in which the virtual collocation space is located; impair the privacy of any communications carried in, from, or through the Eligible Structure in which the virtual collocation space is located; or create hazards or cause physical harm to any individual or the public. Any of the foregoing would be in violation of this tariff.

SWBT requires that all equipment to be collocated in SWBT's Eligible Structures meet Level 1 safety requirements as set forth in Bellcore Network Equipment - Building Systems (NEBS), but SWBT may not impose safety requirements on the Collocators that are more stringent than the safety requirements it imposes on its own equipment. SWBT may not deny collocation of Collocator's equipment because the equipment fails to meet Bellcore NEBS reliability standards. SWBT will publish, at least quarterly, a list of all network equipment installed within the network areas of its facilities within the previous twelve (12) months that fails to meet the Level 1 Safety requirements of Bellcore NEBS, and update the list as needed to keep it current. In the event that SWBT believes that the collocated equipment is not necessary for interconnection or access to unbundled network elements or determines that the Collocator's equipment does not meet Bellcore NEBS Level 1 Safety requirements, the Collocator will be given ten (10) business days to comply with the requirements or remove the equipment from the collocation space. If the parties do not resolve the dispute, SWBT or Collocator may file a complaint at the Commission seeking a formal resolution of the dispute. If it is determined that the Collocator's equipment is not Bellcore NEBS Level 1 Safety compliant, the Collocator will be responsible for removal of the equipment and all resulting damages.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

1.0 GENERAL DESCRIPTION (Continued)

1.1 Virtual Collocation for Interconnection to SWBT for the Transmission and Routing of Telephone Exchange Service and Exchange Access, and for Interconnection with SWBT-Provided UNEs when the Equipment is Provided by the Collocator. (Continued)

(C) A Collocator may arrange for a mutually agreed upon vendor/contractor to engineer and install the virtually collocated equipment the Collocator purchases and the Collocator may pay the vendor/contractor directly. The installation contractor and their activity will be under the direction and control of Collocator who will ensure that the installation contractor meets all standards and requirements for installation of equipment, as required under this Tariff. If SWBT chooses to have its personnel present when the CLEC equipment is installed, then SWBT's presence will be at its own expense. However, if SWBT demonstrates that the CLEC contractor has or would have violated any standard or requirement for installation of equipment, as required under this tariff, the CLEC is responsible for the quantifiable expense incurred by SWBT.

1.2 Federal Telecommunictions Act of 1996

SWBT provides virtual collocation for interconnection to SWBT for the transmission and routing of telephone exchange service and exchange access pursuant to 47 U.S.C. §251(c)(2), and for access to SWBT's unbundled network elements pursuant to 47 U.S.C. §251(c)(3).

The use of virtual collocation for (1) interconnection to SWBT or (2) access to SWBT's unbundled network elements, in either case pursuant to 47 U.S.C. §251(c), is available at SWBT wire centers as specified in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4, and in SWBT CEVs, Huts and Cabinets.

2.0 PROVISIONING

Virtual collocation for Interconnection to SWBT or access to SWBT-provided UNEs is ordered as set forth in SWBT's Interconnector's Collocation Services Handbook for Virtual Collocation in Missouri. SWBT will designate the location or locations within its wire centers, CEVs, Huts and Cabinets for the placement of all equipment and facilities associated with virtual collocation. Virtual collocation does not involve the reservation of segregated central office or CEV, Hut and Cabinet space for the use of Collocators.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

2.0 PROVISIONING (continued)

Virtual Collocation is available for the direct connection of one Collocator-provided facility to a different interconnected provided facility within the same SWBT wire center, CEV, Hut or Cabinet provided the Collocator is interconnected with SWBT's network.

SWBT will provide Virtual Collocation for comparable equipment as it provides to itself in the central office, wire center, CEV, Hut or Cabinet, as the case may be.

3.0 COLLOCATOR RESPONSIBILITIES

The customer will provide, under this section of the tariff, at its expense, all facilities and equipment required to facilitate interconnection and access to SWBT UNEs. The customer will, at its expense, provide the following:

- All plug-ins and/or circuit packs (working, spare, and replacements),
- All unique tools and test equipment,
- Any ancillary equipment and cabling used for remote monitoring and control,
- Any technical publications and updates associated with all Collocator-owned and provided equipment,
- All training as described in Section 13.1(Q),

The Collocator will provide, at its expense, replacements for any recalled, obsolete, defective or damaged facilities, equipment, plug-ins, circuit packs, unique tools, test equipment, or any other item or material provided by the Collocator for placement in/on SWBT property. Suitable replacements are to be immediately provided to SWBT to restore equipment.

The Collocator will provide at least the minimum number of usable equipment spares specified by the manufacturer. Replacements must be delivered to the SWBT central office using the equipment spare within five (5) days of notification that a spare was used or tested defective.

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

4.0 COOPERATIVE RESPONSIBILITIES

SWBT will work cooperatively with the Collocator to develop implementation plans including timelines associated with:

- Placement of Collocator's fiber into the central office vault,
- Location and completion of all splicing,
- Completion of installation of equipment and facilities,
- Removal of above facilities and equipment,
- To the extent known, the Collocator can provide forecasted information to SWBT on anticipated additional Virtual Collocation requirements,
- To the extent known, the Collocator is encouraged to provide SWBT with a listing of the equipment types that they plan to virtually collocate in SWBT central offices or CEVs, Huts and Cabinets. This cooperative effort will insure that SWBT personnel are properly trained on Collocator equipment.

5.0 INTERVALS AND PROVISIONING

5.1 Quote Intervals

In responding to an application request, SWBT shall provide the quotation of the applicable nonrecurring and recurring tariff rates, and the estimated construction interval no later than as specified below. The Collocator has forty-five (45) business days from receipt of the quotation to accept the quotation. The quotation expires after forty-five (45) business days. After forty-five (45) business days, a new application and application fee are required.

Price quote intervals are as follows and will run concurrent with the ten (10) day notification interval for availability of virtual collocation interconnection:

Number of Applications by One Collocator	Quotation Interval
1- 5	10 Business Days
6-20	25 Business Days

Should the Collocator submit twenty-one (21) or more applications within five (5) business days, the quotation interval will be increased by five (5) business days for every five (5) additional applications or fraction thereof. Any material revision to an application will be treated as a new application and will be subject to the time intervals set forth above.

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

5.0 INTERVALS AND PROVISIONING (Continued)

5.1 Quote Intervals (Continued)

A Collocator may obtain a shorter interval for the return of price quotes for virtual collocation arrangements when submitting 6 or more applications if the Collocator files complete applications, including identification of specific rate elements and the applicable rates contained in this tariff, the exact quantity of the rate elements, and an up-front payment of the nonrecurring application fee from, paragraph 13.1 of this Tariff and schedules a meeting with SWBT at least twenty (20) business days prior to submission of the first application to discuss, coordinate and prioritize the Collocator applications. In addition, the applications must include an accurate front equipment view (a.k.a. rack elevation drawing) specifying bay(s) for the Collocator's point of termination. The shortened intervals are:

Number of Applications by One Collocator	Quotation Interval
1-5	10 Business Days
6-20	20 Business Days

Should the Collocator submit twenty-one (21) or more applications within five (5) business days, the quotation interval will be increased by five (5) business days for every five (5) additional applications or fraction thereof. Any material revision to an application will be treated as a new application and will be subject to the time intervals set forth above.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

5.0 INTERVALS AND PROVISIONING (Continued)

5.1 Quote Intervals (Continued)

Once SWBT has completed its review of the virtual collocation application form inquiry, the entire completed quote package will be forwarded to the potential interconnector in writing with a cover letter. The interconnector has 45 days to remit a signed confirmation form along with a check for 50% of all the applicable nonrecurring charges.

If the interconnector fails to respond within the 45-day interval, should the interconnector decide at a later time to proceed with virtual collocation, a new application and Planning Fee will be required.

5.2 Implementation Intervals

A virtual collocation arrangement is not reserved until the quotation is accepted. When the quotation is accepted, unless otherwise mutually agreed to by the Parties in writing, SWBT will allow the Collocator's vendor to begin equipment installation no later than 90 days from acceptance of the quotation. The virtual collocation interval ends when roughed in, unterminated DC power and interconnection cabling is provided to the virtual collocation area.

The construction intervals for virtual collocation arrangements are noted in Table 2-1. For Virtual Collocation in Active Collocation Space where the Collocator is requesting maximum DC Power of 50 amps, either in a single or in multiple feeds of 50 amps (maximum 50 amps per feed), the Virtual Collocation construction intervals remain as stated below. For Virtual Collocation in Active Collocation Space where a Collocator is requesting DC Power that exceeds 50 amps from a single source (e.g., 100 amps) per feed, the construction interval is 90 days. These same construction intervals apply for virtual collocation in Eligible Structures such as CEVs (Vaults), Huts and Cabinets.

When the quotation is accepted, unless otherwise mutually agreed to by the Parties in writing, the construction intervals for virtual are as follows:

Type	Description	Interval	Exception
Virtual	Active collocation space	70 days	With SWBT installation of bays/racks/frames
Virtual	Active collocation space	55 days	With CLEC installation of bays/racks/frames

Table 2-1

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

5.0 INTERVALS AND PROVISIONING (Continued)

5.2 Implementation Intervals (continued)

Virtual collocation space is not reserved until the quotation is accepted. When the quotation is accepted unless otherwise mutually agreed to by the Parties in writing, SWBT will complete construction of Active Collocation Space requests for virtual collocation in 55 days from the receipt of the Collocator's acceptance of the quotation where power is available and the Collocator is installing all of its own bays. The virtual collocation construction interval ends when roughed in, unterminated DC power and interconnection cabling is provided to the collocation area. SWBT will complete construction of Active Collocation Space requests for virtual collocation in 70 days from the receipt of the Collocator's acceptance of the quotation where SWBT will be installing all or some of the bays. SWBT considers power to be available if sufficient power plant capacity exists, the BDFB (if used) is within 100 feet of the Collocator's space and sufficient termination capacity on the power plant and/or BDFB exists.

If a completion date outside the time period required herein is not agreed to by the parties, the issue may be presented by either party to the Missouri Public Service Commission for determination

5.3 Installation of Virtual Collocation Equipment

SWBT does not assume any responsibility for the design, engineering, testing, or performance of the end-to-end connection of the Collocator's equipment, arrangement, or facilities.

SWBT will be responsible for using the same engineering practices as it does for its own similar equipment in determining the placement of equipment and engineering routes for all connecting cabling between collocation equipment.

In this arrangement, telecommunications equipment (hereafter referred to as equipment) is furnished by the CLEC and engineered and installed by a mutually agreed upon vendor for the Collocator. The Collocator will have the authority to select installation vendors. All installations of equipment will be in accordance with the Collocator-provided installation design and must comply with manufacturer's specifications and applicable published national standards approved by the FCC, and other governmental authorities that have jurisdiction.

The Collocator and SWBT must jointly accept the installation of the equipment and facilities prior to the installation of any services using the equipment. As part of this acceptance, SWBT will cooperatively test the collocated equipment and facilities with the Collocator.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

5.0 INTERVALS AND PROVISIONING (Continued)

5.3 Installation of Virtual Collocation Equipment (continued)

SWBT will provide TIRKS and/or SWITCH print out of actual point of termination/connection facilities assignment (APOT/CFA) to CLEC's at collocation space turnover. This information is used to request access and line sharing services. The CLEC is responsible for payment of all non-recurring charges, where applicable, prior to receiving APOT/CFA information.

5.4 Revisions

All Revisions to an initial request for a virtual collocation arrangement submitted by the Collocator must be in writing via a new application form.

Major Revisions:

Major revisions include:

- adding telecommunications equipment that requires additional electrical power
- accelerating the project schedule
- adding additional Collocator bays or equipment that impact the existing/proposed floor-space area provided to the Collocator in their quote package.

If the revision is major, a new interval for the virtual collocation arrangement will be established which shall not exceed two months.

Minor Revisions

Minor revisions include:

- adding bays of equipment that do not significantly impact the existing/proposed electrical systems
- adding light fixtures and outlets which do not exceed the capacity of the existing/proposed electrical system
- adjustments to the heat release projection which do not cause a change in the proposed/existing mechanical system

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

5.0 INTERVALS AND PROVISIONING (Continued)

5.4 Revisions (Continued)

However, minor revisions will not require that a new interval be established. No additional application fees shall be applicable if the revision is minor.

This list is not all-inclusive. Any revisions to the Collocators application not specified above must be reviewed by SWBT to determine whether the revision is major or minor.

5.5 Augments

In order to request an augment, the Collocator must submit a Virtual Collocation Application Form to SWBT Collocation Service Center (CSC) indicating in Section 3 of the application that this is an "Augmentation to an Existing Arrangement." The price quote will contain the charges and the construction interval for that application.

SWBT will work cooperatively with Collocators to negotiate mutually agreeable implementation intervals for augments.

6.0 EQUIPMENT PROVISIONING

The Collocator will arrange to deliver to the SWBT central office where the equipment is located a reasonable number, as recommended by the manufacturer, of all appropriate plug-ins, circuit packs and cards and any other equipment, plus all necessary circuit design and provisioning information on an agreed-upon date which is no later than two (2) business days prior to the scheduled turn-up of the Collocator's equipment.

For the disconnection of circuits, the Collocator will provide all circuit information no later than two (2) business days prior to the scheduled disconnection of the Collocator's circuit.

SWBT does not assume any responsibility for the design, engineering, testing, or performance of the end-to-end connection of the Collocator's circuits.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

7.0 REPAIR OF EQUIPMENT

Except in emergency situations, the Collocator-owned fiber optic facilities and central office terminating equipment will be repaired only upon the request of the customer. In an emergency, SWBT may perform necessary repairs without prior notification. The labor rates specified in Section 13.3(R) apply to SWBT central offices and SWBT CEVs, Huts and Cabinets and are applicable for all repairs performed by SWBT on the Collocator's facilities and equipment.

When initiating repair requests on Collocator owned equipment, the Collocator must provide SWBT with the location and identification of the equipment and a detailed description of the trouble.

Upon notification by the Collocator and availability of spare parts as provided by the Collocator, SWBT will be responsible for repairing the Virtually Collocated equipment at the same standards that it repairs its own equipment.

8.0 MAINTENANCE OF EQUIPMENT

The Collocator will request any and all maintenance by SWBT on its Virtually Collocated facilities or equipment. When initiating requests for maintenance on collocated equipment, the Collocator must provide SWBT with the location and identification of the equipment and a detailed description of the maintenance requested.

Upon notification by the Collocator and availability of spare parts as provided by the Collocator, SWBT will be responsible for maintaining the Virtually Collocated equipment at the same standards that it maintains its own equipment.

9.0 ALARM COLLECTION

The Collocator has the ability to purchase its own remote monitoring and alarming equipment. If the Collocator prefers SWBT to perform this function, it may elect to provision this arrangement under Section 25.5.1(A) of the FCC 73 Access Service Tariff. If the Collocator purchases this equipment, it must be identical to equipment specified in Section 25.5.1 of the FCC 73 Access Service Tariff.

Since the maintenance of the Collocator's equipment is at the direction and control of the Collocator, SWBT will not be responsible for responding to alarms and will only conduct maintenance and repair activities at the direction of the Collocator.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

10.0 TERMINATION OF VIRTUAL COLLOCATION

Upon termination of the Virtual Collocation arrangement, the Collocator will work cooperatively with SWBT to remove the Collocator's equipment and facilities from SWBT property subject to the condition that the removal of such equipment can be accomplished without damaging or endangering other equipment located in the central office. SWBT is not responsible for and will not guarantee the condition of such equipment. The Collocator is responsible for arranging for and paying for the removal of virtually collocated equipment including all costs associated with equipment removal, packing and shipping. Arrangements for and the removal of the Collocator virtually collocated equipment must be made within 30 business days after termination of the virtual collocation arrangement, unless a different time period is mutually agreed upon. SWBT shall be responsible for exercising reasonable caution when removing virtually collocated equipment. SWBT will only be responsible for damage done to such equipment caused by gross negligence on the part of SWBT or its contractors during the removal process. However, Collocators will indemnify and hold SWBT harmless for any damage done to virtually collocated equipment if SWBT permits the Collocator to hire a SWBT approved contractor to remove virtually collocated equipment. Any equipment not removed in this time frame may be removed by SWBT and stored in a non-SWBT location, at the expense of the Collocator.

Upon termination of the Virtual Collocation, the Collocator must remove the fiber entrance cable used for the Virtual Collocation. If the entrance cable is not scheduled for removal within seven (7) days, SWBT may arrange for the removal, and the Collocator will be responsible for any charges incurred to remove the cable. SWBT and the Collocator will cooperatively manage the removal process. The Collocator is only responsible for physically removing entrance cables housed in conduits or inner-ducts and will only be required to do so when SWBT instructs the Collocator that such removal can be accomplished without damaging or endangering other cables contained in a common duct or other equipment residing in the central office.

11.0 REVISIONS

Any revision to SWBT's Interconnector's Collocation Services Handbook for Virtual Collocation in Missouri, or its Technical Publication TP 76300MP, shall become effective and thereafter applicable under this tariff forty five (45) business days after such revision is released by SWBT except for those particular revisions to which the Collocator specifically objects within thirty (30) business days of receipt, providing an explanation for each objection. Upon each such objections, SWBT and the Collocator shall attempt to negotiate a resolution, either party may request resolution by the Missouri Public Service Commission. Any revision made to address potentially harmful situations shall become effective and applicable immediately, pending resolution of the objections by the Missouri Public Service Commission.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

12.0 DISPUTE RESOLUTION PROCESS FOR REVISIONS OR IMPLEMENTATION OF TECHNICAL PUBLICATIONS

Disputes that cannot be resolved by the parties regarding revisions to or implementation of SWBT technical publications that apply to virtual collocation arrangements will be resolved by use of (1) mediation, (2) any dispute resolution process promulgated by the Commission, or (3) any other method mutually agreed to by the parties. Either party may use any of these options to obtain a resolution of the dispute.

13.0 RATE REGULATIONS

This section contains specific regulations governing the rates and charges that apply to Virtual Collocation for the purpose of interconnecting to SWBT and for Access to SWBT provided UNEs when the Collocator provides the equipment.

There are two types of rates and charges that apply to the various rate elements for Virtual Collocation for interconnecting to SWBT and for Access to SWBT provided UNEs. These are non-recurring charges and monthly recurring rates.

Rates and charges specific to Virtual Collocation for interconnection with SWBT for the transmission and routing of telephone exchange service and exchange access, and for access to SWBT provided UNEs in SWBT Central Offices are set forth in 13.3. Rates and charges specific to Virtual Collocation for access to SWBT provided UNEs in SWBT CEVs, Huts and Cabinets are set forth in 13.4.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices

Consistent with provisions in Section 1.1, the following provides a list of the specific rate elements for virtual collocation for interconnection with SWBT for the transmission and routing of telephone exchange service and exchange access, and for access to SWBT provided UNEs to be used in conjunction with virtual collocation in SWBT Central Offices. Charges applicable to virtual collocation other than those listed below are listed in Section 25 of the FCC 73 Access Service Tariff (Expanded Interconnection).

(A) Planning

(1) Planning Fee

The planning fee recovers SWBT costs incurred to estimate the quotation of charges, project management costs, engineering costs, and other related planning activities for the Collocator's request for a virtual collocation arrangement. The planning fee also provides for SWBT personnel to survey each requested location for availability of space for the placement of entrance cables as well as to determine floor space to physically place Collocator-designated equipment expressed as a non-recurring charge. The planning fee is applied on an initial and subsequent basis. The initial charge will apply to the Collocator's request for a virtual collocation arrangement or the addition of cable. The subsequent planning charge will apply to any additional interconnection or power arrangements, connected to existing virtual collocated equipment. Charges for this sub-element are specified in 13.3(A)(1).

(B) Floor Space

This sub-element provides for the "occupancy" cost per bay framework associated with using the floor space in SWBT central offices expressed as a monthly rate. Charges for this sub-element are specified in 13.3(B). In those cases where an individual relay rack and its associated floor space are shared by SWBT and the Collocator or among Collocators, the floor space and relay rack associated will be apportioned on a quarter rack basis.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(C) Relay Rack (Optional)

This sub-element provides the cost per Standard Bay relay rack when provided by SWBT expressed as a monthly rate. SWBT's Standard Bay dimensions are 7'-0" high, and have a 23" interior width, 26" exterior width, and up to 15" deep. Charges for this sub-element are specified in 13.3(C). In those cases where an individual relay rack and associated floor space are shared by SWBT and the Collocator or among Collocators, the floor space and relay rack associated will be apportioned on a quarter rack basis. When the standard bay relay rack is provided by the Collocator this rate element will not apply.

(D) Common Systems Materials

This sub-element provides the infrastructure installation and maintenance of ironwork, racking, and lighting above the equipment bays. Charges for this sub-element are specified in 13.3(D). The common systems sub-element is distinct for standard and non-standard frames. In those cases where common systems materials for an individual relay rack and associated floor space are shared with the Collocator or among Collocators, the common systems materials for the floor space and relay rack associated will be apportioned on a quarter rack basis.

(E) Real Estate

These rate elements provide for SWBT to recover the costs associated with preparing the Eligible Structure for telecommunications equipment (Site Conditioning) and securing this space (Safety & Security). Charges for these sub-elements are specified in 13.3(E).

(1) Site Conditioning

Permits SWBT to recover cost associated with preparing space within the Eligible Structure for telecommunications equipment. The nonrecurring charge for this sub-element is specified in 13.3(E)(1).

(2) Safety & Security

Permits SWBT to recover costs associated with securing the telecommunications area used for Virtual Collocation. The nonrecurring charge for this sub-element is specified in 13.3(E).

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(F) Entrance Fiber

This sub-element provides for SWBT pulling and splicing fiber cable between the manhole and cable vault, and the subsequent routing of fiber riser cable between the cable vault and FDF. (Note: Virtually Collocated Equipment may also be connected to dedicated transport facilities provided as Unbundled Network Elements in lieu the entrance fiber. When Virtually Collocated Equipment is connected to dedicated transport facilities in lieu of the entrance fiber, the terms, conditions and charges for such dedicated transport facilities are pursuant to the Collocator/SWBT Interconnection Agreement. No recurring or non-recurring charges for dedicated transport facilities provided as used are applicable pursuant to this Tariff). Charges for this rate element are in 13.3(F)(1).

(1) Entrance Conduit

This sub-element represents any reinforced passage or opening in, on, under, over or through the ground between the first manhole and the cable vault through which the fiber optic cable is placed. Charges for this sub-element are specified in 13.3(F)(2).

(G) Power Arrangement

This sub-element is the cable and cable rack including support and fabrication material necessary to support the virtually collocated equipment expressed as a monthly rate for either 2-20 AMP feeds or 2-50 AMP feeds. Fuse panels necessary for terminating power feeds are provided by the Collocator. In the event that a Collocator requires a power arrangement that exceeds 50 AMPS from a single source, SWBT will cooperatively work with the Collocator using comparable rate elements as the basis for such arrangements. Cable sizing is based on list 2 design loads. Charges for this sub-element are specified in 13.3(G)(1-2).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(H) Power Consumption

(1) D.C. Power Per AMP

The DC power charge consists of use of the DC power system, with AC input and AC backup for redundant power expressed as a monthly rate. This rate element also includes the AC Power Usage to provide DC power to the virtually collocated equipment. DC Power Charge is on a per amp basis. Charges for this sub-element are specified in 13.3(H)(1).

(2) Heating, Ventilating, and Air Conditioning (HVAC)

This sub-element consists of the elements necessary to provide HVAC within the Eligible Structure to the collocation arrangement and is based on the heat dissipation required for each 10 amps of DC power. Charges for this sub-element are specified in 13.3(H)(2).

(3) Ground Cable Arrangement

The Ground Cable is the cabling arrangement designed to provide grounding for equipment per frame expressed as a monthly rate. Separate Ground Cable Arrangements are required for Integrated and Isolated Ground Planes. Charges for this sub-element are specified in 13.3(H)(3).

(I) Voice Grade Interconnection Arrangement

This sub-element provides for the cost associated with providing 100 voice grade pairs Non-shielded or Shielded between the SWBT Distributing Frame and the virtually collocated equipment expressed as a combination of a non-recurring charge and a monthly rate. Charges for this sub-element are specified in 13.3(I).

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(J) DS-1 Interconnection Arrangement to DCS

This sub-element provides for the cost associated with providing 28 DS-1 circuits between SWBT DCS functionality purchased from the Collocators interconnection agreement and the virtually collocated equipment expressed as a combination of a non-recurring charge and a monthly rate. Charges for this sub-element are specified in 13.3(J). This includes the DS1-Port connecting to the virtual collocation arrangement.

(K) DS-1 Interconnection Arrangement to DSX

This sub-element provides for the cost associated with providing 28 DS-1 circuits between SWBT's DSX functionality purchased from the Collocators interconnection agreement and the virtually collocated equipment expressed as a combination of a non-recurring charge and a monthly rate. Charges for this sub-element are specified in 13.3(K).

(L) DS-3 Interconnection Arrangement to DCS

This sub-element provides for the cost associated with providing one DS-3 circuit between SWBT's DCS functionality purchased from the Collocators interconnection agreement and the virtually collocated equipment expressed as a combination of a non-recurring charge and a monthly rate. Charges for this sub-element are specified in 13.3(L).

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(M) DS-3 Interconnection Arrangement to DSX

This sub-element provides for the cost associated with providing one DS-3 circuit between SWBT's DSX functionality purchased from the Collocators interconnection agreement and the virtually collocated equipment expressed as a combination of a non-recurring charge and a monthly rate. Charges for this sub-element are specified in 13.3(M).

(N) Fiber Interconnection Arrangement

This sub-element provides for the cost associated with providing 12 fibers between SWBT's FDF and the virtually collocated equipment expressed as a combination of a non-recurring charge and a monthly rate. Charges for this sub-element are specified in 13.3(N).

(O) Collocation to Collocation Connection

This rate element includes virtual to virtual and virtual to physical connection options.

(1) Fiber Cable (12 Fibers)

This sub-element provides for direct cabling using fiber cable (12 fibers) between two collocation arrangements at an Eligible Structure. This sub-element is expressed as a combination of a non-recurring charge and a monthly rate and these charges are specified in 13.3(O)(1).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(O) Collocation to Collocation Connection (continued)

(2) Copper Cable (28 DS1s)

This sub-element provides for direct cabling using copper cable (28 DS1s) between two collocation arrangements at an Eligible Structure. This sub-element is expressed as a combination of a non-recurring charge and a monthly rate and these charges are specified in 13.3.(O)(2).

(3) Coax Cable (1 DS3)

This sub-element provides for direct cabling using coaxial cable (1 DS3) between two collocation arrangements at an Eligible Structure. This sub-element is expressed as a combination of a non-recurring charge and a monthly rate and these charges are specified in 13.3(O)(3).

(4) Cable Racking and Hole

This sub-element provides for cable rack space and hole for copper, coax and optical cabling between two virtual collocation arrangements at an Eligible Structure. This sub-element is expressed as a monthly rate and in 13.3(O)(4).

(5) Route Design

This sub-element provides the route design for collocation connections. This sub-element is expressed as a non-recurring charge and this charge is specific in 13.3(O)(5).

(P) Timing Source Arrangement (Optional)

An SWBT provided single signal from the SWBT timing source to provide synchronization between a Collocator's single network element and SWBT's equipment expressed as a recurring and non-recurring rate. Charges for this sub-element, if requested by the Collocator, are specified in 13.3(P).

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(Q) Training

SWBT is responsible for determining when training is necessary and how many SWBT employees require training to provide 24 hour a day, seven day a week coverage for the installation, maintenance and repair of Collocator's designated equipment not currently used in a wire center selected by the Collocator for virtual collocation. SWBT will be limited to request training for four (4) SWBT personnel per location, unless a different number is mutually agreed upon by SWBT and Collocator.

If the Collocator does not have SWBT coordinate the required training, the Collocator may assume the responsibility for providing the training. It is then the responsibility of the Collocator to:

(1) arrange and pay to the supplier all costs for training sessions, including, the cost of the trainer(s), transportation and lodging of such trainer(s), and required course material, and

(2) arrange and pay to each individual supplier all costs associated with lodging and other than local transportation, such as airfare, required for SWBT employee training.

(3) arrange and pay all costs associated with SWBT's employee(s) attendance at the training, including, lodging and other than local transportation, such as airfare, and employee(s) labor rate for time away from the job, required for SWBT employee training.

SWBT will work cooperatively with the Collocator to schedule SWBT personnel training time required for the installation, maintenance and repair of the Collocator's designated equipment. The Collocator will be assessed two hours of the technician additional labor charge for SWBT personnel time required to coordinate training activities with the Collocator. The Collocator will be responsible for reimbursement of applicable SWBT contractual compensation obligations for time spent as a result of the necessary training. All other charges, if applicable, specified in 13.3(Q)(Training) will be assessed to the Collocator.

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.1 Rate Elements for SWBT Central Offices (Continued)

(R) Maintenance and Repair Labor Rates

(1) Maintenance of Equipment

This rate element is a labor rate charged by SWBT to the Collocator for ongoing maintenance of the Collocator's equipment. Any maintenance requirements will be initiated by the Collocator. Labor rates are based upon a ¼ hour basis and are dependent upon day of week and time of day. For purposes of this Tariff, normal week day is defined as 8:00 a.m. through 5:00 p.m., Monday through Friday, excluding holidays. Non-recurring charges for this sub-element are specified in 13.3(R).

(2) Repair of Equipment

This rate element is a labor rate charged by SWBT to the Collocator for repair of the Collocator's equipment. All repair will be at the direction of the Collocator.

Labor rates are based upon a charge for Network Operations Center (NOC) personnel to take the trouble report, create a trouble ticket, and dispatch a technician. Labor rates for actual repair of the trouble are based upon a 1/4 hour basis and are dependent upon day of week and time of day. For purposes of this Tariff, normal week-day is defined as 8:00 a.m. through 5:00 p.m., Monday through Friday excluding holidays. Non-recurring charges for this sub-element are specified in 13.3(R).

(S) Equipment Evaluation Cost

This rate element is a labor rate charged by SWBT to the Collocator for evaluating the Collocator's equipment when not meeting Level 1 Safety requirements as set forth in Bellcore Network Equipment - Building System (NEBS). Charges for this element is specifiifed in 13.3(S).

(T) Test and Acceptance

This rate element is a labor rate charged by SWBT to the Collocator for cooperative assisting the Collocator's approved vendor in testing and accepting the installed virtually collocated equipment. Charges for this element are specified in 13.3(T).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.2 Rate Elements for SWBT CEVs, Huts and Cabinets

The following provides a list of the specific rate elements for virtual collocation for access to SWBT provided UNEs in SWBT CEVs, Huts and Cabinets. Charges applicable to virtual collocation in these structures other than those specified below are listed in Section 25 of the FCC 73 Access Service Tariff.

(A) Entrance Cable Fiber

This sub-element provides for the engineering of a point of appearance cable termination, preparation of work order drawings, postings of the work order and cable data in the appropriate databases for inventory and provisioning purposes, excavation to expose existing subsurface facilities, pulling the Collocator-provided cable into the eligible structure, routing, securing and preparing the end for splicing or termination. Charges for this sub-element are expressed as a non-recurring charge and can be found in 13.4(A).

(B) Entrance Conduit

Any reinforced passage or opening placed for the Collocator provided facility in, on, under/over or through the ground between the SWBT CEV, Hut, or Cabinet and the Collocator structure. Rates and charges are as found in Paragraph 13.4(B) following.

(C) Power Consumption

This sub-element provides for the use of power in the Hut, CEV, or Cabinet based on the amount of mounting space that is used by the Collocator as measured in 2-inch increments. Charges for this sub-element are expressed as a recurring charge and can be found in 13.4(C).

(D) 24-Foot CEV

This sub-element provides the use of mounting space within a 24-Foot CEV. This element is expressed as a monthly rate. The charges for this sub-element is specified in 13.4(D).

(E) 16-Foot CEV

This sub-element provides the use of mounting space within a 16-Foot CEV. This element is expressed as a monthly rate. The charge for this sub-element is specified in 13.4(E).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.2 Rate Elements for SWBT CEVs, Huts and Cabinets (Continued)

(F) Maxi-Hut

This sub-element provides the use of mounting space within a Maxi-Hut. This element is expressed as a monthly rate. The charge for this sub-element is specified in 13.4(F).

(G) Mini-Hut

This sub-element provides the use of mounting space within a Mini-Hut. This element is expressed as a monthly rate. The charge for this sub-element is specified in 13.4(G).

(H) Large Cabinet

This sub-element provides the use of mounting space within a Large Cabinet. This element is expressed as a monthly rate. The charge for this sub-element is specified in 13.4(H).

(I) Medium Cabinet

This sub-element provides the use of mounting space within a Medium Cabinet. This element is expressed as a monthly rate. The charge for this sub-element is specified in 13.4(I).

(J) Small Cabinet

This sub-element provides the use of mounting space within a Small Cabinet. This element is expressed as a monthly rate. The charge for this sub-element is specified in 13.4(J).

(K) Project Coordination Fee

The project coordination fee provides for SWBT personnel to survey each requested CEV, Hut and Cabinet for availability of space for placement of copper or fiber cables as well as to determine space for any Collocator-designated equipment. This sub-element is expressed as a non-recurring charge and is specified in 13.4(K).

LOCAL ACCESS SERVICE

1. VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.3 Rates and Charges Central Offices

	USOC	Rate Per Month	Nonrecurring Charge
(A) Planning Fee			
(1) Planning Fee			
- Initial		0.00	$5,555.76
- Subsequent (Interconnection Cabling)		0.00	2.224.49
- Subsequent (Power Cabling)		0.00	2.303.84
- Subsequent (Interconnection and Power Cabling)		0.00	2.882.61
(B) Floor Space			
(Per Bay Framework)		$28.91	$0.00
(C) Relay Rack			
(Per Rack)		$22.19	$0.00
(D) Common Systems Material			
(Per Standard Bay)		$10.75	$0.00
(Per Non-Standard Bay)		19.36	0.00
(E) Real Estate			
(1) Site Conditioning (Per Frame)		$92.81	$0.00
(2) Safety & Security (Per Frame)		195.57	0.00
(F) Entrance Fiber Placement			
(1) Entrance Fiber Cable Placement			
(Per Fiber Cable Sheath)		$11.01	$1,971.42
(2) Entrance Conduit		8.17	0.00
(G) Power Arrangement			
(1) 2-20 AMP Feeds (Per 2-20 Amp Power Feeds)		$7.74	$1,570.84
(2) 2-50 AMP Feeds (Per 2-50 Amp Power Feeds)		9.57	1,954.85

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.3 Rates and ChargesCentral Offices

		USOC	Rate Per Month	Nonrecurring Charge
(H)	Power Consumption			
	(1) DC Power Per AMP		$10.61	$0.00
	(2) Heating Ventilating, and Air Conditioning (Per 10 Amps)		14.62	0.00
	(3) Ground Cable Arrangement (Per Frame)		0.36	0.00
(I)	Voice Grade Interconnection Arrangement (Non-Shielded or Shielded) (Per 100 Pairs)		$4.94	$1,481.37
(J)	DS1 Interconnection Arrangements to DCS (Per 28 DS1s)		$297.44	$4,067.27
(K)	DS1 Interconnection Arrangement to DSX (Per 28 DS1s)		$9.79	$1,800.69
(L)	DS3 Interconnection Arrangement to DCS (Per DS3)		$115.59	$2,635.79

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.3 Rates and Charges Central Offices (Continued)

	USOC	Rate Per Month	Nonrecurring Charge
(M) DS3 Inteconnection			
Arrangement to DSX (Per DS3)		$7.14	$1,058.10
(N) Fiber Interconnection			
Arrangement (12 Fibers)		$6.55	$1,996.19
(O) Collocation-to-Collocation Connection			
(1) Fiber Cable (12 Fibers) - SWBT Provides Cable and Installs		$3.32	$1,095.09
(2) Copper Cable (28 DS1s) - SWBT Provides Cable and Installs		$3.34	$930.53
(3) Coax Cable (1 DS3) - SWBT Provides Cable and Installs		$3.26	$706.77
(4) Cable Racking and Hole			
- For Optical (Per Cable)		$0.90	$0.00
- DS1 (Per Cable)		0.49	0.00
- DS3 (Per Cable)		0.35	0.00

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.3 Rates and Charges Central Offices (Continued)

	USOC	Rate Per Month	Nonrecurring Charge
(O) Virtual Collocation-to-Virtual Collocation Connection (Continued)			
(5) Route Design		0.00	463.36
(P) Timing Source Arrangement			
- Timing Lead (1 pair per circuit)			
(per linear foot per pair)		$0.08	$14.81
- Bits Timing (Per two circuits)		3.58	698.82
(Q) Training			
(1) Communications Technician, per ½ hour		$0.00	$39.21
(2) C.O. Manager, per ½ hour		0.00	39.45
(3) Power Engineer, per ½ hour		0.00	38.47
(4) Equipment Engineer, per ½ hour		0.00	38.47
(R) Maintenance and Repair Rates			
(1) Staffed CO During Attended Hours			
- Each ¼ hour		$0.00	$15.15
(2) Staffed CO During Unattended Hours			
- Initial 4 Hours		0.00	242.35
- Each Additional ¼ hour		0.00	15.15
(3) Not Staffed CO/RT During Normal Business Day			
- Each ¼ hour		0.00	15.15

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.3 Rates and Charges (Continued)

		USOC	Rate Per Month	Nonrecurring Charge
(R)	Maintenance and Repair Rates (continued)			
	(4) Not-Staffed CO/RT During Non-Normal Business Day			
	- Initial 4 Hours		0.00	242.35
	- Each Additional ¼ hour		0.00	15.15
(S)	Equipment Evaluation Cost			
	- Each ½ hour		0.00	38.47
(T)	Test and Acceptance			
	- Each ½ hour		0.00	39.21

13.4 Rates and Charges CEVs, Huts and Cabinets

(A)	Entrance Fiber Cable Placement			
	Fiber (per cable)		$0.00	$53.58
(B)	Entrance Conduit			
	(Per Fiber Cable Sheath)		2.61	0.00
(C)	Power Consumption			
	(Per 2-inch mounting space)		1.27	0.00

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

13.0 RATE REGULATIONS (Continued)

13.4 Rates and Charges CEVs, Huts and Cabinets (continued)

(D)	24-Foot CEV (Per 2-inch mounting space)	1.64	0.00
(E)	16-Foot CEV (Per 2-inch mounting space)	1.77	0.00
(F)	Maxi-Hut (Per 2-inch mounting space)	0.77	0.00
(G)	Mini-Hut (Per 2-inch mounting space)	1.33	0.00
(H)	Large Cabinet (Per 2-inch mounting space)	1.63	0.00
(I)	Medium Cabinet (Per 2-inch mounting space)	2.19	0.00
(J)	Small Cabinet (Per 2-inch mounting space)	3.29	0.00
(K)	Project Coordination Fee (Per CLEC Application/Augment)	0.00	631.17

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

14.0 ALTERNATIVE VIRTUAL COLLOCATION ARRANGEMENT DESCRIPTION

Virtual collocation wherein the Collocator maintains and repairs the virtually collocated equipment.

For purposes of virtually collocating equipment, SWBT shall determine which Eligible Structures require access to CEVs, Huts, or manholes containing concentrated cabling and other forms of equipment that requires drawings, schematics, or other engineering documents that aide in the prevention of accidental network outages. The drawings, schematics, or other engineering documents shall denote the location of the requesting Collocator's equipment and cabling without disclosing identity of equipment and cabling belonging to SWBT and other Collocators. Provided that SWBT is not required to make this determination prior to an executed agreement to virtually collocate in an Eligible Structure.

After Collocator has been provided with written notification by SWBT that access to CEVs, Huts, or manholes containing concentrated cabling and other forms of equipment requires drawings, schematics, or other engineering documents that aide in the prevention of accidental network outages, Collocators may not enter an Eligible Structures without obtaining undated copies of drawings, schematics, or other engineering documents. Upon request, SWBT shall immediately make available to Collocators those drawings, schematics, or other engineering documents that identify the location of the requesting Collocator's equipment and cabling. In the event the requested documents are not immediately available, SWBT shall not prevent the Collocator from entering the Eligible Structure. If SWBT does not immediately make the requested documents available to a Collocator and the Collocator enters the eligible structure, SWBT shall deliver the requested documents to Collocator immediately upon locating same.

SWBT will provide a security escort with the Collocator paying the expense for the escort. In areas defined in SWBT's local exchange tariff as rate groups C and D, SWBT will provide the security escort within one (1) hour of notification by the Collocator. In areas defined in SWBT's local exchange tariff as rate A and B, SWBT will provide the security escort as soon as reasonably possible, or within the time frame agreed to by the parties, at the time of notice.In the event the FCC determines that SWBT may not require a security escort paid for by the Collocator, then this virtual collocation maintenance alternative as described in this Paragraph 14.0 and in Paragraph 1.0(2) is null and void, and all virtual collocation will be maintained by SWBT as described in Paragraph 1.0(1).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

14.0 ALTERNATIVE VIRTUAL COLLOCATION ARRANGEMENT DESCRIPTION (continued)

Prior to entering an Eligible Structure that requires drawings, schematics, or other engineering documents, Collocators must provide SWBT with reasonable notice of the entry. Notice will be provided to SWBT's Local Operations Center, which will be available to receive notice 24 hours a day, 7 days a week. Collocators providing notice to SWBT's Local Operations Center must specify the title and date of all drawings, schematics, or other engineering documents that will be used while in the Eligible Structure.

The Collocator shall conduct background checks of the technicians who have access to the collocation space. Collocator technicians will be security qualified by the Collocator and will be required to be knowledgeable of SWBT security standards. Disciplinary procedures shall be established in accordance with Section 15.3 to ensure the safety and integrity of the Eligible Structure, including, e.g., procedures that require the responsible employee to be terminated for certain specified actions that damage or place the equipment of SWBT or other Collocators in jeopardy.

SWBT may use security devices, e.g., identification swipe cards, keyed access, and/or logs, as appropriate for the Eligible Structure where collocation will take place.

The Commission will permit SWBT to recover the cost of such security devices from the Collocators in a reasonable manner. The Collocator shall provide indemnification and insurance to cover any damages caused by the Collocator's technicians at a level commensurate with the indemnification and insurance provided by SWBT equipment suppliers with equivalent access.

Provisioning of equipment required for virtual collocation, e.g., power arrangements and interconnection arrangements will be provided in accordance with this tariff and interconnection agreements.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

15.0 OBLIGATIONS OF THE COLLOCATOR

15.1 Indemnification of SWBT

Except as otherwise provided and to the extent not contradicted herein, the indemnity provisions of the Interconnection Agreement between SWBT and the Collocator shall apply and are incorporated herein by this reference. However, in no event will the provisions in this section supersede or override the indemnification provisions contained in the interconnection agreement between SWBT and Collocator. Additionally, in the event of a conflict between indemnification provisions in the interconnection agreement and the Tariff, the provisions in the interconnection agreement will control.

Collocators shall indemnify and hold harmless SWBT the agents, employees, officers, directors and shareholders of any of them ("Indemnities"), from and against any and all liabilities, obligations, claims, causes of action, fines, penalties, losses, costs, expenses (including court costs and reasonable attorney's fees), damages, injuries, of any kind, (individually and collectively "Liabilities"), including but not limited to, Liabilities as a result of (a) injury to or death of any person; (b) damage to or loss or destruction of any property; or (c) Liabilities related in any manner to employee benefits, workers compensation, payroll tax, and any other employer obligations which may be asserted against SWBT where such liabilities arise in connection with Collocator's use of persons that it classifies as an independent contractor or subcontractor to perform obligations under this Tariff; (d) attachments, liens or claims of material persons or laborers arising out of or resulting from or in connection with this Tariff or the performance of or failure to perform and directly or indirectly caused, in whole or part, by acts of omissions, negligent or otherwise, of Collocator or a contractor or a representative of Collocator or an employee of any one of them, except to the extent such Liabilities arise from the negligence or willful or intentional misconduct of SWBT or its employees. The provisions in this section are reciprocal and applicable also to SWBT.

SWBT shall make best efforts to promptly notify Collocator of any suit or other legal proceeding asserting a claim for Liabilities. Upon request, Collocator shall, at no cost or expense to the Indemnitee, defend any such suit or legal proceeding asserting a claim for Liabilities, and Collocator shall pay any costs and attorneys' fees that may be incurred by any Indemnitee in connection with any such claim, proceeding or suit. Collocator shall also (a) keep SWBT and any other Indemnitee subject to any such claim fully informed as to the progress of such defense, and (b) afford SWBT and such Indemnitee, each at its own expense, an opportunity to participate on an equal basis with Collocator in the defense or settlement of any such claim.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

15.0 OBLIGATIONS OF THE COLLOCATOR (Continued)

15.2 Insurance

The Collocator agrees to maintain, at all times, the following minimum insurance coverages and limits and any additional insurance and/or bonds required by law:

(A) Workers' Compensation insurance with benefits afforded under the laws of the State of Missouri and Employers Liability insurance with minimum limits of $100,000 for Bodily Injury-each accident, $500,000 for Bodily Injury by disease-policy limits and $100,000 for Bodily Injury by disease-each employee.

(B) Commercial General Liability insurance with minimum limits of: $2,000,000 General Aggregate limit; $1,000,000 each occurrence sub-limit for all bodily injury or property damage incurred in any one occurrence; $1,000,000 each occurrence sub-limit for Personal Injury and Advertising; $2,000,000 Products/Completed Operations Aggregate limit, with a $1,000,000 each occurrence sub-limit for Products/Completed Operations. Fire Legal Liability sub-limits of $300,000 are required for lease agreements. SWBT will be named as an Additional Insured on the Commercial General Liability policy.

(C) If use of an automobile is required, Automobile Liability insurance with minimum limits of $1,000,000 combined single limits per occurrence for bodily injury and property damage, which coverage shall extend to all owned, hired and non-owned vehicles.

SWBT requires that companies affording insurance coverage have a B+ VII or better rating, as rated in the A.M. Best Key rating Guide for Property and Casualty Insurance Companies.

A certificate of insurance stating the types of insurance and policy limits provided the Collocator must be received prior to commencement of any work. The insurance provisions and requirements are reciprocal to SWBT as well. If a certificate is not received, SWBT will notify the Collocator and the Collocator will have 5 business days to cure the deficiency. If the Collocator does not cure the deficiency within 5 business days, Collocator hereby authorizes SWBT, and SWBT may, but is not required to, obtain insurance on behalf of the Collocator as specified herein. SWBT will invoice Collocator for the costs incurred to so acquire insurance.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

15.0 OBLIGATIONS OF THE COLLOCATOR (Continued)

15.2 Insurance (Continued)

The cancellation clause on the certificate of insurance will be amended to read as follows:

"SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED OR MATERIALLY CHANGED, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER."

The Collocator shall also require all contractors who may enter the Eligible Structure to maintain the same insurance requirements listed above.

Self-insurance in lieu of the insurance requirements listed preceding shall be permitted if the Collocator 1) has a tangible net worth of Fifty (50) Million dollars or greater, and 2) files a financial statement annually with the Securities and Exchange Commission and/or having a financial strength rating of 4A or 5A assigned by Dun & Bradstreet. The ability to self-insure shall continue so long as the Collocator meets all of the requirements of this Paragraph. If the Collocator subsequently no longer satisfies this Paragraph, the coverage requirements described above shall immediately apply.

15.3 Conduct While in SWBT Eligible Structures

Collocators and SWBT will each establish disciplinary procedures up to and including dismissal or denial of access to the Eligible Structure and other SWBT property for certain specified actions that damage, or place the equipment, facilities, or the network or the personnel of the Collocators or SWBT in jeopardy. The following are actions that could damage or place the Eligible Structure, or the network or the personnel of the Collocators or SWBT in jeopardy and may justify disciplinary action up to and including dismissal or the denial of access to the Eligible Structure and other SWBT property:

(a) Theft or destruction of SWBT's or Collocator's property;

(b) Use/sale or attempted use/sale of alcohol or illegal drugs on SWBT property;

(c) Threats or violent acts against other persons on SWBT property;

(d) Knowing violations of any local, state or federal law on SWBT property;

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

15.0 OBLIGATIONS OF THE COLLOCATOR (Continued)

15.3 Conduct While in SWBT Eligible Structures (Continued)

(e) Permitting unauthorized persons access to SWBT or Collocator's equipment on SWBT property; and

Carrying a weapon on SWBT property.

In addition, Collocator and SWBT will take appropriate disciplinary steps as determined by each party to address any violations reported by SWBT or the Collocator of SWBT's policies and practices on security, safety, network reliability, and business conduct as defined in SWBT's Interconnector's Collocation Services Handbook for Virtual Collocation in Missouri, provided the Handbook and any and all updates to it are timely provided to Collocator at no charge.

16.0 COOPERATIVE RESPONSIBILITIES

16.1 Qualification of Collocators

Collocator technicians will be security qualified by the Collocator and will be required to be knowledgeable of SWBT security standards. Collocator personnel and technicians will undergo the same level of security training, or its equivalent that SWBT's own employees and authorized contractors must undergo. SWBT will not, however, require Collocators to receive security training from SWBT, but will provide information to Collocators on the specific type of training required. Collocators can then provide their employees with their own security training. Qualification program and security training details shall be included in SWBT's Interconnector's Collocation Services Handbook for Virtual Collocation in Missouri.

17.0 RATE REGULATIONS

The rate regulations, rate element descriptions and rates and charges included in 13.0 preceding apply to this virtual collocation alternative wherein the Collocator maintains and repairs the virtually collocated equipment. Additional rate elements and rates apply to this alternative as provided for below.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

17.0 RATE REGULATIONS (Continued)

17.1 Rate Elements for SWBT Offices

(A) This security escort charge consists of the charges for SWBT-provided security escorts for Collocator Vendor's access to their virtual collocation space in Staffed and Unstaffed Central Offices. Any escort requirements will be initiated by the Collocator. Labor rates are based upon a ¼ hour basis and are dependent upon day of week and time of day. For purposes of this tariff, normal week day is defined as 8:00 a.m. through 5:00 p.m., Monday through Friday, excluding holidays. The billing period will start at the time the technician is contacted. This will allow for travel time to reach the agreed meet point. Access requests outside of normal business hours or for unstaffed Central Offices which are cancelled will be subject to the minimum four (4) hour call out charge. Non-recurring charges for this sub-element are specified in 17.3(A) following.

17.2 Rate Elements for SWBT CEVs, Huts and Cabinets

(A) Security Escorts

The security escort charge consists of the charges for SWBT-provided security escorts for Collocator Vendor's access to their virtual collocation space in CEVs, Huts and Cabinets. Any escort requirements will be initiated by the Collocator. Labor rates are based upon a ¼ hour basis. The billing period will start at the time the technician is contacted. This will allow for travel time to reach the agreed meet point. Access requests which are cancelled will be subject to the minimum four (4) hour call out charge. Rates and charges are as found in 17.4(A).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

17.0 RATE REGULATIONS (Continued)

17.3 Rates and Charges Central Offices

	USOC	Rate Per Month	Nonrecurring Charge
(A) Security Escorts			
Per visit			
(1) Staffed Building			
- Access during normal business hours			
- Each ¼ hour		$0.00	$15.15
- Each additional ¼ hour		0.00	15.15
- Access outside normal business hours			
- 4 hour minimum		0.00	242.35
- Each additional ¼ hour		0.00	15.15
(2) Unstaffed Building			
- Access during normal business hours			
- Each ¼ hour		0.00	15.15
- Each additional ¼ hour		0.00	15.15
- Access outside normal business hours			
- 4 hour minimum		0.00	242.35
- Each additional ¼ hour		0.00	15.15

17.4 Rates and Charges

CEVs, Huts and Cabinets

(A) Security Escorts, per visit			
4 hours minimum		00.00	242.35
Each additional ¼ hour		00.00	15.15

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities

When the Collocator selects the option to provide, install, and terminate their interconnection and power cabling with an SWBT Approved Vendor, the following paragraphs will apply. However, the terms and conditions within CDOW are not comprehensive. There are terms and conditions from the preceding sections of this same tariff that still apply for CDOW for rate elements that are not specifically addressed within Sections 18 and 19 following.

18.1 The Collocator has the option to provide, install and terminate its interconnection cabling between the Collocator's Dedicated Space and the SWBT Main Distribution Frame or its equivalent by an SWBT Approved Vendor. This option is only available if Collocator does all three (3) activities associated with interconnection cabling: provide, install and terminate. The Collocator may not elect to do some but not all the activities. Collocator must indicate on its virtual collocation application that it has selected this option to apply to all interconnection cabling requested on the application. If Collocator selects this option, the Collocator must also select the option to provide, install and terminate its power cable leads described in Section 18.2. If Collocator selects this option, SWBT will install and stencil termination blocks or panels at SWBT Main Distribution Frame or its equivalent for the handoff of the Actual Point of Termination (APOT) Connection(s) to the Collocator's SWBT Approved Vendor. Intervals and provisioning for this offering is found in Section 18.3.1 through 18.3.5. The Collocator's SWBT Approved Vendor must obtain an approved Method Procedures (MOP) from SWBT and follow SWBT's Technical Publication TP 76300MP for installation of equipment and facilities;

18.2 The Collocator has the option to provide, install and terminate its power cable leads between the Collocator's Dedicated Space and SWBT's Battery Distribution Fuse Bay (BDFB) by an SWBT Approved Power Installation Vendor. When the SWBT designated power termination point is at the Power Plant Primary Distribution, the Collocator's SWBT Approved Power Installation Vendor will provide and install the power cable leads, but not terminate. The Collocator must contact the SWBT Project manager five (5) business days prior to scheduling a request for the termination of the Collocator's power cable leads to the SWBT Power Plant Primary Distribution, which will be performed by SWBT. This option is only available if the Collocator does all three (3) activities associated with the power cable lead unless described otherwise within this Section. The Collocator may not elect to do some but not all the activities unless otherwise permitted in this section. If Collocator selects this option, the Collocator must also select the option to provide, install and terminate its interconnection cabling described in Section 18.1. Intervals and provisioning for this offering is found in Section 18.3.1 through 18.3.5. The Collocator's SWBT Approved Power Installation Vendor must obtain an approved Method of Procedures (MOP) from SWBT and follow SWBT's Technical Publication TP 76300MP for installation of equipment and facilities.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.3 Intervals and Provisioning

18.3.1 Implementation Intervals (Collocator Installs Interconnection and Power Cabling)

SWBT will provide Virtual Collocation arrangements in Eligible Structures on a "first-come, first-served" basis. The determination whether there is sufficient space to accommodate Virtual Collocation at a particular Eligible Structure will be made initially by SWBT. SWBT will notify Collocator as to whether its request for space has been granted or denied due to a lack of space within ten (10) calendar days from receipt of a Collocator's accurate and complete Virtual Collocation Application. If SWBT determines that Collocator's Virtual Collocation Application is unacceptable, SWBT shall advise Collocator of any deficiencies within this ten (10) calendar day period. SWBT shall provide Collocator with sufficient detail so that Collocator has a reasonable opportunity to cure each deficiency. To retain its place in the queue to obtain the Virtual Collocation arrangement, Collocator must cure any deficiencies in its Application and resubmit such Application within ten (10) calendar days after being advised of the deficiencies. Any changes to the amount or type of floor space, interconnection terminations, and power requested from the originally submitted Virtual Collocation Application will not be considered a deficiency, but rather as a new Virtual Collocation Application with a new ten (10) calendar day space notification and a new delivery interval. The delivery intervals set forth in this Section 18.3 is for new and augment Virtual Collocation Applications and apply only when the Collocator installs interconnection and power cabling.

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.3 Intervals and Provisioning (cont'd)

18.3.1 The delivery interval relates to the period in which SWBT shall construct and turnover to the Collocator's SWBT Approved Vendor the requested Virtual Collocation Space. The delivery interval begins on the date SWBT receives a complete and accurate Virtual Collocation Application from the Collocator. The Collocator must provide the SWBT, within seven (7) calendar days from the date of notification granting the application request, a confirmatory response in writing to continue construction along with the fifty percent (50%) payment of non-recurring charges (unless payment was received with application) or the delivery interval provided in table below will not commence until such time as SWBT has received such response and payment. If the Collocator has not provided SWBT such response and payment by the twelfth (12th) calendar day after the date SWBT notified Collocator its request has been granted, the application will be canceled. Dedicated space is not reserved until SWBT's receipt of the confirmatory response in writing from the Collocator with applicable fees. The delivery in from the Collocator with applicable fees. The delivery interval for Virtual Collocation is determined by SWBT taking into consideration the various factors set forth in Table (1) below including, without limitation, the number of all Virtual Collocation Applications submitted by Collocator and the need for additional preparation of the space such as overhead racking, additional power or HVAC. The delivery interval assigned will be provided to the Collocator by SWBT with the ten (10) calendar day space notification. Each complete and accurate Virtual Collocation Application received by SWBT from the Collocator will be processed in the order received unless the Collocator provides a priority list, whichever is applicable.

Table (1)

Number of All Applications submitted by One Collocator per state or metering region	Overhead Iron/Racking Exists for Virtual Collocation Space Use	Overhead Iron/Racking Does Not Exist for Virtual Collocation Space Use	Additional Power or HVAC is Required for Virtual Collocation Space Use
1 – 10	60 calendar days	80 calendar days	180 calendar days
11-20	65 calendar days	85 calendar days	185 calendar days

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.3 Intervals and Provisioning (cont'd)

18.3.1 (Continued)

Should the Collocator submit twenty-one (21) or more applications within ten (10) business days, the above delivery intervals will be increased by five (5) days for every five (5) additional applications or fraction thereof. Any material revision to an application will be treated as a new application and the delivery intervals set forth in Table (1) above will be re-started. All Virtual Collocation Applications received by SWBT from a Collocator within a ten (10) business day period shall be treated as submitted at the same time for purposes of administering the above staggering intervals. The Virtual Collocation delivery interval ends when roughed in and the assigned space has been distinctly marked by SWBT.

For example, but not by way of limitation, if a Collocator submits twelve (12) complete and accurate Virtual Collocation Applications in a state, the delivery intervals assigned by SWBT will depend on which variables apply within each Eligible Structure Virtual Collocation is requested:

If Applications (1-4) are for Virtual Collocation Space where overhead racking exists, the delivery intervals assigned will be sixty (60) days. If Applications (5-11) are for Virtual Collocation Space where overhead racking does not exist, the delivery intervals assigned to Applications (5-10) will be eighty (80) calendar days and Application (11) will be assigned eighty five (85) calendar days. The Virtual Collocation Application (12) was requested in an Eligible Structure that needs additional HVAC added and would be assigned one hundred and eight five (185) calendar days.

18.3.2 The second fifty percent (50%) payment must be received by SWBT prior to the space being turned over to the Collocator's SWBT_Approved Vendor. At space turnover, the Actual Point of Termination (APOT) Connection(s) will be provided to the Collocator's SWBT Approved Vendor by SWBT.

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.3 Intervals and Provisioning (cont'd)

18.3.3 For the following interconnection cabling Augments, the Collocator must submit a complete and accurate Virtual Collocation Application:

- 168 DS1 connections and/or
- 48 DS3 connections and/or
- 400 Copper (shielded or nonshielded) cable pair connections and/or
- 12 fiber pair connections

This application must include an up-front payment of the Application Fee and fifty percent (50%) of all applicable non-recurring charges.

The cabling Augment interval is determined by SWBT taking into consideration the various factors set forth in Table (2) below including, without limitation, the number of all Virtual Collocation Applications for the above Augments submitted by Collocator, the type of infrastructure available for collocation, and the need for additional preparation of the infrastructure such as overhead racking and additional power. The cabling Augment interval assigned will be provided to the Collocator by SWBT with the ten (10) calendar day Augment notification. Each complete and accurate Virtual Collocation Application received by SWBT from the Collocator will be processed in the order received unless the Collocator provides a priority list, whichever is applicable.

Table (2)

Number of All Applications submitted by One Collocator per state or metering region	Necessary Elements such as Iron/Racking and Power exist for Virtual Collocation Use	Necessary Elements such as Iron/Racking and Power does not exist for Virtual Collocation Use
1 – 10	30 calendar days	60 calendar days
11-20	35calendar days	65 calendar days

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.3 Intervals and Provisioning (cont'd)

18.3.3 Should the Collocator submit twenty-one (21) or more Virtual Collocation Applications for cabling Augments within ten (10) business days, the above cabling Augment intervals will be increased by five (5) days for every five (5) additional application or fraction thereof. Any material revision to a Virtual Collocation Application for cabling Augments will be treated as a new application and the cabling Augment delivery intervals set forth in Table (2) above. All cabling Augment applications received by SWBT from a Collocator within a ten (10) business day period shall be treated as submitted at the same time for purposes of administering the above staggering intervals.

For example, but not by way of limitation, if a Collocator submits twelve (12) Virtual Collocation Applications for cabling Augments in a state, the delivery intervals assigned will depend on which variables apply within each Eligible Structure requested:

If Applications (1-4) are for Virtual Collocation cabling Augments where necessary elements such as overhead racking and power exists, the delivery interval assigned will be thirty (30) calendar days. If Applications (5-12) are for Physical Collocation where necessary elements such as overhead racking and power does not exists, the delivery interval assigned to Applications (5-10) will be sixty (60) calendar days and for Applications (11-12) sixty five (65) calendar days.

18.3.4 For all Augments other than provided above, SWBT will work cooperatively with Collocator to negotiate a mutually agreeable delivery intervals.

18.3.5 Within twenty (20) calendar days or mutually agreed upon time, from SWBT's receipt of the confirmatory response in writing to continue construction on the Virtual Collocation job requested along with the 50% payment of non-recurring charges (unless payment was received with application), Network Support and/or appropriate departments will schedule a walk through visit with the CLEC and/or vendor to provide floor plans of space and the preliminary route design for the interconnection and power cabling.

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.4 Rates Elements for SWBT Central Offices

A. Power Arrangement

When the Collocator selects the option to install the power cable by an SWBT Approved Power Installation vendor, only the rack occupancy and on-going maintenance of the rack charge will apply. This is expressed as a monthly rate as specified in 19.1 (A).

B. Voice Grade Interconnection

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the Voice Grade Terminal blocks at the MDF, rack occupancy, and on-going maintenance charges will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (B).

C. DS-1 Interconnection Arrangement to DCS

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the DS-1 Port, rack occupancy, and on-going maintenance charges will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (C).

D. DS-1 Interconnection Arrangement to DSX

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the DSX at the MDF, rack occupancy, and on-going maintenance charges will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (D).

E. DS-3 Interconnection Arrangement to DCS

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the DS-3 Port, rack occupancy, and on-going maintenance charges will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (E).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.4 Rates Elements for SWBT Central Offices (cont'd)

F. DS-3 Interconnection Arrangement to DSX

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the DSX at the MDF, rack occupancy, and on-going maintenance charges will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (F).

G. Fiber Interconnection Arrangement

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the Fiber terminating panel at the FDF-1 Port, rack occupancy, and on-going maintenance charges will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (G).

H. Collocation to Collocation Connection

This rate element include virtual to virtual and virtual to physical connection options.

1. Fiber Cable

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the charge for on-going maintenance of the rack will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (H) (1).

2. Copper Cable

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the charge for on-going maintenance of the rack will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (H) (2).

LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

18.0 CDOW (CLECs Doing Own Work) - Collocator Responsibilities (cont'd)

18.4 Rates Elements for SWBT Central Offices (cont'd)

3. Coax Cable

When the Collocator selects the option to provide and install the interconnection cabling by an SWBT approved vendor, the charge for on-going maintenance will apply. This is expressed as a combination of a non-recurring charge and a monthly rate as specified in 19.1 (H) (3).

4. Cable Racking and Hole

This sub-element provides for cable rack space and hole for copper, coax and optical cabling between two collocation arrangements and the required terminations at each virtual collocation arrangement(s) at an Eligible Structure. This sub-element is expressed as a monthly rate specified in 19.1 (H)(4).

5. Route Design

This sub-element provides the route design for collocation-to-collocation connections. This sub-element is expressed as a non-recurring charge and this charge is specific in 19.1 (H) (5)

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LOCAL ACCESS SERVICE

VIRTUAL COLLOCATION (Continued)

19.0 Rates and Charges for CDOW

19.1 Rates and Charges for CLECs Doing own Work

The rate elements below represent the charges associated with CLEC's providing, installing, and terminating their interconnection and power cabling. However, the rates and charges within CDOW are not comprehensive. There are rates and charges from the preceding sections of this same tariff that still apply for CDOW for rate elements that are not specifically addressed within Section 19 following.

		USOC	Rate Per Month	Nonrecurring Charge
A.	Power Arrangements			
	(Collocator provides and installs Power Cables			
	2-20 AMP Feeds (Per 2-20 AMP power Feeds)		$0.52	$0.00
	2-50 AMP Feeds (Per 2-50 AMP power Feeds)		$0.52	$0.00
B.	Voice Grade Interconnection			
	(Collocator provides and installs Power Cabling)			
	Arrangement (Non-Shielded and Shielded)			
	(Per 100 Pairs)		$3.86	$225.02
C.	DS1 Interconnection			
	(Collocator provides and installs cabling)			
	Arrangement to DCS			
	(Per 28 DS1s)		$295.42	$3,496.22
D.	DS1 Interconnection			
	(Collocator provides and installs cabling)			
	Arrangement to DSX			
	(Per 28 DS1s)		$6.07	$651.13

CORRECTIONS TO THE DSO IMPAIRMENT TOOL

The DLC costs calculations were changed to adjust the DLC Common Power (peak) calculation for engineered DLC Capacity (i.e. fill), to include the range extension line card costs in the DLC investment and to correct the DLC Amp calculation to remove the duplicative division of 48 volts to the amps.

Collocation impairment related costs in the DS-0 and transport impairment tools were updated to exclude disconnect, include certain other cost drivers that were missing and move the leased fiber transport charges from the ds-0 to the transport tool because it is a transport related cost. In addition, the minimum power requirement for node locations was changed 300 amps to 200 amps and the DC peak load: average load conversion factor from .4 to 1 and the DC load amp:fuse amp conversion factor was changed from 1 to 1.5.

The hot cut charge data was revised to exclude the service order cost from the cost of additional lines.

The addressable business and residential lines were revised to correct an error inverting the business and residential line counts.

The transport (DS1/3) connectivity cost calculations were revised to include the node end of leased transport cross-connection costs.

The per foot fiber cost calculation was updated to exclude extra cable costs and the underground ACF calculation was corrected.

The cost per self provided DS3 calculation was revised to include the ring connector costs and revise the calculation methodology.

The cost of maintenance related to transport investment was divided by 12 to convert an annual maintenance expense factor to a monthly cost calculation.

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 110
COMPANY/AT&T/Van De Water
WITNESS MDV-1 thru MDV-22 + Exhibits MDV-1→
DATE 02/24-27/07
MDV-SR1→SR

REQUEST: For each month between August, 2000 and August, 2003, or for the latest period in which this information is available, (by state if available, if not, by region), what percent of total BellSouth retail to UNE-P orders were fully mechanized and required no manual intervention in BellSouth's ordering systems?

(a) What percent of any fallout is returned to the CLEC for correction/resolution?
(b) What percent does BellSouth manually create in its OSS?

RESPONSE: See response to Interrogatory No. 28. For the same reasons BellSouth cannot provide the information requested for migrations from specific services to UNE-L, BellSouth cannot provide similar information for migrations from specific services to UNE-P.

However, in the attached data tables, BellSouth provides – for the timeframe July 2002 to August 2003, and by state and region – the percent of *total* CLEC UNE-P migration orders (regardless of the type of service being changed) that were fully mechanized and required no manual intervention in BellSouth's ordering systems. Further, the responses for items (a) and (b) above are contained in columns on each table.

For the reasons cited in the response to Interrogatory No. 28, similar data for the August 2000 to June 2002 timeframe is not readily available.

RESPONSE PROVIDED BY: Ronald M. Pate

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
AT&T's 1st Interrogatories
October 6, 2003
Item No. 32

ATTACHMENT TO INTERROGATORY, ITEM NO. 32

Migrations to UNE-P
Region

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	1112	129740	8774	17089	264	103613	16343	13132	3211	87270	79.1%	19.6%	20.9%
Aug-02	1440	182895	9804	27574	362	145155	23192	18522	4670	121963	80.4%	20.1%	19.6%
Sep-02	669	138847	8355	21993	388	108111	14672	11484	3188	93439	82.0%	21.7%	18.0%
Oct-02	1263	168016	9516	25186	300	133014	11545	9424	2121	121469	85.7%	18.4%	14.3%
Nov-02	1071	173626	8684	26557	325	138060	8072	6467	1605	129988	88.9%	19.9%	11.1%
Dec-02	1288	155952	6842	26625	332	122153	10311	7702	2609	111842	87.6%	25.3%	12.4%
Jan-03	2002	168668	7067	26241	382	134978	15100	11828	3272	119878	85.2%	21.7%	14.8%
Feb-03	1177	183489	9394	28191	379	145525	9540	6881	2659	135985	88.6%	27.9%	11.4%
Mar-03	1598	197211	10474	29950	359	156428	9550	6850	2700	146878	88.6%	28.3%	11.4%
Apr-03	1548	222405	11535	35132	404	175334	10840	7456	3384	164494	88.9%	31.2%	11.1%
May-03	1616	213074	11767	32080	305	168922	8019	4819	3200	160903	89.8%	39.9%	10.2%
Jun-03	1712	231610	12773	38181	417	180239	14756	8788	5968	165483	87.7%	40.4%	12.3%
Jul-03	2625	254854	14707	38847	459	200841	22981	7853	15128	177860	87.6%	65.8%	12.4%
Aug-03	1550	228326	13225	31762	393	182946	19594	5157	14437	163352	89.1%	73.7%	10.9%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Alabama

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	38	8121	545	1138	20	6418	1377	1099	278	5041
Aug-02	89	19393	662	2638	30	16063	1835	1522	313	14228
Sep-02	91	9637	567	1473	21	7576	738	604	134	6838
Oct-02	123	11836	506	1786	12	9532	688	563	125	8844
Nov-02	136	11434	388	1680	25	9341	540	432	108	8801
Dec-02	114	9048	298	1450	17	7283	634	490	144	6649
Jan-03	300	11462	379	1508	22	9553	1103	914	189	8450
Feb-03	86	13149	547	1839	25	10738	669	530	139	10069
Mar-03	130	14509	672	2010	27	11800	634	500	134	11166
Apr-03	130	17925	789	2552	25	14559	1035	827	208	13524
May-03	70	15675	718	2290	28	12639	573	341	232	12066
Jun-03	102	17351	1163	2370	25	13793	1303	550	753	12490
Jul-03	147	24206	1344	2516	21	20325	2142	804	1338	18183
Aug-03	121	15747	878	2010	13	12846	1171	288	883	11675

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
75.0%	20.2%	25.0%
86.2%	17.1%	13.8%
84.4%	18.2%	15.6%
88.1%	18.2%	11.9%
90.2%	20.0%	9.8%
88.1%	22.7%	11.9%
84.1%	17.1%	15.9%
89.6%	20.8%	10.4%
89.6%	21.1%	10.4%
88.6%	20.1%	11.4%
91.4%	40.5%	8.6%
87.3%	57.8%	12.7%
88.8%	62.5%	11.2%
90.1%	75.4%	9.9%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Florida

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	110	35167	1999	5432	69	27667	4796	3879	917	22871	79.3%	19.1%	20.7%
Aug-02	231	42877	1927	8151	73	32726	5590	4687	903	27136	79.9%	16.2%	20.1%
Sep-02	101	35682	3716	5992	83	25891	3188	2467	721	22703	78.3%	22.6%	21.7%
Oct-02	162	31166	2473	5622	46	23025	1550	1269	281	21475	84.6%	18.1%	15.4%
Nov-02	162	36624	1798	6621	87	28118	1709	1390	319	26409	88.7%	18.7%	11.3%
Dec-02	272	48229	2336	10085	150	35658	3460	2372	1088	32198	86.6%	31.4%	13.4%
Jan-03	449	47173	2245	9739	183	35006	4848	3591	1257	30158	82.8%	25.9%	17.2%
Feb-03	339	47760	3023	9813	181	34743	2885	1912	973	31858	85.8%	33.7%	14.2%
Mar-03	562	49415	2865	9874	129	36547	2936	2071	865	33611	85.9%	29.5%	14.1%
Apr-03	623	57818	3463	12673	160	41522	3122	1874	1248	38400	86.6%	40.0%	13.4%
May-03	939	48688	3190	10374	106	35018	2613	1468	1145	32405	85.3%	43.8%	14.7%
Jun-03	943	46506	3046	12398	152	30910	3049	1870	1179	27861	82.6%	38.7%	17.4%
Jul-03	1415	49969	3447	11389	165	34968	4245	1467	2778	30723	82.9%	65.4%	17.1%
Aug-03	640	42479	3159	7491	166	31663	4044	1291	2753	27619	84.4%	68.1%	15.6%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Georgia

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	493	41989	2019	4967	50	34953	4352	3587	765	30601
Aug-02	534	32410	1643	4189	43	26535	3807	2859	948	22728
Sep-02	182	27098	1077	3520	65	22436	2900	2185	715	19536
Oct-02	436	39986	2001	4676	38	33271	3076	2491	585	30195
Nov-02	190	37926	1491	4981	36	31418	1619	1286	333	29799
Dec-02	206	32936	1500	4721	34	26681	1878	1477	401	24803
Jan-03	256	38691	1881	4015	55	32740	3339	2614	725	29401
Feb-03	198	39865	2063	4375	42	33385	1873	1387	486	31512
Mar-03	272	41974	2318	4513	46	35097	1745	1169	576	33352
Apr-03	301	43601	2331	4885	52	36333	1813	1230	583	34520
May-03	140	46158	2593	4845	49	38671	1541	905	636	37130
Jun-03	146	50978	2412	7146	74	41346	2881	1951	930	38465
Jul-03	378	55191	2646	11507	61	40977	3974	1992	1982	37003
Aug-03	206	50964	2637	9951	50	38326	2880	863	2017	35446

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
83.4%	17.6%	16.6%
81.9%	24.9%	18.1%
85.0%	24.7%	15.0%
86.0%	19.0%	14.0%
90.9%	20.6%	9.1%
88.6%	21.4%	11.4%
86.1%	21.7%	13.9%
89.6%	25.9%	10.4%
89.9%	33.0%	10.1%
89.9%	32.2%	10.1%
91.1%	41.3%	8.9%
89.5%	32.3%	10.5%
88.1%	49.9%	11.9%
90.5%	70.0%	9.5%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Kentucky

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	66	3350	438	496	16	2400	290	198	92	2110	75.0%	31.7%	25.0%
Aug-02	116	5587	368	1012	30	4177	769	631	138	3408	75.3%	17.9%	24.7%
Sep-02	29	8274	263	1550	24	6437	779	634	145	5658	85.9%	18.6%	14.1%
Oct-02	55	13719	542	2247	37	10893	1013	825	188	9880	87.4%	18.6%	12.6%
Nov-02	65	10831	316	1761	37	8717	437	365	72	8280	91.7%	16.5%	8.3%
Dec-02	54	7213	346	1263	14	5590	480	371	109	5110	86.9%	22.7%	13.1%
Jan-03	67	9337	290	1512	9	7526	709	568	141	6817	88.1%	19.9%	11.9%
Feb-03	58	11041	486	1756	20	8779	488	355	133	8291	90.2%	27.3%	9.8%
Mar-03	64	13551	659	2004	21	10867	437	300	137	10430	91.1%	31.4%	8.9%
Apr-03	45	11254	520	1553	31	9150	511	336	175	8639	90.6%	34.2%	9.4%
May-03	32	14919	687	1886	28	12318	435	284	151	11883	92.2%	34.7%	7.8%
Jun-03	11	14671	625	2708	23	11315	703	507	196	10612	90.3%	27.9%	9.7%
Jul-03	75	14583	704	1361	48	12470	1055	390	665	11415	90.7%	63.0%	9.3%
Aug-03	71	12416	705	1245	24	10442	842	277	565	9600	90.1%	67.1%	9.9%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Louisiana

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	117	8442	797	1173	39	6433	2097	1729	368	4336	62.1%	17.5%	37.9%
Aug-02	160	32368	2774	4732	72	24790	5004	3964	1040	19786	74.1%	20.8%	25.9%
Sep-02	81	15093	645	2668	86	11694	2900	2396	504	8794	73.8%	17.4%	26.2%
Oct-02	132	15460	680	2548	62	12170	1619	1375	244	10551	82.8%	15.1%	17.2%
Nov-02	160	16792	609	2637	32	13514	758	639	119	12756	90.1%	15.7%	9.9%
Dec-02	193	11680	429	1972	21	9258	646	507	139	8612	88.4%	21.5%	11.6%
Jan-03	332	14861	558	2558	30	11715	1148	973	175	10567	85.0%	15.2%	15.0%
Feb-03	83	17547	800	2499	20	14228	756	604	152	13472	90.1%	20.1%	9.9%
Mar-03	109	18388	1016	3017	27	14328	689	510	179	13639	89.3%	26.0%	10.7%
Apr-03	119	19948	939	3086	35	15888	661	408	253	15227	91.2%	38.3%	8.8%
May-03	118	18356	970	3506	19	13861	485	293	192	13376	90.6%	39.6%	9.4%
Jun-03	179	21400	1291	3439	39	16631	1615	839	776	15016	86.7%	48.0%	13.3%
Jul-03	182	20953	1501	2624	37	16791	2790	592	2198	14001	86.0%	78.8%	14.0%
Aug-03	146	17586	1031	1980	22	14553	2060	278	1782	12493	89.6%	86.5%	10.4%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Mississippi

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	64	2850	271	524	18	2037	575	447	128	1462	65.2%	22.3%	34.8%
Aug-02	122	9527	823	1493	30	7181	1527	1118	409	5654	73.3%	26.8%	26.7%
Sep-02	62	9095	380	1871	38	6806	980	729	251	5826	83.3%	25.6%	16.7%
Oct-02	82	12073	507	2011	31	9524	965	777	188	8559	86.2%	19.5%	13.8%
Nov-02	64	11354	387	1922	27	9018	742	564	178	8276	89.1%	24.0%	10.9%
Dec-02	83	8151	324	1412	22	6393	637	490	147	5756	86.5%	23.1%	13.5%
Jan-03	203	10447	367	1823	27	8230	940	728	212	7290	84.9%	22.6%	15.1%
Feb-03	88	12254	576	2030	43	9605	709	482	227	8896	88.6%	32.0%	11.4%
Mar-03	98	14017	708	2187	36	11086	805	555	250	10281	88.3%	31.1%	11.7%
Apr-03	87	15692	905	2511	30	12246	849	626	223	11397	87.6%	26.3%	12.4%
May-03	86	11953	721	2200	19	9013	443	273	170	8570	88.8%	38.4%	11.2%
Jun-03	61	11373	800	1769	16	8788	791	455	336	7997	85.9%	42.5%	14.1%
Jul-03	88	13041	880	1952	18	10191	1308	406	902	8883	86.6%	69.0%	13.4%
Aug-03	63	14319	798	1825	32	11664	1563	525	1038	10101	87.9%	66.4%	12.1%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
South Carolina

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	53	3122	1082	336	9	1695	311	249	62	1384	50.0%	19.9%	50.0%
Aug-02	27	4057	215	716	7	3119	691	537	154	2428	75.7%	22.3%	24.3%
Sep-02	21	7407	232	1265	19	5891	891	631	260	5000	85.0%	29.2%	15.0%
Oct-02	34	10780	605	1562	18	8595	692	500	192	7903	87.4%	27.7%	12.6%
Nov-02	35	10312	322	1524	18	8448	363	285	78	8085	92.6%	21.5%	7.4%
Dec-02	17	5835	272	911	12	4640	304	233	71	4336	89.3%	23.4%	10.7%
Jan-03	57	7484	239	1209	8	6028	500	405	95	5528	88.7%	19.0%	11.3%
Feb-03	60	9705	447	1500	12	7746	370	291	79	7376	90.2%	21.4%	9.8%
Mar-03	46	10585	519	1500	15	8551	574	471	103	7977	88.5%	17.9%	11.5%
Apr-03	32	12734	562	2025	20	10127	689	521	168	9438	89.4%	24.4%	10.6%
May-03	34	9440	465	1300	13	7662	369	232	137	7293	90.9%	37.1%	9.1%
Jun-03	59	9414	450	1500	4	7460	611	379	232	6849	88.5%	38.0%	11.5%
Jul-03	50	10862	629	1198	11	9024	645	302	343	8379	89.5%	53.2%	10.5%
Aug-03	44	10034	629	1126	15	8264	723	232	491	7541	89.3%	67.9%	10.7%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
North Carolina

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	56	13683	742	1444	18	11479	1028	842	186	10451
Aug-02	64	12072	447	1240	28	10357	1181	973	208	9176
Sep-02	40	9819	399	1179	10	8231	683	568	115	7548
Oct-02	106	13452	687	1644	17	11104	675	564	111	10429
Nov-02	100	16189	518	1899	27	13745	691	547	144	13054
Dec-02	94	14386	468	1770	16	12132	670	540	130	11462
Jan-03	115	13269	441	1431	23	11374	951	809	142	10423
Feb-03	75	14622	628	1590	15	12389	709	528	181	11680
Mar-03	130	15369	716	1688	30	12935	664	519	145	12271
Apr-03	74	16904	786	1826	19	14273	1010	849	161	13263
May-03	55	13994	742	1450	11	11791	420	265	155	11371
Jun-03	68	14193	688	1371	16	12118	992	736	256	11126
Jul-03	141	14596	941	1289	14	12352	945	389	556	11407
Aug-03	105	14983	845	1199	14	12925	1032	275	757	11893

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
86.4%	18.1%	13.6%
86.1%	17.6%	13.9%
88.2%	16.8%	11.8%
88.5%	16.4%	11.5%
91.8%	20.8%	8.2%
91.2%	19.4%	8.8%
88.4%	14.9%	11.6%
90.5%	25.5%	9.5%
90.0%	21.8%	10.0%
88.6%	15.9%	11.4%
91.5%	36.9%	8.5%
88.2%	25.8%	11.8%
88.6%	58.8%	11.4%
90.7%	73.4%	9.3%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

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Migrations to UNE-P
Tennessee

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	115	11414	803	1442	25	9144	1073	852	221	8071	82.0%	20.6%	18.0%
Aug-02	97	22106	685	3050	48	18323	2251	1844	407	16072	86.0%	18.1%	14.0%
Sep-02	62	13159	575	2093	41	10450	1158	932	226	9292	85.6%	19.5%	14.4%
Oct-02	133	16156	953	2775	35	12393	939	788	151	11454	85.9%	16.1%	14.1%
Nov-02	159	17936	866	3108	34	13928	946	767	179	12982	87.9%	18.9%	12.1%
Dec-02	255	15353	556	2711	45	12041	1297	971	326	10744	85.8%	25.1%	14.2%
Jan-03	223	14157	534	2294	24	11305	1348	1060	288	9957	84.6%	21.4%	15.4%
Feb-03	190	16019	687	2646	20	12666	902	657	245	11764	88.5%	27.2%	11.5%
Mar-03	187	17499	792	2819	27	13861	876	611	265	12985	89.1%	30.3%	10.9%
Apr-03	137	22228	996	3561	32	17639	868	636	232	16771	90.5%	26.7%	9.5%
May-03	142	17795	806	2711	24	14254	615	374	241	13639	91.2%	39.2%	8.8%
Jun-03	143	20657	843	2611	55	17148	1827	955	872	15321	88.8%	47.7%	11.2%
Jul-03	149	23100	1179	1686	55	20180	3882	683	3199	16298	89.0%	82.4%	11.0%
Aug-03	154	18450	958	1613	36	15843	3085	513	2572	12758	88.7%	83.4%	11.3%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-P
Undefined State

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	0	1602	78	137	0	1387	444	250	194	943	74.2%	43.7%	25.8%
Aug-02	0	2498	260	353	1	1884	537	387	150	1347	67.6%	27.9%	32.4%
Sep-02	0	3583	501	382	1	2699	455	338	117	2244	72.8%	25.7%	27.2%
Oct-02	0	3388	562	315	4	2507	328	272	56	2179	72.3%	17.1%	27.7%
Nov-02	0	4228	1989	424	2	1813	267	192	75	1546	41.5%	28.1%	58.5%
Dec-02	0	3121	313	330	1	2477	305	251	54	2172	79.4%	17.7%	20.6%
Jan-03	0	1787	133	152	1	1501	214	166	48	1287	81.1%	22.4%	18.9%
Feb-03	0	1527	137	143	1	1246	179	135	44	1067	79.7%	24.6%	20.3%
Mar-03	0	1904	209	338	1	1356	190	144	46	1166	76.8%	24.2%	23.2%
Apr-03	0	4301	244	460	0	3597	282	149	133	3315	89.4%	47.2%	10.6%
May-03	0	16096	875	1518	8	13695	525	384	141	13170	91.3%	26.9%	8.7%
Jun-03	0	25067	1455	2869	13	20730	984	546	438	19746	90.8%	44.5%	9.2%
Jul-03	0	28353	1436	3325	29	23563	1995	828	1167	21568	90.5%	58.5%	9.5%
Aug-03	0	31348	1585	3322	21	26420	2194	615	1579	24226	91.7%	72.0%	8.3%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

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BellSouth's Interrogatory No. 32

REQUEST: For each month between August 2000 and August 2003, or for the latest period in which this information is available (by state, if available; if not, by region), what percent of total BellSouth retail to UNE-L orders were fully mechanized and required no manual intervention in BellSouth's ordering system.

(a) What percent of any fallout is returned to the CLEC for correction/resolution?

(b) What percent does BellSouth manually created in its OSS?

RESPONSE: BellSouth does not track information at the level of specificity requested in this interrogatory. The ordering process – and BellSouth's ability to track certain data items – is driven by the submission of the local service request (LSR) by a CLEC. The LSR specifies the service that is being ordered, but does not provide information as to the type of service that is being changed. Consequently, BellSouth cannot provide the data as requested.

However, in the attached data tables, BellSouth provides – for the timeframe July 2002 to August 2003, and by state and region – the percent of *total* CLEC UNE-L migration orders (regardless of the type of service being changed) that were fully mechanized and required no manual intervention in BellSouth's ordering systems. Further, the responses for items (a) and (b) above are contained in columns on each table.

Similar data for the August 2000 to June 2002 timeframe is not readily available. BellSouth created the July 2002-August 2003 data tables primarily by using disaggregated LSR information that is the underlying data for the BellSouth flow-through report provided monthly on the BellSouth PMAP website. Since July 2002, BellSouth has retained the disaggregated LSR information in an accessible online database.

While BellSouth retains monthly flow-through reporting information well back beyond July 2002 as required, access to the disaggregated LSR information used to create the flow-through reports prior to July 2002 is not

available. That information is currently stored on magnetic tape, but it is not stored in a manner

RESPONSE (CONT.):

that allows extraction in a useable format without an extensive programming effort to develop special code.

Due to many modifications that have taken place within BellSouth's OSS over the past several years – and the impacts to extraction capabilities – separate code would have to be written for each month's flow-through data in order to extract the disaggregated LSR data required to calculate pre-July 2002 percentages as defined on the tables.

RESPONSE PROVIDED BY: Ronald M. Pate

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
AT&T's 1st Interrogatories
October 6, 2003
Item No. 28

ATTACHMENT TO INTERROGATORY, ITEM NO. 28

Migrations to UNE-L
Region

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	736	2435	1110	180	0	1145	824	563	261	321	11.8%	31.7%	88.2%
Aug-02	788	2392	1038	166	1	1187	939	679	260	248	9.0%	27.7%	91.0%
Sep-02	414	2094	955	118	0	1021	845	594	251	176	8.2%	29.7%	91.8%
Oct-02	478	3053	1254	177	0	1622	1417	1069	348	205	6.8%	24.6%	93.2%
Nov-02	436	2584	722	179	0	1683	1478	1087	391	205	8.4%	26.5%	91.6%
Dec-02	439	2515	750	139	2	1624	1273	970	303	351	14.0%	23.8%	86.0%
Jan-03	633	4417	840	236	11	3330	1490	943	547	1840	43.2%	36.7%	56.8%
Feb-03	483	2662	678	118	1	1865	1080	779	301	785	28.8%	27.9%	71.2%
Mar-03	453	2298	663	155	2	1478	1199	860	339	279	12.4%	28.3%	87.6%
Apr-03	367	2135	586	106	0	1443	946	651	295	497	23.7%	31.2%	76.3%
May-03	385	2492	702	158	1	1631	1092	748	344	539	22.7%	31.5%	77.3%
Jun-03	435	2263	865	227	0	1171	544	404	140	627	26.9%	25.7%	73.1%
Jul-03	274	3218	1262	221	0	1735	577	409	168	1158	37.3%	29.1%	62.7%
Aug-03	136	3120	1325	233	0	1562	782	635	147	780	27.1%	18.8%	72.9%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
Alabama

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	6	10	6	0	0	4	3	0	3	1
Aug-02	12	3	1	0	0	2	2	2	0	0
Sep-02	6	8	0	0	0	8	7	5	2	1
Oct-02	2	1	0	0	0	1	0	0	0	1
Nov-02	0	2	0	1	0	1	0	0	0	1
Dec-02	5	25	3	0	0	22	16	12	4	6
Jan-03	4	109	8	1	0	100	21	12	9	79
Feb-03	2	27	4	0	0	23	1	1	0	22
Mar-03	0	4	0	0	0	4	2	0	2	2
Apr-03	0	7	1	1	0	5	4	3	1	1
May-03	0	5	0	0	0	5	3	3	0	2
Jun-03	0	9	5	2	0	2	0	0	0	2
Jul-03	0	8	7	0	0	1	0	0	0	1
Aug-03	0	1	0	0	0	1	0	0	0	1

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
7.7%	100.0%	92.3%
0.0%	0.0%	100.0%
8.3%	28.6%	91.7%
33.3%	#DIV/0!	66.7%
100.0%	#DIV/0!	0.0%
23.1%	25.0%	76.9%
76.7%	42.9%	23.3%
75.9%	0.0%	24.1%
100.0%	100.0%	0.0%
20.0%	25.0%	80.0%
40.0%	0.0%	60.0%
28.6%	#DIV/0!	71.4%
12.5%	#DIV/0!	87.5%
100.0%	#DIV/0!	0.0%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
Flordia

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	243	1497	682	126	0	689	653	488	165	36
Aug-02	245	1540	618	126	1	795	767	590	177	28
Sep-02	103	1350	585	99	0	666	650	483	167	16
Oct-02	163	2217	876	135	0	1206	1173	928	245	33
Nov-02	138	1863	515	145	0	1203	1167	906	261	36
Dec-02	158	1813	567	112	1	1133	1018	823	195	115
Jan-03	238	2489	512	161	6	1810	970	674	296	840
Feb-03	116	1537	374	82	1	1080	758	609	149	322
Mar-03	47	1328	375	102	2	849	811	650	161	38
Apr-03	101	1074	302	60	0	712	498	394	104	214
May-03	100	1244	298	83	1	862	612	472	140	250
Jun-03	101	1172	451	145	0	576	320	263	57	256
Jul-03	69	1414	595	127	0	692	300	239	61	392
Aug-03	21	1548	651	143	0	754	430	373	57	324

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
2.5%	25.3%	97.5%
1.9%	23.1%	98.1%
1.3%	25.7%	98.7%
1.7%	20.9%	98.4%
2.3%	22.4%	97.7%
6.9%	19.2%	93.1%
37.1%	30.5%	62.9%
22.7%	19.7%	77.3%
3.4%	19.9%	96.6%
21.2%	20.9%	78.8%
22.3%	22.9%	77.7%
23.9%	17.8%	76.1%
30.3%	20.3%	69.7%
23.7%	13.3%	76.3%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + Total Mech LSR's) - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
Georgia

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	120	290	146	20	0	124	63	32	31	61	17.0%	49.2%	83.0%
Aug-02	156	260	127	11	0	122	45	25	20	77	20.0%	44.4%	80.0%
Sep-02	53	252	116	11	0	125	47	21	26	78	29.1%	55.3%	70.9%
Oct-02	57	254	102	23	0	129	48	22	26	81	30.9%	54.2%	69.1%
Nov-02	40	236	74	17	0	145	57	24	33	88	38.9%	57.9%	61.1%
Dec-02	55	226	47	9	1	169	48	25	23	121	48.8%	47.9%	51.2%
Jan-03	93	757	143	36	4	574	185	84	101	389	54.9%	54.6%	45.1%
Feb-03	70	433	118	19	0	296	105	48	57	191	44.7%	54.3%	55.3%
Mar-03	19	348	118	27	0	203	102	36	66	101	36.9%	64.7%	63.1%
Apr-03	50	362	101	14	0	247	110	40	70	137	41.8%	63.6%	58.2%
May-03	21	411	111	31	0	269	106	40	66	163	48.7%	62.3%	51.3%
Jun-03	33	574	186	44	0	344	77	36	41	267	51.1%	53.2%	48.9%
Jul-03	22	852	277	38	0	537	83	33	50	454	57.8%	60.2%	42.2%
Aug-03	9	817	346	45	0	426	130	91	39	296	39.9%	30.0%	60.1%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + Total Mech LSR's) - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
Kentucky

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	3	4	0	1	0	3	0	0	0	3	50.0%	#DIV/0!	50.0%
Aug-02	5	0	0	0	0	0	0	0	0	0	0.0%	#DIV/0!	100.0%
Sep-02	2	1	0	0	0	1	0	0	0	1	33.3%	#DIV/0!	66.7%
Oct-02	4	1	0	0	0	1	0	0	0	1	20.0%	#DIV/0!	80.0%
Nov-02	2	1	0	0	0	1	0	0	0	1	33.3%	#DIV/0!	66.7%
Dec-02	3	4	0	0	0	4	1	0	1	3	50.0%	100.0%	50.0%
Jan-03	13	82	2	2	0	78	8	4	4	70	78.7%	50.0%	21.3%
Feb-03	1	32	4	0	0	28	2	1	1	26	81.3%	50.0%	18.8%
Mar-03	0	12	8	3	0	1	0	0	0	1	11.1%	#DIV/0!	88.9%
Apr-03	0	2	0	0	0	2	1	1	0	1	50.0%	0.0%	50.0%
May-03	2	0	0	0	0	0	0	0	0	0	0.0%	#DIV/0!	100.0%
Jun-03	0	3	0	1	0	2	0	0	0	2	100.0%	#DIV/0!	0.0%
Jul-03	0	3	0	0	0	3	0	0	0	3	100.0%	#DIV/0!	0.0%
Aug-03	0	4	1	0	0	3	1	1	0	2	50.0%	0.0%	50.0%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
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(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
Louisiana

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	56	150	67	17	0	66	29	9	20	37	21.9%	69.0%	78.1
Aug-02	92	89	43	4	0	42	20	7	13	22	13.4%	65.0%	86.6
Sep-02	39	76	35	0	0	41	34	25	9	7	6.6%	26.5%	93.4
Oct-02	40	125	54	0	0	71	64	42	22	7	4.9%	34.4%	95.1
Nov-02	22	139	24	1	0	114	93	64	29	21	16.0%	31.2%	84.0
Dec-02	60	112	34	1	0	77	54	36	18	23	15.0%	33.3%	85.0
Jan-03	51	187	27	4	0	156	57	29	28	99	48.1%	49.1%	51.9
Feb-03	49	111	22	1	0	88	49	36	13	39	26.7%	26.5%	73.3
Mar-03	215	89	15	1	0	73	62	44	18	11	3.9%	29.0%	96.1
Apr-03	80	141	21	3	0	117	102	78	24	15	7.7%	23.5%	92.3
May-03	100	162	55	2	0	105	96	71	25	9	3.8%	26.0%	96.2
Jun-03	58	92	26	6	0	60	46	39	7	14	10.2%	15.2%	89.8
Jul-03	44	109	21	9	0	79	25	21	4	54	38.6%	16.0%	61.4
Aug-03	10	82	9	11	0	62	36	28	8	26	35.6%	22.2%	64.4

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + Total Mech LSR's) - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
Mississippi

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	44	5	2	0	0	3	3	2	1	0	0.0%	33.3%	100.0%
Aug-02	39	6	3	0	0	3	3	1	2	0	0.0%	66.7%	100.0%
Sep-02	80	3	0	0	0	3	3	3	0	0	0.0%	0.0%	100.0%
Oct-02	78	1	0	0	0	1	1	1	0	0	0.0%	0.0%	100.0%
Nov-02	71	2	0	0	0	2	2	1	1	0	0.0%	50.0%	100.0%
Dec-02	41	1	0	0	0	1	1	0	1	0	0.0%	100.0%	100.0%
Jan-03	106	2	0	0	0	2	2	2	0	0	0.0%	0.0%	100.0%
Feb-03	73	0	0	0	0	0	0	0	0	0	0.0%	#DIV/0!	100.0%
Mar-03	45	1	0	0	0	1	1	1	0	0	0.0%	0.0%	100.0%
Apr-03	43	12	6	0	0	6	6	2	4	0	0.0%	66.7%	100.0%
May-03	37	0	0	0	0	0	0	0	0	0	0.0%	#DIV/0!	100.0%
Jun-03	88	5	0	0	0	5	2	2	0	3	3.2%	0.0%	96.8%
Jul-03	23	35	18	1	0	16	2	2	0	14	24.6%	0.0%	75.4%
Aug-03	20	28	7	0	0	21	9	7	2	12	26.1%	22.2%	73.9%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + Total Mech LSR's) - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
North Carolina

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	210	249	114	10	0	125	35	15	20	90
Aug-02	180	290	161	17	0	112	45	18	27	67
Sep-02	85	224	129	6	0	89	34	11	23	55
Oct-02	101	233	115	17	0	101	43	22	21	58
Nov-02	143	152	65	8	0	79	47	15	32	32
Dec-02	78	170	53	13	0	104	47	18	29	57
Jan-03	88	395	73	13	1	308	111	46	65	197
Feb-03	145	286	85	11	0	190	72	30	42	118
Mar-03	102	293	73	14	0	206	113	52	61	93
Apr-03	77	281	78	14	0	189	92	35	57	97
May-03	96	344	126	24	0	194	102	41	61	92
Jun-03	79	252	137	23	0	92	37	16	21	55
Jul-03	94	588	270	33	0	285	104	66	38	181
Aug-03	58	415	220	21	0	174	108	79	29	66

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
21.0%	57.1%	79.0%
15.7%	60.0%	84.3%
19.6%	67.6%	80.4%
19.6%	48.8%	80.4%
12.5%	68.1%	87.5%
27.7%	61.7%	72.3%
48.8%	58.6%	51.2%
31.2%	58.3%	68.8%
29.1%	54.0%	70.9%
33.8%	62.0%	66.2%
25.9%	59.8%	74.1%
19.2%	56.8%	80.8%
29.6%	36.5%	70.4%
15.6%	26.9%	84.4%

Notes:
(1) Percent Fully Mech = Issues SO's / (Total Manual LSR's + (Total Mech LSR's - Auto Clarifications - Pending Supps - CLEC Caused Fallout))
(2) Percent Fallout Returned to CLEC = CLEC Caused Fallout / Total System Fallout
This does not give any consideration to manual clarifications processed from LSR's from the Total Manual Fallout category.
(3) Percent BST Manually Creates = (Total Manual LSR's + Total Manual Fallout + BST Caused Fallout) / (Total Manual LSR's + Total Mech LSR's) - Auto Clarifications - Pending Supps - CLEC Caused Fallout))

Migrations to UNE-L
South Carolina

Month	LSR Submissions		Mech LSR Submissions							
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's
Jul-02	4	86	40	0	0	46	17	6	11	29
Aug-02	19	72	37	3	0	32	19	6	13	13
Sep-02	5	64	42	1	0	21	11	6	5	10
Oct-02	0	66	36	2	0	28	15	7	8	13
Nov-02	4	72	26	6	0	40	23	15	8	17
Dec-02	1	42	21	2	0	19	12	5	7	7
Jan-03	9	85	32	7	0	46	34	13	21	12
Feb-03	0	106	41	2	0	63	41	14	27	22
Mar-03	0	45	17	2	0	26	10	7	3	16
Apr-03	4	99	44	10	0	45	27	10	17	18
May-03	12	99	51	7	0	41	31	15	16	10
Jun-03	19	54	22	5	0	27	12	5	7	15
Jul-03	5	90	35	9	0	46	19	12	7	27
Aug-03	4	94	50	5	0	39	24	18	6	15

Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BST Manually Creates
36.7%	64.7%	63.3%
17.3%	68.4%	82.7%
15.9%	45.5%	84.1%
23.2%	53.3%	76.8%
27.4%	34.8%	72.6%
20.6%	58.3%	79.4%
18.2%	61.8%	81.8%
28.6%	65.9%	71.4%
40.0%	30.0%	60.0%
23.7%	63.0%	76.3%
11.4%	51.6%	88.6%
24.6%	58.3%	75.4%
34.2%	36.8%	65.8%
17.2%	25.0%	82.8%

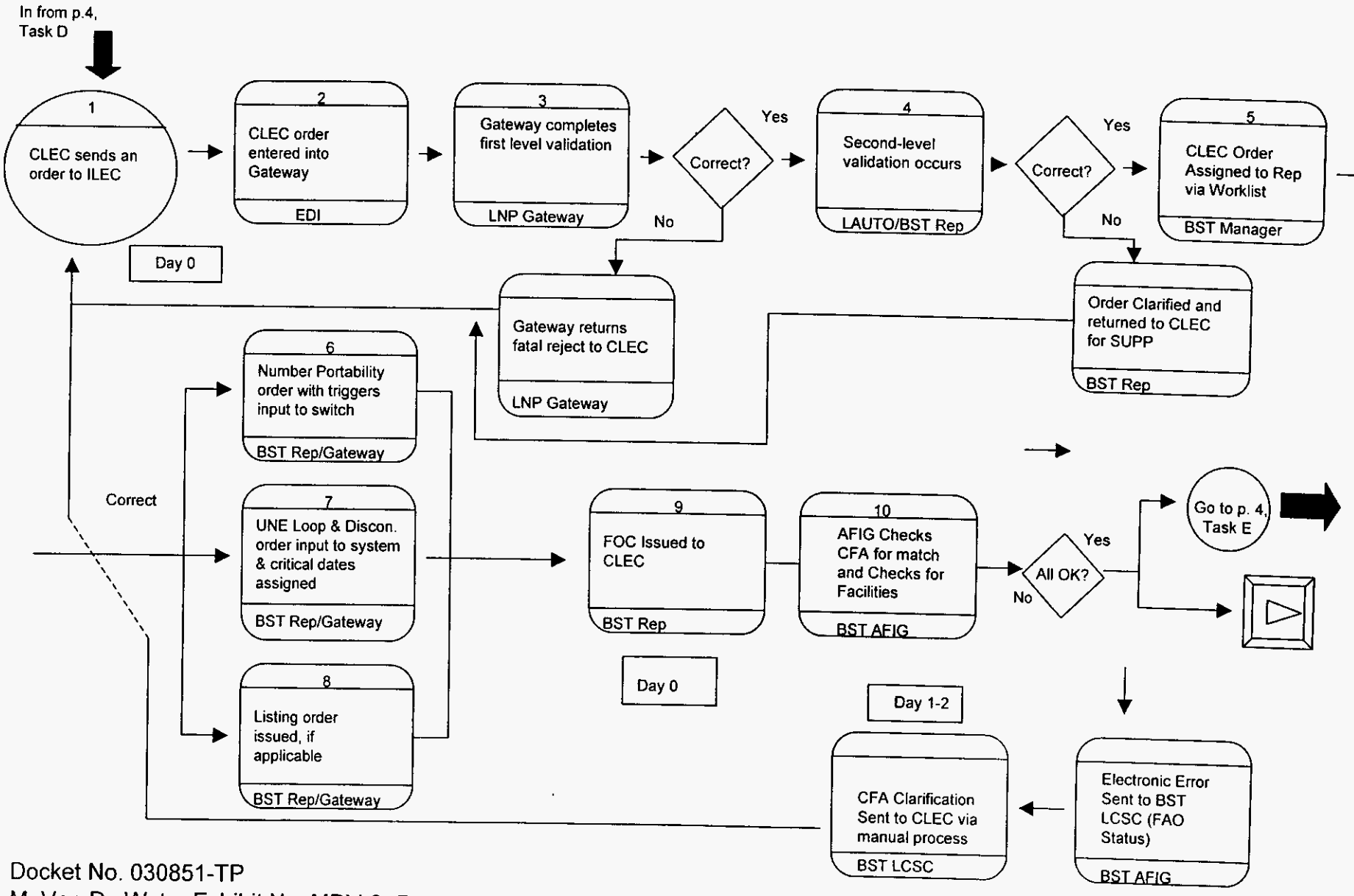
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Migrations to UNE-L
Tennessee

Month	LSR Submissions		Mech LSR Submissions								Percent Fully Mech	Percent Fallout Returned to CLEC	Percent BS Manually Creates
	Total Manual LSR's	Total Mech LSR's	Total Manual Fallout	Auto Clarification	Pending Supps	Validated LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's			
Jul-02	50	144	53	6	0	85	21	11	10	64	36.0%	47.6%	64.0%
Aug-02	40	132	48	5	0	79	38	30	8	41	25.8%	21.1%	74.2%
Sep-02	41	116	48	1	0	67	59	40	19	8	5.8%	32.2%	94.2%
Oct-02	33	155	71	0	0	84	73	47	26	11	6.8%	35.6%	93.2%
Nov-02	16	117	18	1	0	98	89	62	27	9	8.6%	30.3%	91.4%
Dec-02	38	122	25	2	0	95	76	51	25	19	14.3%	32.9%	85.7%
Jan-03	31	311	43	12	0	256	102	79	23	154	50.2%	22.5%	49.8%
Feb-03	27	130	30	3	0	97	52	40	12	45	31.7%	23.1%	68.3%
Mar-03	25	178	57	6	0	115	98	70	28	17	10.1%	28.6%	89.9%
Apr-03	12	157	33	4	0	120	106	88	18	14	9.5%	17.0%	90.5%
May-03	17	227	61	11	0	155	142	106	36	13	6.6%	25.4%	93.4%
Jun-03	57	102	38	1	0	63	50	43	7	13	8.6%	14.0%	91.4%
Jul-03	17	119	39	4	0	76	44	36	8	32	25.8%	18.2%	74.2%
Aug-03	14	131	41	8	0	82	44	38	6	38	29.0%	13.6%	71.0%

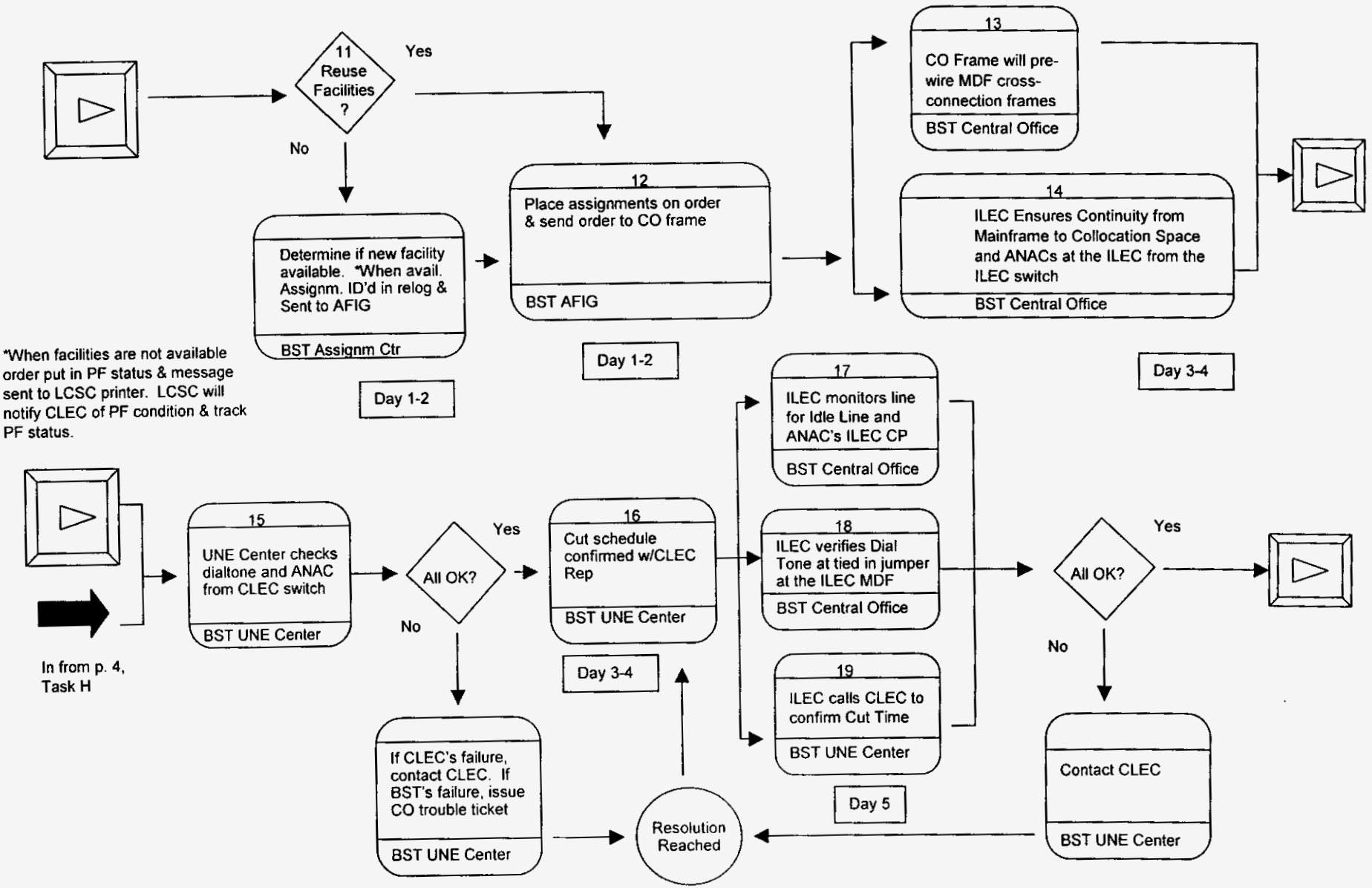
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Coordinated Hot Cut Process



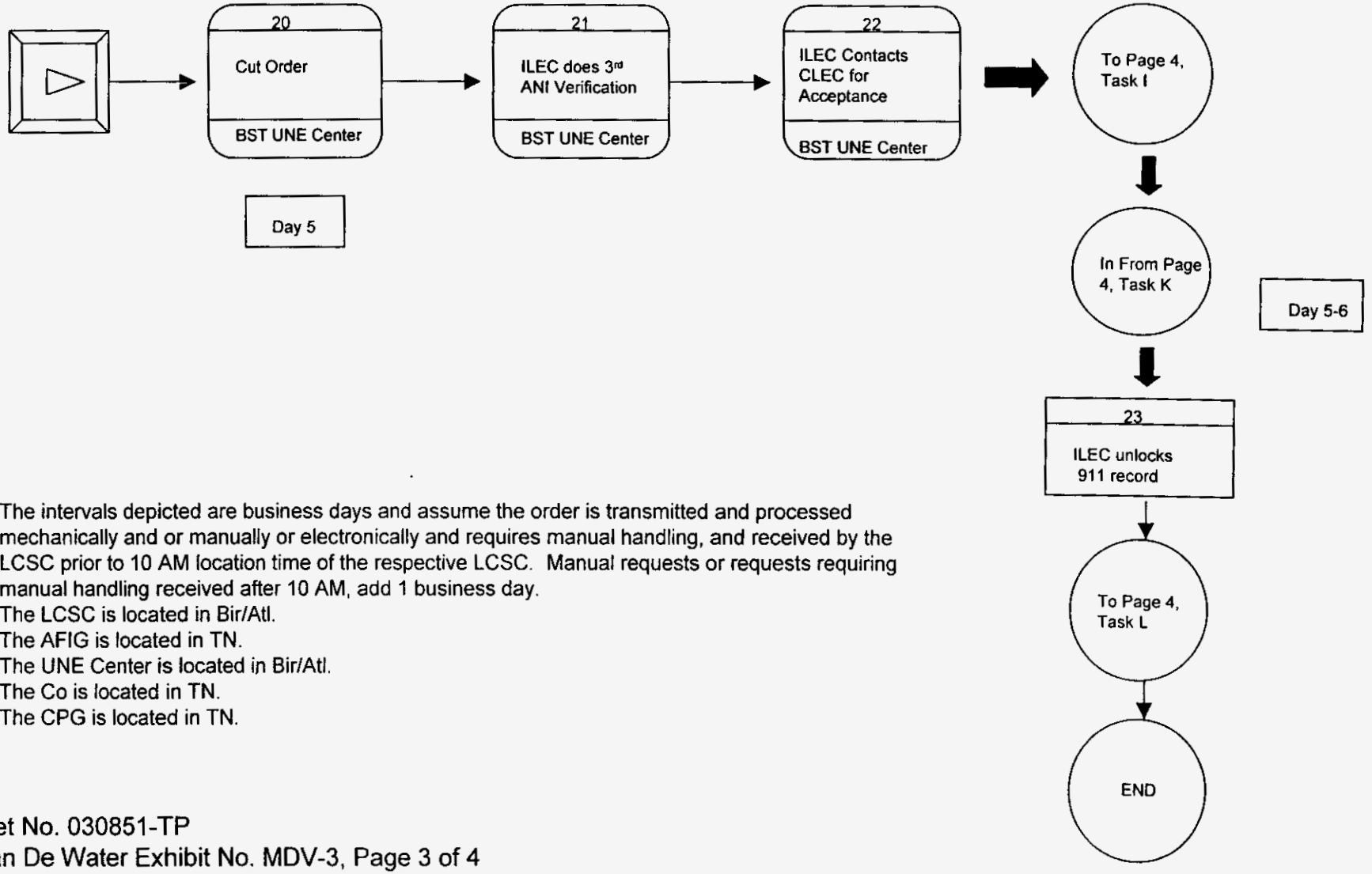
Docket No. 030851-TP
M. Van De Water Exhibit No. MDV-3, Page 1 of 4
UNE-L Flow Chart

Coordinated Hot Cut Process



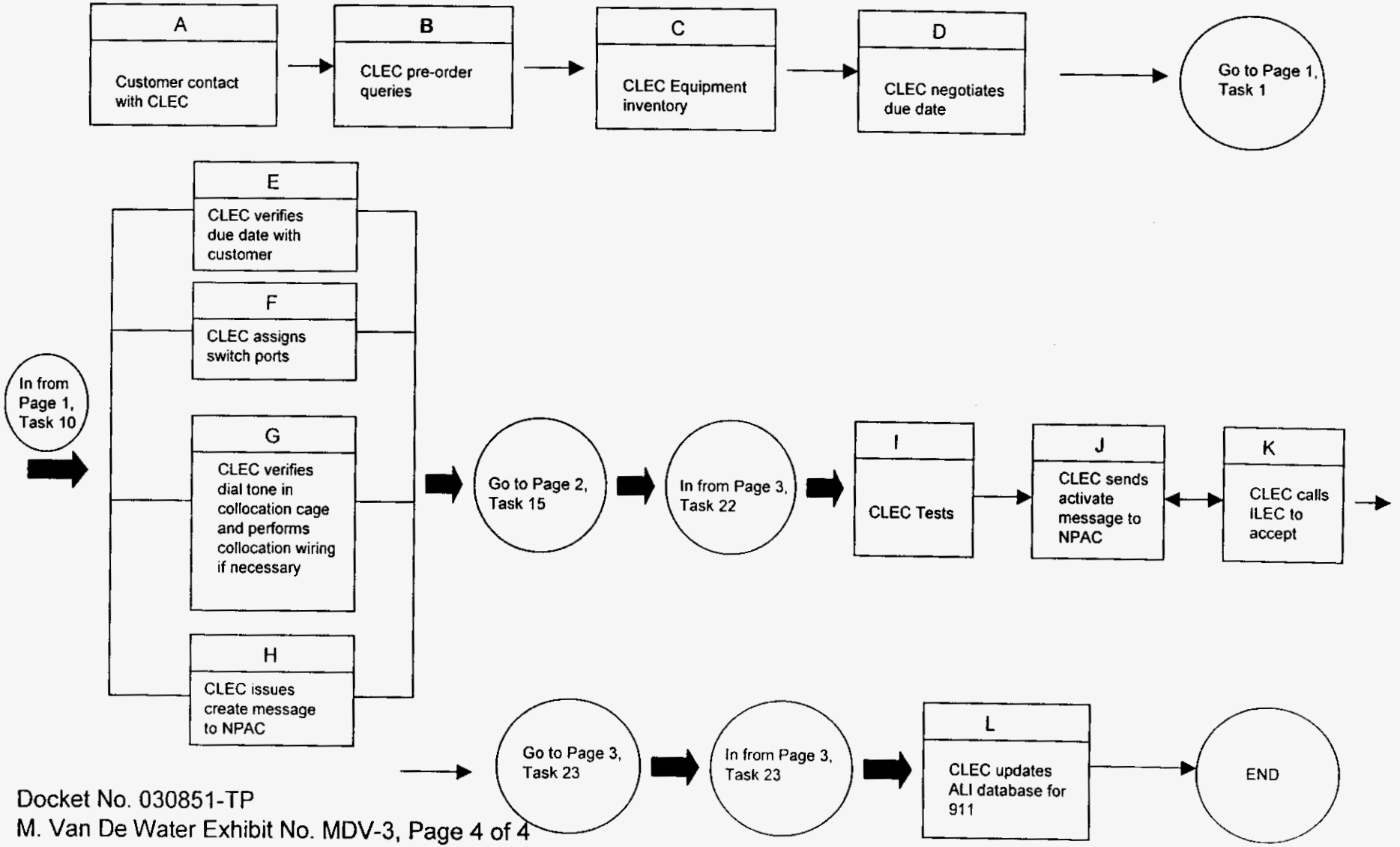
Docket No. 030851-TP
M. Van De Water Exhibit No. MDV-3, Page 2 of 4
UNE-L Flow Chart

Coordinated Hot Cut Process



The intervals depicted are business days and assume the order is transmitted and processed mechanically and or manually or electronically and requires manual handling, and received by the LCSC prior to 10 AM location time of the respective LCSC. Manual requests or requests requiring manual handling received after 10 AM, add 1 business day.
The LCSC is located in Bir/Atl.
The AFIG is located in TN.
The UNE Center is located in Bir/Atl.
The Co is located in TN.
The CPG is located in TN.

Coordinated Hot Cut Process
CLEC Hot Cut Incremental Activities



Docket No. 030851-TP
M. Van De Water Exhibit No. MDV-3, Page 4 of 4
UNE-L Flow Chart

SEE VIDEO ATTACHED

August 30, 2002

VIA FACSIMILE AND MAIL

Jim Schenk
BellSouth Telecommunications, Inc.
600 North 19th Street
8th Floor
Birmingham, Alabama 35203

RE: Coordinated Bulk Hot Cut Process

Dear Jim:

The purpose of this letter is to request BellSouth's adoption of a new process in our companies' efforts to address the insufficiency in today's loop-by-loop hot cut process. As we have discussed on several occasions, in spite of its commitment to serving customers on our own local network, AT&T has found it increasingly difficult to use unbundled loops to provide service to our small business local customers. While there are many factors, the inability to complete individual hot cuts in a commercially reasonable manner has proven to be a significant initial hurdle. In fact, in spite of the development of detailed individual hot cut processes to avoid outages, our experience has shown that current methods are unreliable, uneconomical and incapable of sustaining commercial volumes in a competitive environment.

However, AT&T has achieved a small measure of success in New York where, using an outside contractor, AT&T has been able to convert thousands of customers to AT&T's network using a bulk hot cut process. We wish to implement a similar process in the BellSouth territory. This process allows for the project-based conversion of a number of AT&T customers within a single local serving office ("LSO") and takes advantage of the efficiency of converting a number of lines, after regular business hours, with real time coordination between AT&T and BellSouth. Contrary to the current individual hot cut processes, the bulk conversion process can eliminate many of today's problems with customer outages and the lack of commercial volumes, while at the same time significantly lowering the cost to both BellSouth and AT&T.

Based on the New York experience, it is clear that it would be worthwhile to develop a process which would allow AT&T to migrate those customers currently served on the

UNE platform to AT&T's own network using unbundled loops. More importantly, because a bulk conversion process will be less costly for BellSouth to implement, we would anticipate substantial reductions on UNE-L hot cut charges associated with this process. Therefore, I am now asking for your commitment to work collaboratively with AT&T to fully document and implement the necessary procedures for such bulk conversions. AT&T has identified a number of factors that must be addressed in order to ensure a successful process. Although probably not a comprehensive list. these factors include:

- The ability to convert between 100 – 250 lines within a single LSO at one time;
- The development of a streamlined ordering process to avoid unnecessary individual orders and both the work and costs associated with them;
- A project managed focus at both AT&T and the BellSouth;
- BellSouth's conversion readiness, including dial-tone/ANI testing, loop qualification testing and pre-wiring in advance of the conversion;
- Dedicated personnel at BellSouth for the duration of the conversion process, including personnel able to resolve CFA discrepancies identified during the bulk conversion;
- Commitment of immediate service restoration in the event of a service outage during the conversion process;
- The development of appropriate measurements and tracking to ensure the quality of the process, and if necessary, to further improve the process;
- Substantially reduced prices for UNE-L hot cuts to take into account reduced costs for BellSouth.

Additional requirements, which, we believe, BellSouth already delivers via COSMOS and LENS, are the electronic access to BellSouth's CFA inventory and the ability to identify spare and utilized facilities.

In order to most efficiently develop and test a bulk hot cut process, I suggest that each company designate a representative to lead our implementation teams with this effort. I will lead the AT&T team and ask that you designate the appropriate BellSouth team leader as soon as possible. Given the importance of this process to any attempt by AT&T to use unbundled loops to serve our customers, I ask that negotiations on the process begin no later than September 16, 2002.

Sincerely,

cc: Greg Terry

UNE-Port/Loop Combination (UNE-P) to UNE-Loop (UNE-L) Bulk Migration

CLEC Information Package

Version 1

Docket No. 030851-TP
M. Van De Water Exhibit No. MDV-6, Page 1 of 11
BellSouth's Bulk Migration Package

UNE-P to UNE-L Bulk Migration

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UNE-P to UNE-L Bulk Migration

1. Introduction & Scope

This Product Information Package is intended to provide CLECs general ordering information specific to the **UNE-P** to **UNE-L** Bulk Migration process described herein.

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

Please contact your BellSouth Local Support Manager if you have any questions about the information contained herein.

UNE-P to UNE-L Bulk Migration

2. Service Description

The Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element – Loop (UNE-L) Bulk Migration process may be used by a CLEC when migrating existing multiple non-complex UNE-P Services to a UNE-L offering.

All Bulk Migration orders will be project managed by a BellSouth Project Manager. Initially, the CLEC will submit required information to a BellSouth Project Manager who after reviewing the bulk migration work effort with the field organizations will provide due dates back to the CLEC. Once the CLEC receives the due date information from the BellSouth Project Manager, the CLEC will electronically submit a Bulk Request for service order processing and provisioning. This allows migration of multiple UNE-P end-users to a UNE-L offering without submitting individual Local Service Requests.

UNE-P and UNE-L are defined below:

2.1 UNE-P

UNE-P is a UNE Port/Loop Switched Combination that combines a UNE local switch port and UNE loop to create an end-user-to-end-user transmission path and provides local exchange service. The CLEC may also choose to use the vertical services that are available through the features and functions of the local switch.

2.2 UNE-L

UNE-L is defined as the local loop network element that is a transmission facility between the main distribution frame (MDF) in BellSouth's central office and the point of demarcation at an end-user's premises. This facility will allow for the transmission of the CLEC's telecommunications services when connected to the CLEC's switch equipment. The local loop will require cross-connects for connection to the CLEC's collocation equipment. BellSouth does not provide telecommunications services with the UNE-L.

UNE-P to UNE-L Bulk Migration

3. Requirements

Major requirements for UNE-P to UNE-L Bulk Migration process are listed below. For complete requirements, refer to the **UNE to UNE Bulk Migration** section of the **Local Ordering Handbook** *(formerly named "BellSouth Business Rules for Local Ordering")*

- Bulk Migration is available for migrating existing **non-complex** Port/Loop Combination services to Unbundled Loops with Local Number Portability (LNP).
- A UNE Loop will be provided for each ported telephone number formerly associated with the UNE-P Service.
- Complex UNE-P accounts are prohibited on Bulk Requests. Examples of Complex UNE-P are 2 Wire ISDN/BRI Digital Loop & Port UNE Combination, 4 Wire ISDN/PRI Digital Loop & Port UNE Combination, UNE-P Centrex, Digital Direct Integration Termination Service (DDITS), etc.
- The UNE-Ps that can be migrated are listed in the **UNE-P USOC** section.
- UNE-Ps can be migrated to the UNE-Ls listed in the **UNE-L USOC** section. These UNE-L types must be in the CLEC's Interconnection Agreement.
- Bulk Requests that require a change in existing loop facilities to a type of facility that is not available, resulting in a Pending Facility (PF) status, must be cancelled by the CLEC and removed from the Bulk Request.
- All Existing Account Telephone Numbers (EATNs) on the Bulk Request must use the existing Regional Street Address Guide (RSAG) valid end-user address.
- All EATNs must be served from the same BellSouth Serving Wire Center (SWC).
- All UNE-Ps on a Bulk Request must be migrated to a single UNE-L type.
- No end-user moves or changes of address will be allowed on the Bulk Request.
- Non-Recurring rates for the specific loop type being requested will be charged.
- Service order charges for mechanized orders (SOMEC) will be charged based on the current rules for individual Local Service Requests (LSRs) created per EATN of a Bulk Request.
- A BellSouth Project Manager (PM) will project manage the Bulk Request.
- CLEC must submit a **BellSouth UNE-P to UNE-L Bulk Migration Project Notification**, herein known as **Project Notification,** to the BellSouth PM prior to the CLEC's placing the mechanized Bulk Request.
- CLEC may specify Desired Due Dates (DDD) for each EATN. However, the BellSouth PM will negotiate firm Due Dates for the Bulk Request.
- A minimum of two (2) EATNs and up to a maximum of ninety-nine (99) EATNs can be placed on a single Bulk Request.
- A maximum of twenty-five (25) end-user telephone numbers per EATN can be placed on a Bulk Request.
- No additional EATNs or end-user telephone numbers may be added to the ***BellSouth UNE-P to UNE-L Bulk Migration Project Notification*** form once it has been submitted to the BellSouth PM.

UNE-P to UNE-L Bulk Migration

Requirements (continued)

- Order Coordination-Time Specific option is not applicable for a Bulk Request.
- UNE-Ls that require a Service Inquiry and/or Unbundled Loop Modification are excluded from the Bulk Request process.
- A Reservation Identification (RESID) (also referred to as a Facility Reservation Number (FRN)) is required on the Bulk Request for Unbundled ADSL Compatible Loops, HDSL Compatible Loops and Unbundled Copper Loop - Designed (UCL-D). Refer to the **Unbundled ADSL and Unbundled HDSL Compatible Loop, UCL-Designed CLEC Information Packages** and **Loop Make-Up CLEC Information Package** for RESID/FRN requirements.
- When a Mechanized Loop Make Up with Facility Reservation Number (FRN) is requested, the CLEC must submit the Bulk Request with the FRN to BellSouth within 24 hours of receiving FRN.
- Firm Order Confirmation (FOC) will be sent on individual LSRs generated from the Bulk Request.
- Upon receipt of a Reject, CLEC must re-submit a corrected Bulk Request or submit a cancellation of the Bulk Request.

4. Options

- Order Coordination (OC) /Coordinated Hot Cut (CHC) is included on the UVL-SL2, 2 Wire ADSL and 2/4 Wire HDSL Loops. OC is available when the loop is provisioned over an existing circuit that is currently providing service to the end-user.
- OC is available as a chargeable option for conversions to UVL-SL1, UCL-ND and UCL-Designed Loops. OC must be requested at the EATN level on the Project Notification form. An OC charge will be applied to each loop on the EATN for which OC has been requested. OC will be indicated on Project Notification and will not be required on the Bulk Request LSR at this time.
- The CLEC may qualify the existing UNE-P facilities for the UNE-L types requested. For example, through Loop Make-Up (LMU), the CLEC can verify that a UNE-P facility being migrated is not on an Integrated Digital Loop Carrier (IDLC). When the existing UNE-P facility is on IDLC, the CLEC can reserve alternate compatible facilities if available.

UNE-P to UNE-L Bulk Migration

5. Bulk Migration Submission/Flow Process

The Bulk Request Submission Process will consist of two main work activities. The CLEC will first submit a Project Notification. Once the Project Notification has been processed and returned to the CLEC, the CLEC will then prepare and input the mechanized Bulk Request. The Bulk Request must be submitted according to the guidelines contained in the **Local Ordering Handbook**. Below are the steps in the process :

Step #	Action
1	PM receives Project Notification form from CLEC and negotiates/assigns Bulk Order Package Identifier (BOPI) and validates information (i.e., USOCs, Same Wire Center, etc.).
2	If pertinent information is missing on the Project Notification package, the form is returned to CLEC along with a reason(s) for return. PM receives corrected Project Notification from the CLEC and continues the negotiation process.
3	PM contacts BellSouth's Network organization and negotiates Due Date (DD) for all related Purchase Order Numbers (PONs) in the Bulk package and returns Bulk Notification Form including negotiated DD to the CLEC.
4	Upon receipt of the Bulk Notification Form that includes negotiated DD from PM, CLEC submits Bulk Request package with negotiated dates for each EATN/PON via electronic ordering interface.
5	If the CLEC wants to supplement (SUP) (01,02,03) an individual PON, the request must be sent through the same electronic ordering system as the original Bulk Request.
6	At this point, the Bulk Request package will be processed for 1st level validation and any rejects will be mechanically generated to the CLEC.
7	The electronic ordering systems will accept the Bulk Request package, break the individual PONs into separate LSRs and populate the remaining required LSR fields from Operation Support System (OSS) systems prior to sending the individual LSRs downstream to the Local Number Portability (LNP) Gateway.
8	The LNP Gateway will perform 2nd level validations and provide any fallouts, per "business as usual" processes. The Local Carrier Service Center (LCSC) will handle all fallouts as normal. Any of the individual PONs that must be clarified will be sent back to the CLEC, business as usual.
9	After LNP Gateway issues the service orders, the LCSC will handle all manual service order fallouts as normal. The BellSouth Service Representative will send any PF and Missed Appointments (MA) to the CLEC via a jeopardy notice.
10	LNP Gateway will send an FOC on each individual PON associated with the Bulk Request package, to the CLEC.
11	The Project Manager will monitor PON, Service Order and Porting Statuses associated with the Bulk Request package. BellSouth's Service Representative and Project Manager will monitor the LNP gateway for the "Number Ported" messages and the Service Representative will handle manual port out order processing if required.

6. BellSouth UNE-P to UNE-L Bulk Migration Project Notification Process

Following is the Project Notification process:

- Complete the **BellSouth UNE-P to UNE-L Bulk Migration Project Notification** form according to the instructions.
- Electronically submit the ***Project Notification*** to the email address of the CLEC's assigned BellSouth Project Manager (PM). For help with identifying a Project Manager, contact your BellSouth Customer Support Manager.
- The BellSouth PM will review the information submitted by the CLEC and will assign a Bulk Order Package Identifier (BOPI) that the CLEC will later use on the electronic Bulk Request.
- The BellSouth PM will coordinate with BellSouth's field forces to schedule the migration Due Dates.
- Once the review with the field forces is complete, the BellSouth PM will include the Due Dates on the ***Project Notification*** and return it to the CLEC.
- No additional EATNs or end-user telephone numbers may be added to the ***Project Notification*** form once it has been submitted to the BellSouth PM.

UNE-P to UNE-L Bulk Migration

7. UNE-P USOCs

The UNE-P Services that can be migrated to UNE-L are represented by the Port USOCs listed in the table below:

Port USOC	Unbundled Port/Loop Combination Element	Description of Combinations using an Unbundled Exchange Port (UEP):
UEPBX	UEPLX	UEP, Business, 2 Wire Analog Business Line Port, UNE=P Basic Class of Service
UEPRX	UEPLX	UEP, Residence, 2 Wire Analog Residence Line Pot, UNE-P Basic Class of Service
UEPCO	UEPLX	UEP, Coin Basic Class of Service UNE-P
UEPBV	UEPLX	UEP, Remote Call Forwarding, Business Basic Class of Service
UEPVR	UEPLX	UEP, Remote Call Forwarding, Residence Basic Class of Service

8. UNE-L USOCs

Below are the UNE-L types and associated USOCs to which the UNE-Ps can be migrated:

Loop USOC	Description
UEAL2	2 Wire Unbundled Voice Loop – SL1
UEAL2, UEAR2	2 Wire Unbundled Voice Loop – SL2
UCLPW	2 Wire Unbundled Copper Loop/Short– Designed without manual Service Inquiry
UCL2W	2 Wire Unbundled Copper Loop/Long - Designed without manual Service Inquiry
UCL4W	4 Wire Unbundled Copper Loop/Short – Designed without manual Service Inquiry
UCL4O	4 wire Unbundled Copper Loop/Long – Designed without manual Service Inquiry
UEQ2X	2 Wire Unbundled Copper Loop – Non-Designed
UAL2W	2 Wire Unbundled ADSL Loop without manual Service Inquiry
UHL2W	2 Wire Unbundled HDSL Loop without manual Service Inquiry
UHL4W	4 Wire Unbundled HDSL Loop without manual Service Inquiry

UNE-P to UNE-L Bulk Migration

9. Intervals

9.1 BellSouth UNE-P to UNE-L Bulk Migration Project Notification Interval

- The "*PM Targeted Response Interval*" column in the table below represents the targeted number of business days in which the PM will respond back to the CLEC.
- CLEC must submit the **Project Notification** in advance of the earliest CLEC's requested Desired Due Date (DDD) according to the "*Minimum # of days in advance to submit Project Notification*" column in the table below. This column represents the number of days that the Project Notification must be submitted in advance of the earliest DDD.
- "*Minimum # of days*" includes the interval for the Project Manager to negotiate the Due Dates. It also allows three (3) days for the CLEC to correct, process and submit mechanized Bulk Request and it includes 14 days in order to meet the 14-business day submission requirement for the Bulk Request.
- The PM will attempt, where possible, to assign the work such that migrations occur on the requested DDD.

# of end-user Tel. Numbers	PM Targeted Response Interval	CLEC days after receipt from Proj Mgr	Bulk Request Submission Requirement	Minimum # of days in advance to submit Project Notification
Maximum of 99	7 business days	3 business days	14 business days	24 business days
100-200	10 business days	3 business days	14 business days	27 business days
201 +	To be determined	3 business days	14 business days	Contact PM

9.2 Bulk Request Service Order Intervals

- The BellSouth Project Manager will negotiate the Bulk Request due dates with BellSouth's provisioning personnel and will communicate the due date to the CLEC.
- The CLEC must submit the Bulk Request and it must be accepted by the mechanized system at least 14 business days in advance of the earliest Due Date for any end-user telephone number to be migrated.

9.3 Example of Intervals

An example of Intervals follows:

CLEC submits Project Notification with 87end-user telephone numbers on May 1, 2003:

- May 12, 2003 (7 business days) – CLEC receives Project Notification with firm Due Dates
- May 12 – May 15 (3 business days) – CLEC will prepare and submit mechanized Bulk request via the electronic interface.
- June 5, 2003 (14 business days) – the earliest PM assigned Due Date on the Project Notification returned to the CLEC.

10. Acronyms

ADSL	Asymmetrical Digital Subscriber Line
BOPI	Bulk Order Package Identifier
CHC	Coordinated Hot Cut
CLEC	Competitive Local Exchange Carrier
DDD	Desired Due Date
EATN	Existing Account Telephone Number
FOC	Firm Order Confirmation
FRN	Facility Reservation Number
HDSL	High-Bit-Rate Digital Subscriber Line
LCSC	Local Carrier Service Center
LNP	Local Number Portability
LSR	Local Service Request
MDF	Main Distribution Frame
OC	Order Coordination
OSS	Operation Support System
PM	Project Manager
PON	Purchase Order Number
RESID	Reservation Identification
RSAG	Regional Street Address Guide
SWC	Serving Wire Center
UCL-D	Unbundled Copper Loop – Designed
UCL-ND	Unbundled Copper Loop – Non-Designed
UNE-P	Unbundled Network Element-Port/Loop Combination
UNE-L	UNE Loop

Denise C. Berger
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June 9, 2003

Phillip Cook
BellSouth Interconnection Services
675 West Peachtree Street
Room 34H71
Atlanta, Georgia 30375

RE: NBR GA02-M931-00 Unbundled Network Element – Platform (UNE-P) to UNE-Loop (UNE-L) Coordinated Bulk Conversion Process

Dear Phillip:

The purpose of this letter is to respond to your letter of May 30, 2003, regarding New Business Request (NBR) GA02-M931-00. Your letter stated that BellSouth, pursuant to Section 1.10 of Attachment 10 of the Interconnection Agreement, would consider the NBR cancelled if an acceptance or rejection response was not provided within five (5) days.

In its initial request on August 30, 2002, AT&T indicated that BellSouth's current hot cut methods were "unreliable, uneconomical and incapable of sustaining commercial volumes in a competitive environment" and proposed a new process, designed to address each concern. Unfortunately, BellSouth has failed to adequately address these concerns.

First, AT&T is disappointed that BellSouth did not provide adequate information regarding the impact to customers served by BellSouth's IDLC facilities. Further, AT&T requested a process, which would allow the conversion of up to 500 customers in two (2) central offices per evening. In its letter of November 20, 2002. BellSouth states,

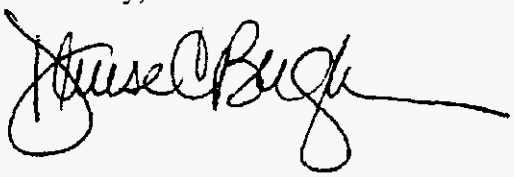
> "BellSouth has determined that AT&T's request is technically feasible with the following caveat:
>
> - The quantity of physical facilities and telephone numbers cut per evening will vary based on the load at the time the request is submitted, and will be driven by the actual number of lines per customer."

AT&T is distressed and concerned with this stated inability of BellSouth to sustain reasonable commercial volumes. AT&T finds BellSouth's unwillingness to commit to AT&T's modest request completely unacceptable.

Finally, BellSouth's ridiculous and excessive cost of $134.32 per working telephone number, plus regular ordering charges, as well as other unspecified overtime and technician charges, prohibits commercial use. BellSouth has once again presented AT&T with a Hobson's choice: risk a devastating disruption of a customer's service or pay BellSouth a ransom to mitigate the risk.

Please consider this letter a rejection of BellSouth's preliminary analysis and firm quote.

Sincerely,



cc: Steve Huels
Jim Schenk

Verizon Hot Cut Processes



Verizon Hot Cut Processes
TRO Impairment Issues

- **Operational issues:**
  - How to handle higher volume of Hot Cuts each month
    - WPTS automation opportunities
    - Scalability model
    - Leverage our existing, proven processes across the nation
      - Basic Hot Cuts
      - Project Hot Cuts
- **Economic issues:**
  - How to do all of the above while keeping costs down

Verizon Hot Cut Processes
Scalability Model

- **Estimate future Hot Cut volumes:**
  - Current UNE-P inward activities
    - New
    - Migration
  - Current Hot Cut Volumes
- **Determine required work times:**
  - Technicians
  - Coordination and support centers
- **Calculate required force:**
  - (Volumes) X (Work Time) = Force Required

REQUEST: Please provide the maximum number of lines that can be converted (per day) to

UNE-L using:

(a) a "bulk" hot cut process per CO and for Florida as a whole; and
(b) an individual hot cut process per CO and for Florida as a whole.

RESPONSE:

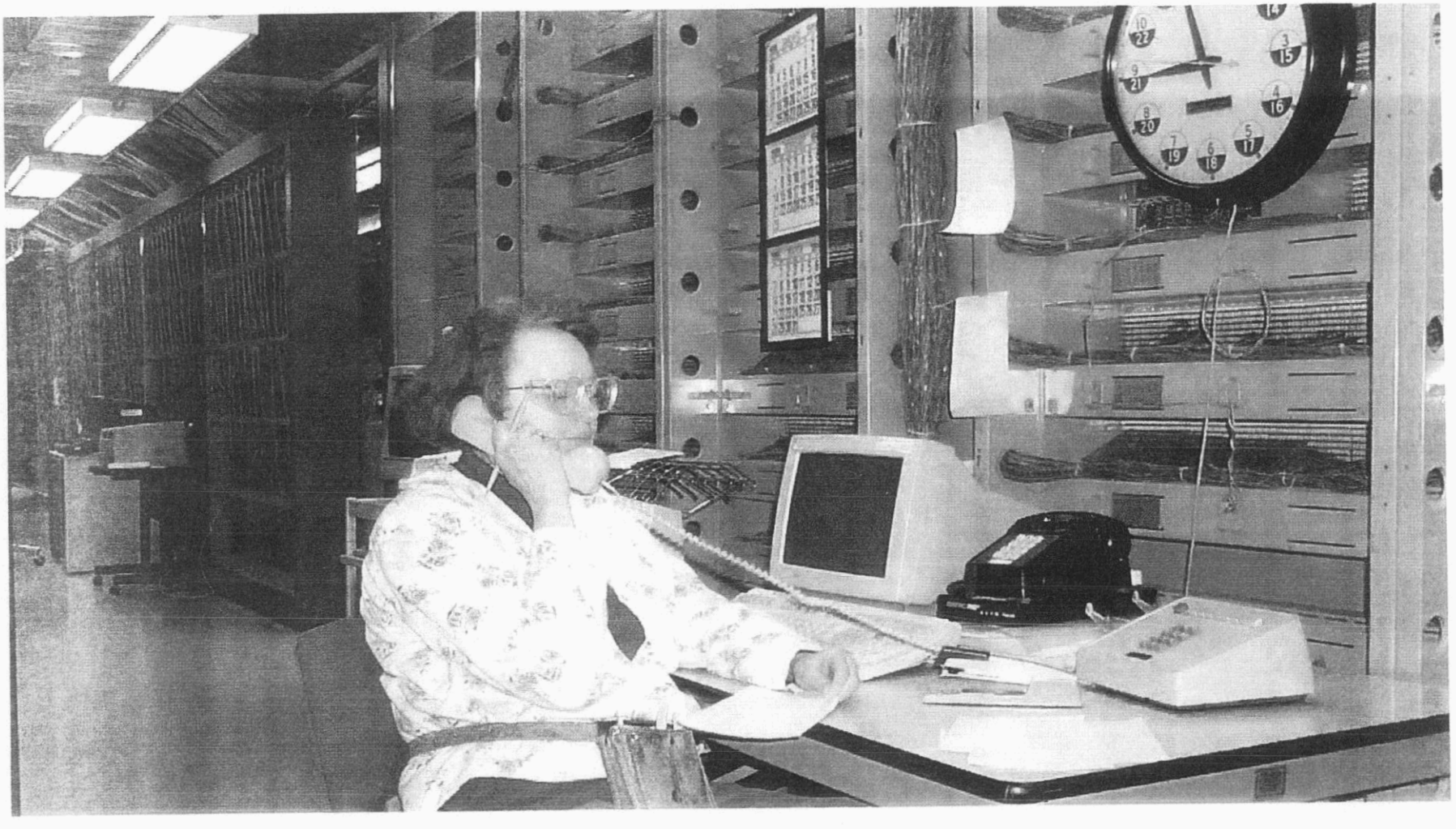
a) BellSouth's bulk hot cut process is scalable depending on volumes.

b) BellSouth's individual hot cut process is scalable depending on volumes.

RESPONSE PROVIDED BY: Ken Ainsworth

LOOP CUTOVER PROCESS

Step 1: Technician gets call to begin cutover. Asks for cable pair information.



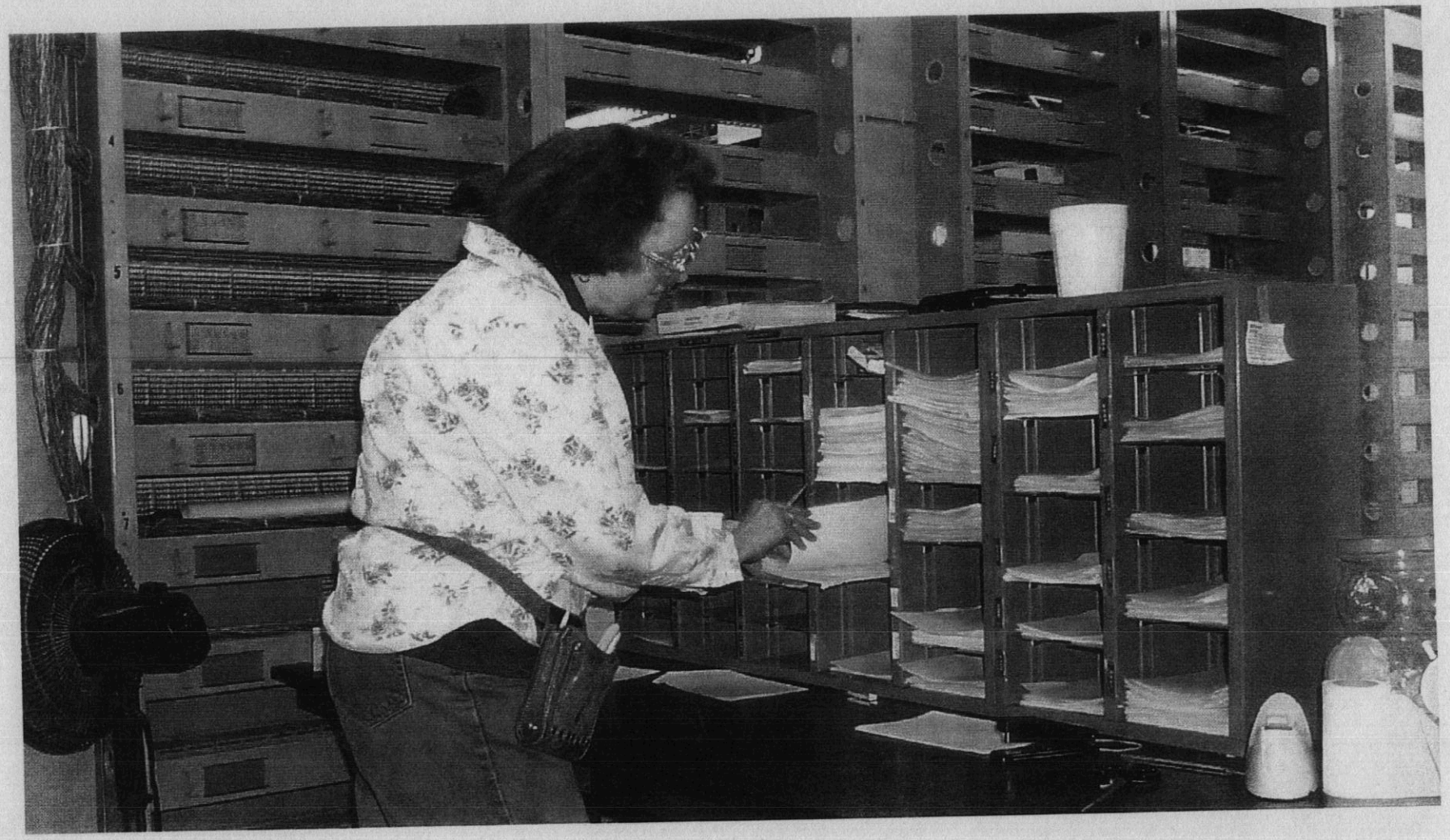
LOOP CUTOVER PROCESS

Step 2: Technician types in cable pair number to obtain order number.



LOOP CUTOVER PROCESS

Step 3: Technician retrieves copy of work order.



LOOP CUTOVER PROCESS

Step 4: Technician responds to UNE Center request to initiate overall cutover of service from BellSouth to CLEC.



LOOP CUTOVER PROCESS

Step 5: Technician conducts ANAC test to verify that correct loop is being cutover.



LOOP CUTOVER PROCESS

Step 6: Technician walks along Main Distributing Frame to locate both ends of jumper to be cut.



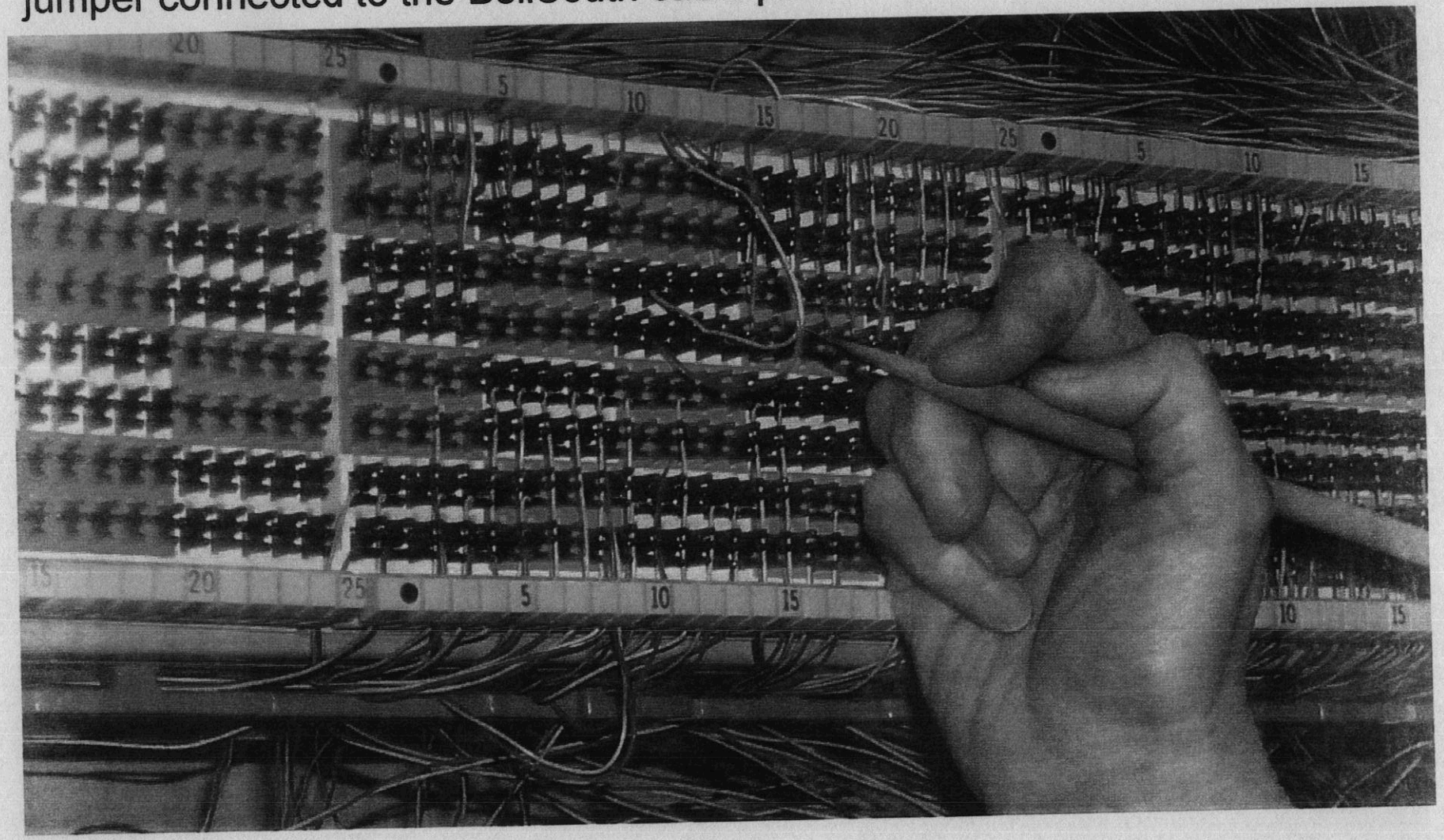
LOOP CUTOVER PROCESS

Step 7: Technician locates precise location of jumper.



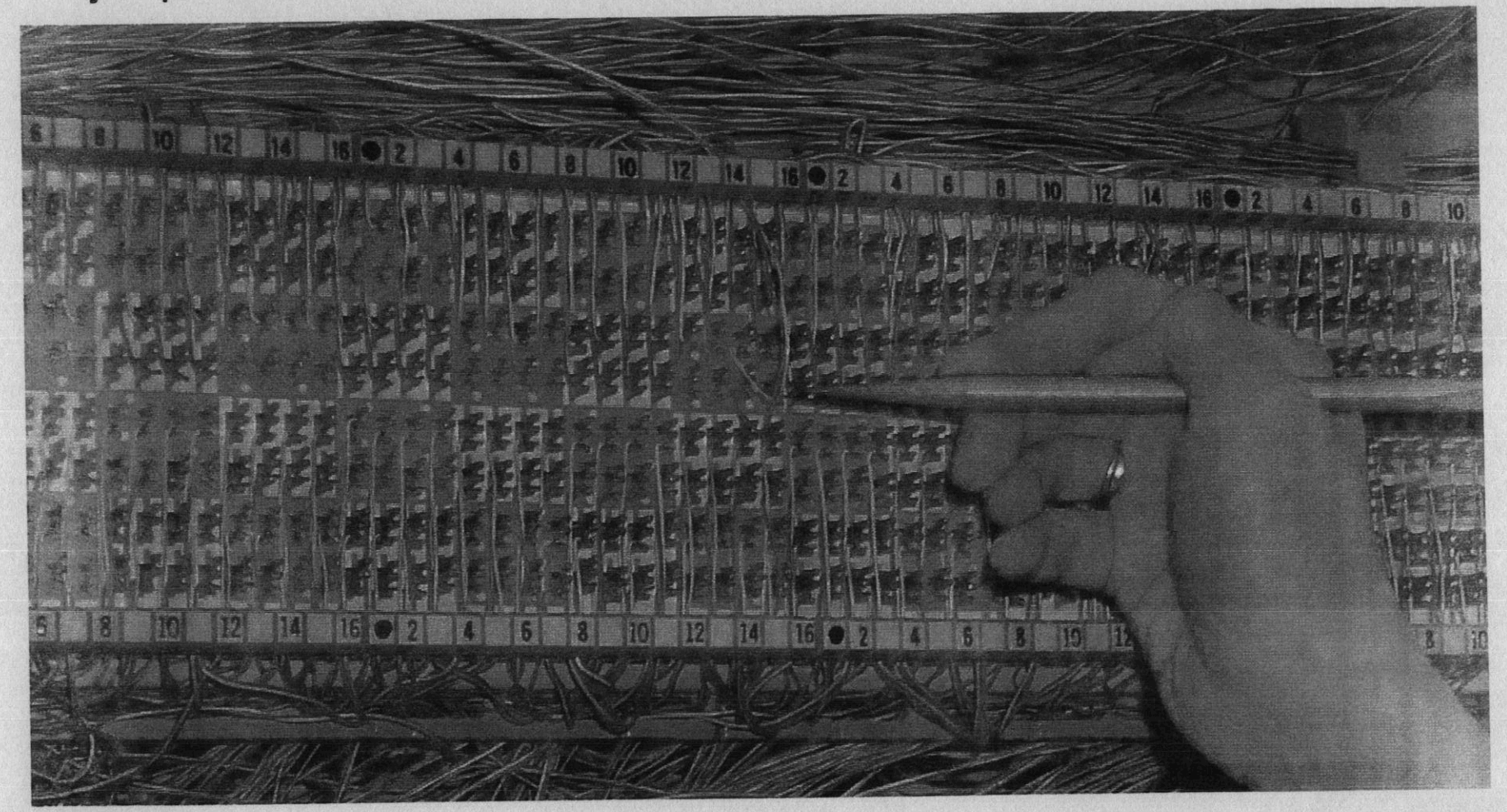
LOOP CUTOVER PROCESS

Step 8: Technician locates and removes end of jumper connected to the BellSouth cable pair.



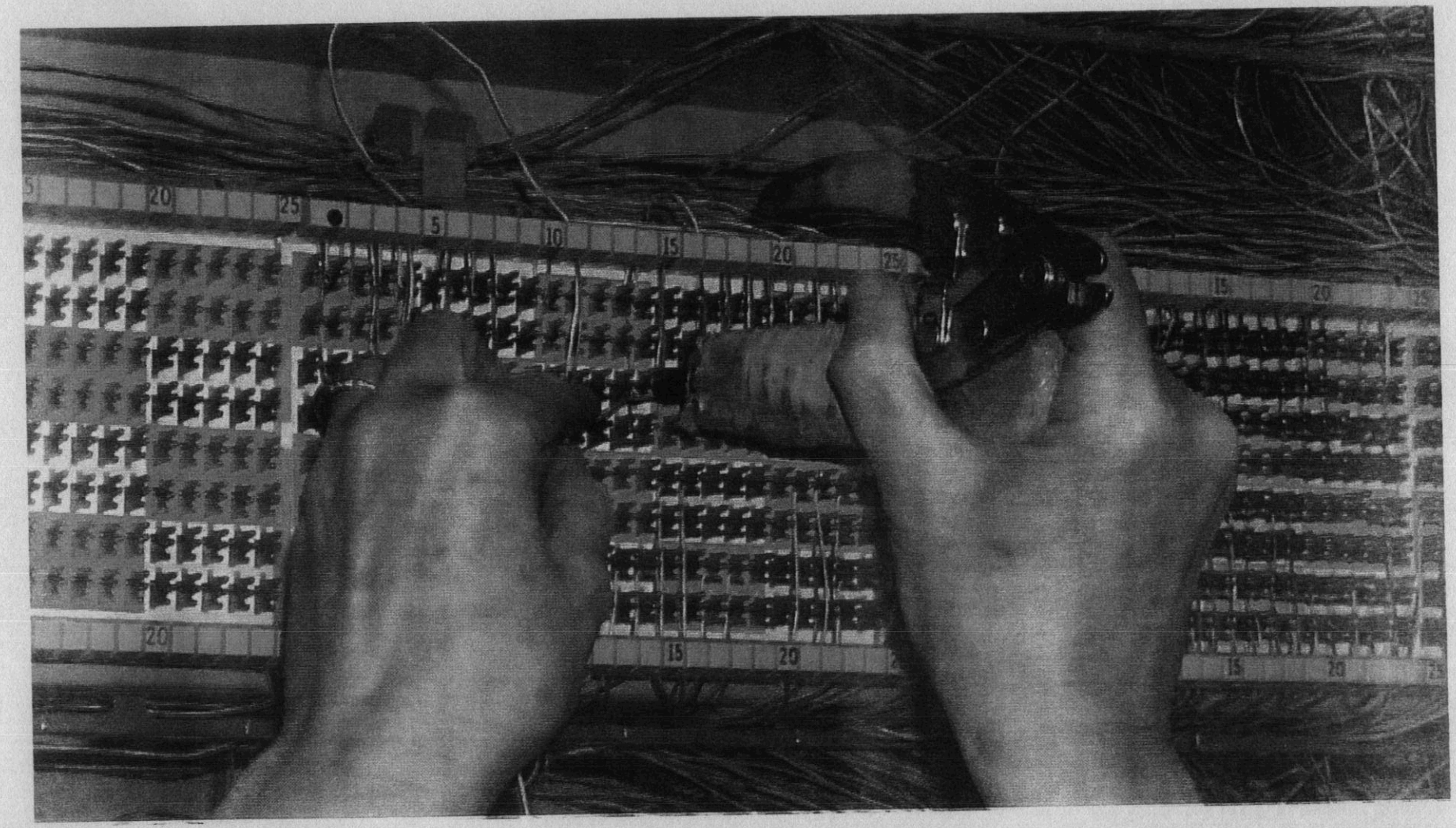
LOOP CUTOVER PROCESS

Step 9: Technician locates and removes end of jumper connected to the switching equipment.



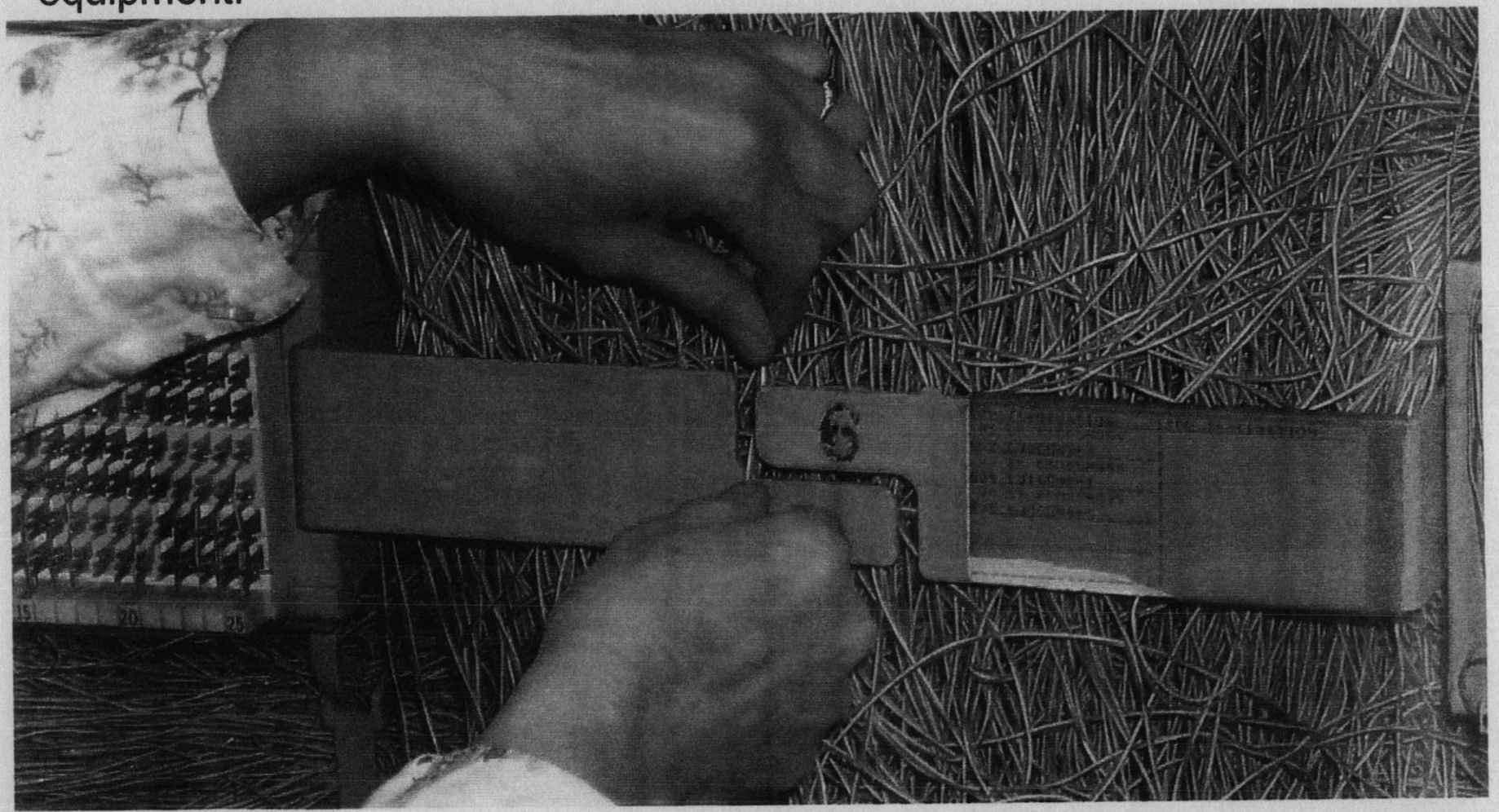
LOOP CUTOVER PROCESS

Step 10: Technician places new jumper on MDF.



LOOP CUTOVER PROCESS

Step 11: Technician weaves wire through cable rack to reach tie cable to CLEC's collocation equipment.



LOOP CUTOVER PROCESS

Step 12: Technician connects new jumper on frame to tie cables to CLEC equipment.



LOOP CUTOVER PROCESS

Step 13: Technician conducts ANAC test to verify that loop has been cut to correct CLEC switch port.



LOOP CUTOVER PROCESS

Step 14: Technician verifies cutover with CLEC, closes order, and notifies the UNE Center.



REQUEST: Provide the average time spent by BellSouth Central Office personnel who work directly on the Main Distribution Frame or other frames to conduct a single cutover on a single order, separated between each type or classification of cutover provided by BellSouth, including, but not limited to, "non-coordinated," "coordinated," "coordinated time-specific," or "bulk" cutovers, and explain how this was calculated.

RESPONSE: Presently, the average times spent by BellSouth Central Office personnel to conduct a single cutover for a non-designed SL1 loop on a single order are:

Activity	1st Loop (Minutes)	Additional Loops (Minutes)
non-coordinated cutover	30	21
coordinated cutover	40	23
coordinated time-specific cutover	50	25
bulk (with coordination) cutover	40	23

All of the times are based on Subject Matter Expert estimates.

In addition, see the response to Item No. 43.

RESPONSE PROVIDED BY: Dan Stinson

REQUEST: In BellSouth's Ex Parte in FCC Docket 01-338, filed December 24, 2002, on page 7, a table sets forth BellSouth's calculation of the time required to convert the "Top 20 UNE-P wire centers" to UNE-L or EELs. Provide answers to the following questions regarding that table:

(a) How many technicians were planned to work per shift, per wire center, to accomplish these conversions?
(b) How many conversions were planned per technician, per shift in each of the twenty wire centers?
(c) What is the maximum amount of new migrations BellSouth would be able to complete during the 3 –9 months these conversions would take place?
(d) How many UNE-P customers exist in these 20 wire centers as of September 1, 2003?

RESPONSE: (a) The assumption was that each of the Top 20 UNE-P wire centers, shown on page 7 of BellSouth's December 24, 2002, ex parte, have large frames and that there would typically be 6 technicians working on the frame during the normal day shift, with a maximum of 12 technicians able to work on the frame at any given time. Two shifts were assumed (except for the HLWDFLPE wire center where some third shift work was assumed) per day, with 6 technicians performing cuts during the day shift and 12 technicians performing cuts during the night shift, for an average of 9 technicians per wire center per day.

(b) The number of conversions per technician per shift in each of the twenty wire centers works out to be approximately 11.5, which results in approximately 104 conversions per wire center per day. In HLWDFLPE, assuming some third shift work, the number of conversions per technician per shift is approximately 13, which results in approximately 156 conversions per day.

(c) BellSouth's process is scalable depending on volumes.

RESPONSES (CONT.):

(d) See Attachment for response to Item No. 44(d).

RESPONSE PROVIDED BY: Lisa Brooks
Keith Milner

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
AT&T's 1st Interrogatories
October 6, 2003
Item No. 44 (d)

ATTACHMENT TO INTERROGATORY, ITEM NO. 44 (D)

Attachment
Response to Item No. 44 (d)

BellSouth's Top 20 UNE Impacted Wire Centers as of - 10/1/2003
WCs shaded are the Top Twenty Reported to FCC 12/23/2002

Rank	STATE	CLLI	Total UNE-P
1	FL	hlwdflpe	27662
2	FL	miamflhl	18049
3	FL	hlwdflwh	17955
4	GA	mrttgama	15599
5	FL	prrnflma	15038
6	GA	lrvlgaos	13118
7	FL	pmbhflcs	12014
8	FL	wpbhfiga	11726
9	FL	miamflca	11704
10	FL	ftldfloa	11202
11	FL	pmbhflma	10631
12	FL	ndadflbr	10330
13	GA	jnbogama	9587
14	GA	smyrgama	9572
15	GA	wdstgacr	9551
16	FL	orldflph	9407
17	FL	ftldflpl	9406
18	GA	rswlgama	9292
19	GA	alprgama	9215
20	FL	miamflwd	9051
21	FL	ftldflja	9038
22	FL	ndadflac	8937
23	FL	bybhflma	8913
24	GA	gsvlgama	8862
25	GA	cmnggama	8842
26	GA	agstgafl	8415
27	FL	pmbhflfe	8269
28	FL	hlwdflma	8256
29	GA	llbngama	8088
30	FL	ftldflmr	8084
31	FL	ndadflgg	7939
32	GA	atlngaep	7849
33	GA	panlgama	7815
34	FL	miamflpl	7790

Attachment
Response to Item No. 44 (d)

BellSouth's Top 20 UNE Impacted Wire Centers as of - 10/1/2003
WCs shaded are the Top Twenty Reported to FCC 12/23/2002

Rank	STATE	CLLI	Total UNE-P
1	FL	hlwdflpe	27662
2	FL	miamflhl	18049
3	FL	hlwdflwh	17955
4	GA	mrttgama	15599
5	FL	prrnflma	15038
6	GA	lrvlgaos	13118
7	FL	pmbhflcs	12014
8	FL	wpbhflga	11726
9	FL	miamflca	11704
10	FL	ftldfloa	11202
11	FL	pmbhflma	10631
12	FL	ndadflbr	10330
13	GA	jnbogama	9587
14	GA	smyrgama	9572
15	GA	wdstgacr	9551
16	FL	orldflph	9407
17	FL	ftldflpl	9406
18	GA	rswlgama	9292
19	GA	alprgama	9215
20	FL	miamflwd	9051
21	FL	ftldflja	9038
22	FL	ndadflac	8937
23	FL	bybhflma	8913
24	GA	gsvlgama	8862
25	GA	cmnggama	8842
26	GA	agstgafl	8415
27	FL	pmbhflfe	8269
28	FL	hlwdflma	8256
29	GA	llbngama	8088
30	FL	ftldflmr	8084
31	FL	ndadflgg	7939
32	GA	atlngaep	7849
33	GA	panlgama	7815
34	FL	miamflpl	7790

BELLSOUTH

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Robert T. Blau, Ph.D., CFA
Vice President-Executive and
Federal Regulatory Affairs

202 463-4108
Fax 202 463-4631

December 24, 2002

Ms Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte in WC Docket No. 01-338

Dear Ms Dortch:

On December 23, 2002, Pete Martin, Jonathan Banks, Keith Milner, Ken Ainsworth and the undersigned met with William Maher, Jeffrey Carlisle and Rich Lerner of the Wireline Competition Bureau.

The purpose of this meeting was to discuss BellSouth's ability to hot-cut UNE-P to UNE-L lines, as well as BellSouth retail to UNE-L lines, in a timely and efficient manner. Details of the discussion are summarized in the attached document.

In accordance with Section 1.1206, I am filing this notice electronically and request that you please place them in the record of the proceeding identified above.

Sincerely,

Robert T. Blau/all

Attachment

cc: William Maher
Jeffrey Carlisle
Rich Lerner

Conversion of the Embedded UNE-P Base – Top 20 UNE-P Wire Centers

CO	UNE-P Bus Units	UNE-P Res Units	Total UNE-Ps	Months required to convert 100% of UNE-Ps to UNE-L and/or EELs	Months required to convert 30% of existing UNE-Ps to UNE-L and/or EELs	# of Collocation Arrangements by CLECs that are also providing UNE-Ps
HLWDFLPE Total	2,448	22,154	24,602	9.00	3.55	5
MIAMFLHL Total	3,177	12,883	16,060	7.73	2.32	4
HLWDFLWH Total	2,253	12,253	14,506	6.98	2.10	6
PRRNFLMA Total	2,433	10,647	13,080	6.30	1.89	4
MRTTGAMA Total	2,253	9,138	11,391	5.48	1.65	8
MIAMFLCA Total	1,290	9,843	11,133	5.36	1.61	2
PMBHFLCS Total	1,731	8,858	10,589	5.10	1.53	2
LRVLGAOS Total	1,414	7,982	9,396	4.52	1.36	2
MIAMFLWD Total	494	8,094	8,588	4.13	1.24	1
PMBHFLMA Total	2,258	6,205	8,463	4.07	1.22	5
WPBHFLGA Total	1,471	6,922	8,393	4.04	1.21	4
NDADFLBR Total	943	7,094	8,037	3.87	1.16	1
FTLDFLOA Total	1,358	6,675	8,033	3.87	1.16	3
FTLDFLJA Total	1,570	6,456	8,026	3.86	1.16	3
MIAMFLPL Total	5,353	1,912	7,265	3.50	1.05	4
WDSTGACR Total	1,165	6,014	7,179	3.46	1.04	2
FTLDFLPL Total	1,897	5,280	7,177	3.46	1.04	5
NDADFLAC Total	1,565	5,568	7,133	3.43	1.03	2
RSWLGAMA Total	1,391	5,515	6,906	3.33	1.00	7
SMYRGAMA Total	971	5,926	6,897	3.32	1.00	6
Total (Top 20 COs)	37,435	165,419	202,854			76
Grand Total (all COs)	576,297	821,002	1,397,299			898

NOTES: (1) Months required to convert 100% of UNE-Ps based on 2 shifts, except for HLWDFLPE, where some third shift work is included.
(2) Based on a mix of SL1 and SL2 loops.

Docket No. 030851-TP
M. Van De Water Exhibit No. MDV-13, Page 2 of 4
December 24, 2002 Ex Parte

Hot Cut Rates - First

Hot Cut Option	Cost Ref. No.	Rate Elements	AL	FL	GA	KY	LA	MS	NC	SC	TN
1	SL1 LOOP										
	A.1.1	SL1 Loop NRC (1st)	$37.81	$49.57	$42.54	$46.66	$36.54	$37.92	$36.54	$37.92	$31.99
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.55	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL1 Loop Hot Cut (1st)	*$43.64*	*$51.09*	*$43.09*	*$54.54*	*$39.52*	*$43.62*	*$39.52*	*$43.84*	*$31.99*
2	SL1 LOOP with Order Coordination										
	A.1.1	SL1 Loop NRC (1st)	$37.81	$49.57	$42.54	$46.66	$36.54	$37.92	$36.54	$37.92	$31.99
	N.1.5	Order Coordination	$8.15	$9.00	$18.11	$9.00	$7.92	$8.20	$7.92	$8.17	$36.52
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.55	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL1 Loop Hot Cut (1st)	*$51.79*	*$60.09*	*$59.20*	*$63.54*	*$47.44*	*$51.82*	*$47.44*	*$52.01*	*$68.51*
3	SL1 LOOP with Order Coordination and OC for Specified Conversion Time										
	A.1.1	SL1 Loop NRC (1st)	$37.81	$49.57	$42.54	$46.66	$36.54	$37.92	$36.54	$37.92	$31.99
	N.1.5	Order Coordination	$8.15	$9.00	$18.11	$9.00	$7.92	$8.20	$7.92	$8.17	$36.52
	N.1.6	Order Coordination for Specified Conversion Time	$18.09	$23.02	$35.74	$23.01	$17.56	$18.19	$17.56	$18.13	$34.29
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.55	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL1 Loop Hot Cut (1st)	*$69.88*	*$83.11*	*$94.94*	*$86.55*	*$65.00*	*$70.01*	*$65.00*	*$70.14*	*$102.80*
4	SL2 LOOP (Order Coordination included in Loop NRC)										
	A.1.2	SL2 Loop NRC (1st)	$88.00	$135.75	$104.17	$134.89	$102.10	$105.96	$102.10	$105.96	$75.06
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.55	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL2 Loop Hot Cut (1st)	*$93.83*	*$137.27*	*$104.72*	*$142.77*	*$105.08*	*$111.66*	*$105.08*	*$111.90*	*$75.06*
5	SL2 LOOP (Order Coordination included in Loop NRC) with OC for Specified										
	A.1.2	SL2 Loop NRC (1st)	$88.00	$135.75	$104.17	$134.89	$102.10	$105.96	$102.10	$105.96	$75.06
	N.1.6	Order Coordination for Specified Conversion Time	$18.09	$23.02	$35.74	$23.01	$17.56	$18.19	$17.56	$18.13	$34.29
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.55	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL2 Loop Hot Cut (1st)	*$111.92*	*$160.29*	*$140.46*	*$165.78*	*$122.64*	*$129.85*	*$122.64*	*$130.03*	*$109.35*

Hot Cut Rates - Additional

Hot Cut Option	Cost Rel. No.	Rate Elements	AL	FL	GA	KY	LA	MS	NC	SC	TN
1	SL1 LOOP										
	A.1.1	SL1 Loop NRC (Add)	$17.56	$22.63	$31.33	$22.57	$16.87	$17.56	$16.87	$17.62	$20.02
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.56	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL1 Loop Hot Cut (Add'l)	*$23.39*	*$24.35*	*$31.88*	*$30.45*	*$19.85*	*$23.26*	*$19.85*	*$23.54*	*$20.02*
2	SL1 LOOP with Order Coordination										
	A.1.1	SL1 Loop NRC (1st)	$17.56	$22.63	$31.33	$22.57	$16.87	$17.56	$16.87	$17.62	$20.02
	N.1.5	Order Coordination	$8.15	$9.00	$16.11	$9.00	$7.92	$8.20	$7.92	$8.17	$36.52
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.56	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL1 Loop Hot Cut (Add'l)	*$31.54*	*$33.35*	*$47.99*	*$38.45*	*$27.77*	*$31.45*	*$27.77*	*$31.71*	*$56.54*
3	SL1 LOOP with Order Coordination and OC for Specified Conversion Time										
	A.1.1	SL1 Loop NRC (1st)	$17.56	$22.63	$31.33	$22.57	$16.87	$17.56	$16.87	$17.62	$20.02
	N.1.5	Order Coordination	$8.15	$9.00	$16.11	$9.00	$7.92	$8.20	$7.92	$8.17	$36.52
	N.1.6	Order Coordination for Specified Conversion Time	$18.09	$23.02	$35.74	$23.01	$17.56	$18.19	$17.56	$18.13	$34.29
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.56	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL1 Loop Hot Cut (Add'l)	*$49.63*	*$56.37*	*$83.73*	*$62.48*	*$45.33*	*$49.64*	*$45.33*	*$49.84*	*$90.83*
4	SL2 LOOP (Order Coordination Included in Loop NRC)										
	A.1.2	SL2 Loop NRC (1st)	$56.00	$62.47	$78.10	$61.87	$85.72	$68.26	$65.72	$68.43	$48.20
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.56	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL2 Loop Hot Cut (Add'l)	*$60.83*	*$63.99*	*$78.65*	*$69.75*	*$88.70*	*$73.96*	*$68.70*	*$74.35*	*$48.20*
5	SL2 LOOP (Order Coordination Included in Loop NRC) with OC for Specified										
	A.1.2	SL2 Loop NRC (1st)	$56.00	$62.47	$78.10	$61.87	$85.72	$68.26	$65.72	$68.43	$48.20
	N.1.6	Order Coordination for Specified Conversion Time	$18.09	$23.02	$35.74	$23.01	$17.56	$18.19	$17.56	$18.13	$34.29
	N.1.1	Electronic Service Order	$5.83	$1.52	$0.56	$7.88	$2.98	$5.70	$2.98	$5.92	$0.00
		TOTAL SL2 Loop Hot Cut (Add'l)	*$78.92*	*$107.01*	*$114.39*	*$112.76*	*$86.26*	*$92.17*	*$86.26*	*$92.48*	*$82.48*

REQUEST: Please provide, in table format, the following information for each BellSouth host or remote CO in the state of Florida:

(a) CLLI code;
(b) address;
(c) city or town;
(d) whether the CO is staffed full time (i.e., during regular business hours), part-time (and if so on what basis), or unstaffed; and
(e) whether the switch within the CO is a remote switch, and if so identify the associated host switch.

RESPONSE: See Attachment 1.

NOTE: A Central Office is noted as "Manned" if BellSouth reports employees to that central office every day regardless of workload, and a central office is marked "Unmanned" if employees are only dispatched to that location when workload warrants. No central offices are unmanned all the time.

RESPONSE PROVIDED BY: W. Keith Milner

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
AT&T's 1st Interrogatories
October 6, 2003
Item No. 1

ATTACHMENT TO INTERROGATORY, ITEM NO. 1

Attachment
Response to Item No. 1

CLLI	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST
ARCHFLMA	327 W ALABAMA ST	ARCHER	FL	32618	N	REMOTE	GSVLFLNW
BCRTFLBT	5140 S Congress Av	BOCA RATON	FL	33487	Y	HOST	
BCRTFLMA	838 S Dixie Hwy	BOCA RATON	FL	33432	Y	HOST	
BCRTFLSA	9407 Glades Rd	BOCA RATON	FL	33433	Y	HOST	
BGPIFLMA	US Hwy 1 MM 31	BIG PINE KEY	FL	33042	N	REMOTE	KYWSFLMA
BKVLFLJF	201 E JEFFERSON ST	BROOKSVILLE	FL	34613	Y	HOST	
BLDWFLMA	155 DREW ST	JACKSONVILLE	FL	32234	N	REMOTE	JCVLFLWC
BLGLFLMA	108 SW Av C	BELLE GLADE	FL	33430	N	HOST	
BNNLFLMA	111 SOUTH CHERRY STREET	BUNNELL	FL	32110	N	REMOTE	PLCSFLMA
BRSNFLMA	211 CAPITAL STREET	BRONSON	FL	32621	N	REMOTE	GSVLFLNW
BYBHFLMA	221 SE 4th St	BOYNTON BEACH	FL	33435	Y	HOST	
CCBHFLAF	1734 CANAVERAL AIR FORCE	CAPE CANAVERAL	FL	32920	N	REMOTE	CCBHFLMA
CCBHFLMA	450 W CCBH CAUSEWAY	COCOA BCH	FL	32931	Y	HOST	
CDKYFLMA	3RD STREET	CEDAR KEY	FL	32625	N	REMOTE	GSVLFLNW
CFLDFLMA	112 S.E. 1ST STREET	CHIEFLAND	FL	32626	Y	REMOTE	GSVLFLNW
CHPLFLJA	689A 3RD ST.	CHIPLEY	FL	32428	Y	HOST	
CNTMFLLE	521 MUSCOGEE RD	CANTONEMENT	FL	32533	Y	HOST	
COCOFLMA	712 FLORIDA AVENUE	COCOA	FL	32922	Y	HOST	
COCOFLME	125 EAST MUSTANG WAY	MERRITT ISLAND	FL	32953	Y	HOST	
CSCYFLBA	410 SW 1ST ST	CROSS CITY	FL	32628	Y	REMOTE	GSVLFLNW
DBRYFLDL	1204 PROVIDENCE BLVD	DELTONA	FL	32713	N	HOST	
DBRYFLMA	113 SOUTH HIGHWAY 17-92	DEBARY	FL	32713	N	REMOTE	DBRYFLDL
DELDFLMA	316 W NEW YORK AVE	DELAND	FL	32720	Y	HOST	
DLBHFLKP	6037 W Atlantic	DELRAY BEACH	FL	33445	Y	HOST	
DLBHFLMA	321 SE 2nd St	DELRAY BEACH	FL	33483	Y	HOST	
DLSPFLMA	135 BERLIN STREET	DELEON SPGS	FL	32130	N	REMOTE	DELDFLMA
DNLNFLWM	12060 S WILLIAMS ST	DUNNELLON	FL	34430	Y	REMOTE	WWSPFLHI
DRBHFLMA	780 S Deerfield Av	DEERFIELD	FL	33441	Y	HOST	
DYBHFLFN	1861 MASON AV	DAYTONA BCH	FL	32014	N	REMOTE	DYBHFLPO
DYBHFLMA	268 N RIDGEWOOD AVE	DAYTONA BCH	FL	32114	Y	HOST	
DYBHFLOB	22 S RIDGEWOOD AVE	ORMOND BCH	FL	32174	Y	HOST	
DYBHFLOS	1776 N OCEANSHORE BLVD	ORMOND BCH	FL	32174	N	REMOTE	DYBHFLOB
DYBHFLPO	829 ORANGE AVE	DAYTONA BCH	FL	32119	Y	HOST	
EGLLFLBG	1750 CROTON AVE	MELBOURNE	FL	32935	Y	HOST	
EGLLFLIH	980 PINETREE DRIVE	SATELLITE BCH	FL	32937	Y	HOST	
EORNFLMA	19544 COLONIAL DR.	ORLANDO	FL	32826	N	REMOTE	ORLDFLAP

Attachment
Response to Item No. 1

CLLI	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST
FLBHFLMA	210 S DAYTONA AVE	FLAGLER BCH	FL	32136	N	REMOTE	PLCSFLMA
FRBHFLFP	1910 SOUTH 8TH STREET	FERNANDINA BCH	FL	32034	Y	HOST	
FTGRFLMA	9451 HECKSCHER DRIVE	JACKSONVILLE	FL	32226	N	REMOTE	JCVLFLOW
FTLDFLAP	200 Terminal Dr	FT. LAUDERDALE	FL	33315	N	REMOTE	HLWDFLMA
FTLDFLCR	2530 E Oakland Park Blvd	FT.LAUDERDALE	FL	33306	Y	HOST	
FTLDFLCY	5395 NE 14th Av	FT.LAUDERDALE	FL	33334	Y	HOST	
FTLDFLJA	10141 W Broward Blvd	FT.LAUDERDALE	FL	33324	Y	HOST	
FTLDFLMR	211 NE 2nd St	FT.LAUDERDALE	FL	33301	Y	HOST	
FTLDFLOA	4200 W Oakland Park	FT.LAUDERDALE	FL	33313	Y	HOST	
FTLDFLPL	4036 Bryan Blvd	PLANTATION	FL	33317	Y	HOST	
FTLDFLSG	14000 NW 8th St	SUNRISE	FL	33325	Y	HOST	
FTLDFLSU	8750 W Oakland Park Blvd	BLVD SUNRISE	FL	33351	Y	HOST	
FTLDFLWN	1431 Bonaventure Blvd	FT.LAUDERDALE	FL	33326	Y	HOST	
FTPRFLMA	712 Citrus Av	FT PIERCE	FL	34950	Y	HOST	
GCSPFLCN	512 CENTER STREET	GREEN COVE SPGS	FL	32043	Y	HOST	
GCVLFLMA	5370 CLIFF STREET	GRACEVILLE	FL	32440	N	REMOTE	CHPLFLJA
GENVFLMA	173 FIRST ST	GENEVA	FL	32732	N	REMOTE	SNFRFLMA
GLBRFLMC	98 MCCLURE DR	GULF BREEZE	FL	32561	Y	HOST	
GSVLFLMA	400 SW 2ND AVENUE	GAINESVILLE	FL	32601	Y	HOST	
GSVLFLNW	7525 N.W. 5TH PLACE	GAINESVILLE	FL	32601	Y	HOST	
HAVNFLMA	111 1ST STREET SE	HAVANA	FL	32333	Y	HOST	
HBSDFLMA	1500 S Dixie Hwy	HOBE SOUND	FL	33455	Y	HOST	
HLNVFLMA	1810 STATE ROAD 87	NAVARRE	FL	32561	Y	HOST	
HLWDFLHA	120 NE 12th Av	HALLANDALE	FL	33009	Y	HOST	
HLWDFLMA	715 N Federal Hwy	HOLLYWOOD	FL	33020	Y	HOST	
HLWDFLPE	61 NW 98th Av	PEMBROKE PINES	FL	33024	Y	HOST	
HLWDFLWH	250 SW 62nd Av	HOLLYWOOD	FL	33023	Y	HOST	
HMSTFLEA	2850 NORTH CANAL DR	HOMESTEAD	FL	33033	N	REMOTE	HMSTFLHM
HMSTFLHM	75 Civic Ct	HOMESTEAD	FL	33030	Y	HOST	
HMSTFLNA	14475 SW 264th St	NARANJA	FL	33032	Y	REMOTE	HMSTFLHM
HTISFLMA	10990 S A1A	JRNSEN BEACH	FL	34957	Y	HOST	
HWTHFLMA	21 N.W. FIRST STREET	HAWTHORNE	FL	32640	Y	REMOTE	GSVLFLNW
ISLMFLMA	US Hwy MM 182	ISLAMORADA	FL	33036	Y	REMOTE	HMSTFLHM
JAYAFLMA	107 CHERRY STREET	JAY	FL	32565	N	REMOTE	CNTMFLLE
JCBHFLAB	13635 ATLANTIC BLVD.	JACKSONVILLE	FL	32225	Y	REMOTE	JCVLFLBW
JCBHFLMA	1824 NORTH 3RD STREET	JACKSONVILLE	FL	32250	Y	HOST	

Attachment
Response to Item No. 1

CLLI	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST
JCBHFLSP	3370 THALIA RD	JACKSONVILLE	FL	32250	Y	REMOTE	JCVLFLBW
JCVLFLAR	7553 ATLANTIC BLVD.	JACKSONVILLE	FL	32211	Y	HOST	
JCVLFLBW	11317 BEACH BLVD.	JACKSONVILLE	FL	32216	Y	HOST	
JCVLFLCL	424 PEARL STREET	JACKSONVILLE	FL	32202	Y	HOST	
JCVLFLFC	6654 FT CAROLINE RD	JACKSONVILLE	FL	32211	Y	HOST	
JCVLFLIA	1550 AIRPORT RD	JACKSONVILLE	FL	32218	N	REMOTE	JCVLFLOW
JCVLFLJT	4500 SALISBURY RD	JACKSONVILLE	FL	32216	Y	REMOTE	MNDRFLLO
JCVLFLLF	1441 W EDGEWOOD AVE	JACKSONVILLE	FL	32208	Y	HOST	
JCVLFLNO	6602 NORMANDY BLVD.	JACKSONVILLE	FL	32205	Y	HOST	
JCVLFLOW	11741 N MAIN ST	JACKSONVILLE	FL	32218	Y	HOST	
JCVLFLRV	1710 TALBOT AVENUE	JACKSONVILLE	FL	32205	Y	HOST	
JCVLFLSJ	6234 OLD ST AUGUSTINE RD	JACKSONVILLE	FL	32217	Y	HOST	
JCVLFLSM	2048 HENDRICKS AVE	JACKSONVILLE	FL	32207	Y	HOST	
JCVLFLWC	5532 JAMMES RD	JACKSONVILLE	FL	32210	Y	HOST	
JPTRFLMA	112 Seminole Av	JUPITER	FL	33458	Y	HOST	
KYHGFLMA	70 SW MAGNOLIA AVE	KEYSTONE HGHTS	FL	32656	N	REMOTE	GSVLFLNW
KYLRFLLS	US Hwy 1 MM 102.5	LARGO SOUND	FL	33037	Y	REMOTE	HMSTFLHM
KYLRFLMA	US Hwy 1 MM 95	KEY LARGO	FL	33037	Y	REMOTE	HMSTFLHM
KYWSFLMA	530 Southard St	KEY WEST	FL	33040	Y	HOST	
LKCYFLMA	130 WEST NASSAU STREET	LAKE CITY	FL	32055	Y	HOST	
LKMRFLMA	365 INTERNATIONAL PARKWAY	LAKE MARY	FL	32746	Y	HOST	
LYHNFLOH	812 OHIO AVE	LYNN HAVEN	FL	32444	Y	HOST	
MCNPFLMA	101 N.E. 3RD AVE	MICANOPY	FL	32667	N	REMOTE	GSVLFLNW
MDBGFLPM	3906 MAIN STREET	MIDDLEBURG	FL	32068	Y	HOST	
MIAMFLAE	115 Alhambra Dr	CORAL GABLES	FL	33134	Y	HOST	
MIAMFLAL	2470 NW 38th St	MIAMI	FL	33142	Y	HOST	
MIAMFLAP	5275 NW 36th St	MIAMI	FL	33166	Y	HOST	
MIAMFLBA	2010 NW 17th Av	MIAMI	FL	33142	Y	HOST	
MIAMFLBC	251 NW 29th St	MIAMI	FL	33056	Y	HOST	
MIAMFLBR	1550 Lennox Av	MIAMI	FL	33127	Y	HOST	
MIAMFLCA	2301 SW 100th Av	MIAMI	FL	33165	Y	HOST	
MIAMFLDB	9405 Old Dixie Hwy	MIAMI	FL	33156	N	REMOTE	MIAMFLRR
MIAMFLFL	2105 W. Flagler	MIAMI	FL	33135	Y	HOST	
MIAMFLGR	45 NW 5th St	MIAMI	FL	33128	Y	HOST	
MIAMFLHL	1245 W 69th St	HIALEAH	FL	33141	Y	HOST	
MIAMFLIC	6800 Harding Av	MIAMI BEACH	FL	33142	Y	HOST	

Attachment
Response to Item No. 1

CLLI	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST
MIAMFLKE	89 Westwood Dr	KEY BISCAYNE	FL	33149	Y	HOST	
MIAMFLME	1380 NW 21st St	MIAMI	FL	33138	Y	HOST	
MIAMFLNM	1360 NE 127th St	NORTH MIAMI	FL	33147	Y	HOST	
MIAMFLNS	2615 NW 79th St	MIAMI	FL	33169	Y	HOST	
MIAMFLOL	2660 E Superior St	MIAMI	FL	33178	Y	HOST	
MIAMFLPB	25 Nahkoda Dr	MIAMI	FL	33166	Y	HOST	
MIAMFLPL	9056 NW 41st St	MIAMI	FL	33164	Y	HOST	
MIAMFLRR	6100 SW 57th Av	MIAMI	FL	33143	Y	HOST	
MIAMFLSH	8451 NE 1st Av	MIAMI	FL	33161	Y	HOST	
MIAMFLSO	10701 SW 88th St	MIAMI	FL	33176	Y	HOST	
MIAMFLWD	15000 SW 88th St	MIAMI	FL	33196	Y	HOST	
MIAMFLWM	1155 SW 67th Av	MIAMI	FL	33144	Y	HOST	
MICCFLBB	720 Egret Cir	MICCO	FL	32957	N	REMOTE	VRBHFLMA
MLBRFLMA	728 E PALMETTO AVE	MELBOURNE	FL	32901	Y	HOST	
MLTNFLRA	6749 RAVINE STREET	MILTON	FL	32570	Y	HOST	
MNDRFLAV	8923 W WAY-SUITE 100	JACKSONVILLE	FL	32217	Y	HOST	
MNDRFLLO	11498 ST. AUGUSTINE ROAD	JACKSONVILLE	FL	32223	Y	HOST	
MNDRFLLW	577 SR 13	FRUIT COVE	FL	32223	N	REMOTE	MNDRFLLO
MNSNFLMA	11686 MUNSON WAY	MUNSON	FL	32531	N	REMOTE	CNTMFLLE
MRTHFLVE	US Hwy 1 MM 54.5	MARATHON	FL	33050	Y	REMOTE	KYWSFLMA
MXVLFLMA	8455 MAXVILLE BLVD	JACKSONVILLE	FL	32226	N	REMOTE	JCVLFLWC
NDADFLAC	2100 NE 164th St	MIAMI	FL	33139	Y	HOST	
NDADFLBR	18560 NW 27th Av	MIAMI	FL	33179	Y	HOST	
NDADFLGG	18400 NE 5th Av	MIAMI	FL	33179	Y	HOST	
NDADFLOL	19251 NE 26th Av	MIAMI	FL	33054	Y	HOST	
NKLRFLMA	Ocean Key Club St Rd 905	NORTH KEY LARGO	FL	33037	Y	REMOTE	HMSTFLHM
NSBHFLMA	100 CANAL ST	NEW SMYRNA BCH	FL	32169	Y	HOST	
NWBYFLMA	25410 NW 1ST AVE	NEWBERRY	FL	32669	Y	REMOTE	GSVLFLNW
OKHLFLMA	153 BELL AVE	OAKHILL	FL	32759	N	REMOTE	DYBHFLPO
OLTWFLLN	LEON ST. NO NUMBER	OLD TOWN	FL	32680	N	REMOTE	GSVLFLNW
ORLDFLAP	7320 LAKE UNDER HILL RD	ORLANDO	FL	32807	Y	HOST	
ORLDFLCL	2315 EAST CENTRAL BLVD	ORLANDO	FL	32803	Y	HOST	
ORLDFLMA	45 NORTH MAGNOLIA AVENUE	ORLANDO	FL	32801	Y	HOST	
ORLDFLPC	6621 SOUTH ORANGE AVENUE	ORLANDO	FL	32809	Y	HOST	
ORLDFLPH	5120 SILVER STAR ROAD	ORLANDO	FL	32808	Y	HOST	
ORLDFLSA	4959 SANDLAKE ROAD	ORLANDO	FL	32809	Y	HOST	

Attachment
Response to Item No. 1

CLLI	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST
ORPKFLMA	150 MCINTOSH AVE	ORANGE PARK	FL	32073	Y	HOST	
ORPKFLRW	721 BLANDING BLVD - B	ORANGE PARK	FL	32073	Y	HOST	
OVIDFLCA	84 SOUTH CENTRAL AVE	OVIEDO	FL	32765	Y	HOST	
PACEFLPV	4351 HIGHWAY 90	PACE	FL	32571	Y	REMOTE	MLTNFLRA
PAHKFLMA	826 E Main St	PAHOKEE	FL	33479	N	REMOTE	BLGLFLMA
PCBHFLNT	604 NAUTILUS	PANAMA CITY	FL	32401	Y	HOST	
PLCSFLMA	5 CLUBHOUSE DR	PALM COAST	FL	32137	Y	HOST	
PLTKFLMA	319 MAIN STREET	PALATKA	FL	32177	Y	HOST	
PMBHFLCS	9420 Royal Palm Blvd	CORAL SPRINGS	FL	33065	Y	HOST	
PMBHFLFE	1230 N Federal Hwy	POMPANO BEACH	FL	33062	Y	HOST	
PMBHFLMA	1180 Banks Rd	MARGATE	FL	33063	Y	HOST	
PMBHFLNP	1551 N. POWERLINE	FT. LAUDERDALE	FL		Y	REMOTE	PMBHFLTA
PMBHFLTA	7600 N University Dr	TAMARAC	FL	33321	Y	HOST	
PMPKFLMA	212 WORCHESTER RD	POMONA PARK	FL	32181	N	REMOTE	PLTKFLMA
PNCYFLCA	6609 EAST ST. RD. 22	PANAMA CITY	FL	32401	Y	REMOTE	PNCYFLMA
PNCYFLMA	111 EAST 5TH STREET	PANAMA CITY	FL	32401	Y	HOST	
PNSCFLBL	30 WEST BELMONT STREET	PENSACOLA	FL	32501	Y	HOST	
PNSCFLFP	1725 OLIVE ROAD	PENSACOLA	FL	32504	Y	HOST	
PNSCFLHC	6913 PINE FOREST RD NW	PENSACOLA	FL	32506	Y	REMOTE	PNSCFLFP
PNSCFLPB	5575 LARIMER ST	PERDIDO	FL	32507	Y	HOST	
PNSCFLWA	515 S OLD CORRY FIELD RD	PENSACOLA	FL	32507	Y	HOST	
PNVDFLMA	637 A1A N	PONTE VEDRA BCH	FL	32082	Y	HOST	
PRRNFLMA	16645 US Hwy 1	MIAMI	FL	33157	Y	HOST	
PRSNFLFD	112 N FOUNTAIN DR	PIERSON	FL	32180	N	REMOTE	DELDFLMA
PTSLFLMA	450 Irving St	PT ST LUCIE	FL	34983	Y	HOST	
PTSLFLSO	2002 Pt St Lucie Blvd	PORT ST LUCIE SOUTH	FL	34953	N	HOST	
SBSTFLFE	5 Bay St	FELLSMERE	FL	32948	N	REMOTE	VRBHFLMA
SBSTFLMA	1137 US Hwy 1	SEBASTIAN	FL	32958	Y	HOST	
SGKYFLMA	19921 Overseas Hwy	SUGARLOAF KEY	FL	33042	N	REMOTE	KYWSFLMA
SNFRFLMA	501 W 9TH ST	SANFORD	FL	32771	Y	HOST	
STAGFLBS	4900 A1A SOUTH	ST AUGUSTINE	FL	32084	N	REMOTE	STAGFLMA
STAGFLMA	69 CORDOVA STREET	ST AUGUSTINE	FL	32084	Y	HOST	
STAGFLSH	4460 US #1 SOUTH	ST AUGUSTINE	FL	32084	Y	REMOTE	STAGFLMA
STAGFLWG	4875 STATE ROAD 16	ST AUGUSTINE	FL	32095	N	REMOTE	MNDRFLLO
STRTFLMA	305 W 3rd St	STUART	FL	34994	Y	HOST	
SYHSFLCC	4228 COUNTRY CLUB LANE	SUNNY HILLS	FL	32463	N	REMOTE	CHPLFLJA

Attachment
Response to Item No. 1

CLLI	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST
TRENFLMA	213 N W 1ST ST.	TRENTON	FL	32693	Y	REMOTE	GSVLFLNW
TTVLFLMA	620 HOPKINS STREET	TITUSVILLE	FL	32796	Y	HOST	
VERNFLMA	3321 COURT AVENUE	VERNON	FL	32462	N	REMOTE	CHPLFLJA
VRBHFLBE	766 Beachland Blvd	VERO BEACH	FL	32963	N	REMOTE	SBSTFLMA
VRBHFLMA	1976 16th St	VERO BEACH	FL	32960	Y	HOST	
WELKFLMA	301 3RD AVE	WELAKA	FL	32193	N	REMOTE	PLTKFLMA
WPBHFLAN	325 Gardenia St	WEST PALM BEACH	FL	33401	Y	HOST	
WPBHFLGA	3800 S Military Trail	LAKE WORTH	FL	33463	Y	HOST	
WPBHFLGR	3700 RCA Blvd	PALM BEACH GARDENS	FL	33410	Y	HOST	
WPBHFLHH	1550 N Haverhill Rd	WEST PALM BEACH	FL	33417	Y	HOST	
WPBHFLLE	120 N K St	LAKE WORTH	FL	33460	Y	HOST	
WPBHFLRB	3640 Ave E	RIVIERA BEACH	FL	33404	Y	HOST	
WPBHFLRP	11455 State Rd 80	ROYAL PALM BEACH	FL	33411	Y	HOST	
WWSPFLHI	9401 CORTEZ BLVD	BROOKSVILLE	FL	34613	Y	HOST	
WWSPFLSH	1395 DELTONA BLVD	SPRING HILL	FL	34606	Y	HOST	
YNFNFLMA	12102 AZALEA ST	FOUNTAIN	FL	32438	N	REMOTE	LYHNFLMA
YNTWFLMA	SCHOOLCRAFT STREET	YANKEETOWN	FL	34498	N	REMOTE	BKVLFLJF
YULEFLMA	S.R. 200 & U.S. 17	YULEE	FL	32097	N	REMOTE	JCVLFLOW

BellSouth Interconnection Services
675 West Peachtree Street
Room 34H71
Atlanta, Georgia 30375

Laurel MacKenzie
(404) 927-7575
Fax: (404) 927-4985

May 5, 2003

Ms. Denise Berger
AT&T Local Services
Operations Assistant Vice President
Room 12256
1200 Peachtree St. NE
Atlanta, GA 30309

Dear Ms. Berger:

This is in response to your e-mail dated March 6, 2003, posing additional questions concerning the conversion of customers from Unbundled Network Element – Platform (UNE-P) to UNE-Loop (UNE-L). The following are BellSouth's responses to your questions:

AT&T Question #1: Will BellSouth support the transition of IDLC UNE-P customers to UNE Loop as a part of this proposed migration? If not, what is a viable alternative.

BellSouth Response: As part of this proposed migration, BellSouth will support transition of Integrated Digital Loop Carrier (IDLC) UNE-P customers to UNE-L when alternative arrangements exist. Attachment 2, Section 3.11.1 of AT&T's Interconnection Agreement specifies the viable alternatives.

AT&T Question #2: Will BellSouth identify the IDLC customers as part of its project planning process? If so, will BellSouth also identify the alternative facilities onto which it will move customers prior to the migration?

BellSouth Response: During the project planning process, BellSouth will identify the IDLC UNE-P customers and will assign alternate facilities, when such facilities exist, during the service order process.

AT&T Question #3: Does BellSouth plan to move the customer to copper prior to the migration? If so, how will BellSouth schedule that interim transition? If not, how will BellSouth care for the change in facilities?

BellSouth Response: Currently, BellSouth has no plans to convert IDLC UNE-P customers to copper on an interim basis prior to the negotiated due date of the actual conversion. BellSouth will perform the conversion on the due date as per existing processes being utilized today. This process, as well as the CLEC notification, is based on requested service type (SL1/SL2) and requested conversion type (coordinated or non-coordinated).

AT&T Question #4: AT&T assumes that dispatch technicians will be required to migrate IDLC customers. How does BellSouth plan to schedule these customers in order to minimize dispatch technician overtime?

BellSouth Response: It is expected that IDLC UNE-P customers being converted to UNE-L will require a field dispatch. Upon initial receipt of the project planning notification from the CLEC, the project manager will negotiate due dates with the network organizations based on volumes and required dispatches. These dates will be set to maximize field resources with minimal or no use of overtime.

AT&T Question #5: What percentage of end-user customers by state in BellSouth's territory are on IDLC?

BellSouth Response: The following is the percentage by state within BellSouth territory of end-user customers of all carriers on IDLC:

AL 22.7%,	MS 22,7%
FL 31.8%,	NC 26.0%
GA 27.0%,	SC 36.3%
KY 13.4%,	TN 21.8%
LA 12.5%	

The questions that you submitted to Professional Services did not specifically pertain to the New Business Request (NBR) AT&T submitted earlier and, therefore, have required a longer response period. In the future, in an effort to facilitate quicker responses, please direct questions about general BellSouth practices to AT&T's Local Contract Manager within Jim Schenks' CLEC Care organization. CLEC Care has the resources assigned to AT&T to respond to your questions and interface with any department required to provide information in formulating an answer.

Sincerely,

Laurel MacKenzie

Laurel Mackenzie
Senior Manager – Professional Services
Interconnection Services Marketing

CC: Jim Schenks
Scott Kunze

REQUEST: With respect to the Coordinated Hot Cut Timeliness % Within Interval Measure, please provide all documents containing or pertaining to performance data, studies, or other information that support the benchmark of 95% within 4 hours window for IDLC loops.

RESPONSE: Additional time to provide loops where existing service is provided over IDLC is necessary due to the fact that the process for handling a hot cut conversion with IDLC is significantly different than with non-IDLC. As an example, moving a jumper and then testing the circuit can accomplish a very simple non-IDLC hot cut. However, when a hot cut involves IDLC, the facility to the customer's premise is integrated with BellSouth's digital switch. The facility must be separated from BellSouth's switch prior to the hot cut because the switching port is provided by the CLEC. This may require a transfer to a non-IDLC facility and may also require a technician at the customer's premise and in the BellSouth central office. Occasionally, hot cuts involving IDLC may also require the placement of non-IDLC facilities prior to the day of the hot cut.

The number of hot cuts involving IDLC is an appreciable percentage of the total number of hot cuts, and when an IDLC hot cut does occur, additional flexibility is required to dispatch the technicians at both ends of the circuit. In terms of volume, in July 2003, there were 526 hot cuts in Florida, and, of these, 146 (or 27.7%) involved IDLC. In August 2003, there were 520 hot cuts and, of these, 163 (or 31.3%) involved IDLC.

If the interval for hot cuts involving IDLC is less than four hours, then in order to satisfy this measurement, BellSouth will have to dispatch a technician prior to the time the hot cut is scheduled to make a line and station transfer (LST) to place the customer service on a non-integrated facility. This approach requires additional work time for the technician, which is currently performed before the scheduled hot cut. Although this extra work means additional cost to BellSouth, which is not covered in the price for the service, unless a technician is dispatched to perform the LST the day before the scheduled hot cut, BellSouth would be unable to meet a 15-minute interval for cutting over loops.
Given this, BellSouth has a separate benchmark interval for Measure P-7A, Coordinated Customers Conversions – Hot Cut Timeliness % within Interval and Average Interval for hot cuts involving Integrated Digital Loop Carrier ("IDLC") in order to account for the greater time required to coordinate these hot cuts. BellSouth has a benchmark of 95% within a 4-hour window. This allows

RESPONSE (CONT.):

BellSouth to dispatch the technician only once on the date the hot cut is scheduled to perform the station transfer to a non-IDLC facility, and to call the CWINS center when the technician is ready to perform the hot cut. The four-hour window would be 8 a.m. to 12 p.m. or 1 p.m. to 5 p.m. This four-hour window is consistent with the AM or PM dispatch strategy BellSouth currently has in place for other Provisioning work, providing the technicians sufficient time to complete all of the associated work with one dispatch in most cases.
On hot cuts involving IDLC, BellSouth would notify the CLEC by 10:30 a.m. the day before the scheduled cutover to advise the CLEC that IDLC is involved and that the four-hour window would apply.

The benchmark BellSouth proposes is consistent with the approach in New York, where Verizon has a four-hour window to cut over a loop served on IDLC. (See New York State Carrier-to-Carrier Guidelines Performance Standards and Reports, November 2002, PR-9 Hot Cut Performance.)

REQUEST: For the BellSouth access lines that are currently provisioned on IDLC/NGDLC technology as described in the response to Interrogatory No. 20 above, please state the percentage of such access lines for which BellSouth has existing, parallel copper or Universal Digital Loop Carrier ("UDLC") facilities available for hot cut conversions.

RESPONSE: Refer to Item No. 23 attachment (column labeled "% compatible"). To ascertain "parallel copper" and "UDLC facilities available for hot cut conversions", only loop feeder facilities are considered.

RESPONSE PROVIDED BY: W. Keith Milner

ATTACHMENT TO INTERROGATORY, ITEM NO. 23

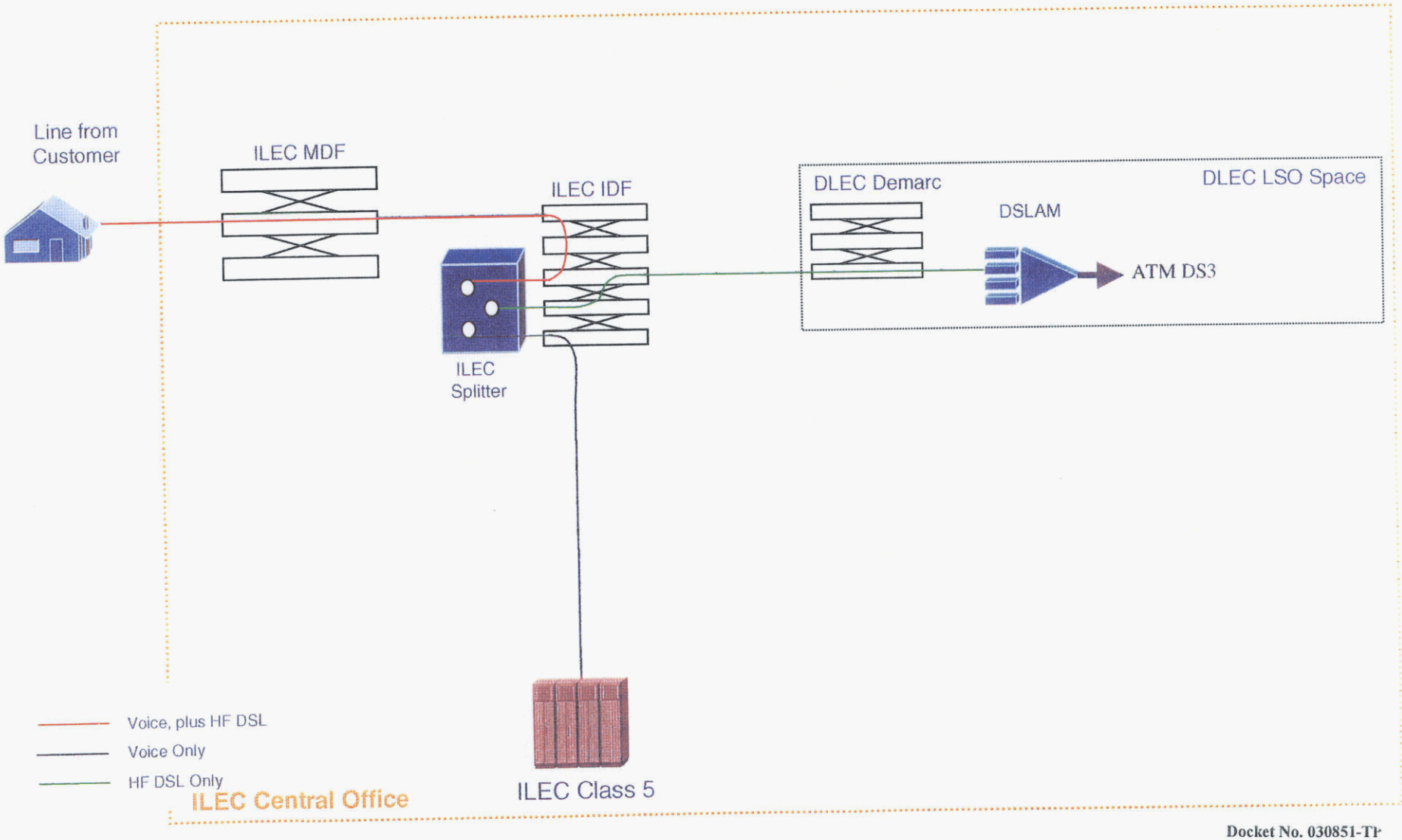
CLLI	total IDLC loops	total spares	% compatible spares
archflma	1207	1165	96.52%
bcrtflbt	12446	16954	100.00%
bcrtflsa	37159	8973	24.15%
bgpiflma	2748	2350	85.52%
bkvlfljf	13293	6951	52.29%
bldwflma	786	816	100.00%
blglflma	2430	2766	100.00%
bnnlflma	1806	4825	100.00%
brsnflma	2194	1113	50.73%
bybhflma	29668	19911	67.11%
ccbhflma	3718	5792	100.00%
cdkyflma	259	307	100.00%
cfldflma	2594	1376	53.05%
chplflja	1790	1641	91.68%
cntmflle	3619	2274	62.84%
cocoflma	29683	13297	44.80%
cocoflme	12329	5468	44.35%
cscyflba	1750	1468	83.89%
dbryfldl	8379	1806	21.55%
dbryflma	5015	2358	47.02%
deldflma	5676	6274	100.00%
dlbhflkp	9878	9260	93.74%
dlbhflma	4	14792	100.00%
dlspflma	0	1449	N/A
dnlnflwm	6403	3880	60.60%
drbhflma	24431	15839	64.83%
dybhflfn	0	1742	N/A
dybhflma	22714	17038	75.01%
dybhflob	12406	10282	82.88%
dybhflos	1603	1882	100.00%
dybhflpo	15303	15520	100.00%
eglIflbg	34952	8417	24.08%
eglIflih	3940	4858	100.00%
eornflma	4545	1848	40.66%
flbhflma	472	1972	100.00%
frbhflfp	10510	4414	42.00%
ftgrflma	0	935	N/A
ftldflap	2434	4785	100.00%
ftldflcr	4571	14482	100.00%
ftldflcy	4684	18482	100.00%
ftldflja	29305	20620	70.36%
ftldflmr	15644	31482	100.00%
ftldfloa	12397	16466	100.00%
ftldflpl	18058	16872	93.43%
ftldflsg	6677	3935	58.93%
ftldflsu	0	14279	N/A
ftldflwn	32415	8728	26.93%
ftprflma	21990	11209	50.97%
gcspflcn	2842	2683	94.41%
gcvlflma	529	1661	100.00%
genvflma	979	711	72.63%
glbrflmc	9857	4086	41.45%
gsvlflma	48364	32786	67.79%
gsvlflnw	7185	4825	67.15%
havnflma	1772	1911	100.00%
hbsdflma	2319	3037	100.00%
hlnvflma	10192	4383	43.00%
hlwdflha	4	10186	100.00%
hlwdflma	9741	14196	100.00%
hlwdflpe	116900	26165	22.38%

hlwdflwh	26028	21929	84.25%
hmstflea	208	598	100.00%
hmstflhm	12370	14201	100.00%
hmstflna	1340	4885	100.00%
htisflma	4837	3413	70.56%
hwthflma	1695	1439	84.90%
islmflma	2482	1696	68.33%
jayaflma	0	1677	N/A
jcbhflab	12208	2067	16.93%
jcbhflma	0	13205	N/A
jcbhflsp	11096	3141	28.31%
jcvlflar	6661	11432	100.00%
jcvlflbw	27629	9563	34.61%
jcvlflcl	6684	42859	100.00%
jcvlflfc	4568	4406	96.45%
jcvlflia	0	903	N/A
jcvlfljt	3664	4765	100.00%
jcvlflll	0	10241	N/A
jcvlflno	13193	8546	64.78%
jcvlflow	8522	6651	78.05%
jcvlflrv	0	8139	N/A
jcvlflsj	7513	14523	100.00%
jcvlflsm	3333	12934	100.00%
jcvlflwc	21322	9122	42.78%
jptrflma	24133	8935	37.02%
kyhgflma	3038	1246	41.01%
kylrflls	3138	2529	80.59%
kylrflma	6271	3405	54.30%
kywsflma	11940	7511	62.91%
lkcyflma	15594	7177	46.02%
lkmrflma	8725	12985	100.00%
lyhnfloh	2550	4816	100.00%
mcnpflma	552	442	80.07%
mdbgflpm	5341	4012	75.12%
miamflae	8935	38592	100.00%
miamflai	0	8924	N/A
miamflap	1210	14592	100.00%
miamflba	0	19344	N/A
miamflbc	245	6978	100.00%
miamflbr	13267	32630	100.00%
miamflca	50859	32746	64.39%
miamfldb	0	4775	N/A
miamflfl	1021	8774	100.00%
miamflgr	5339	60296	100.00%
miamflhl	50836	28902	56.85%
miamflic	5156	13708	100.00%
miamflke	856	2633	100.00%
miamflme	0	7838	N/A
miamflnm	1363	8595	100.00%
miamflns	3535	8876	100.00%
miamflol	2142	9138	100.00%
miamflpb	349	15539	100.00%
miamflpl	31023	34141	100.00%
miamflrr	13279	20542	100.00%
miamflsh	0	12390	N/A
miamflso	13404	24562	100.00%
miamflwd	34830	14288	41.02%
miamflwm	6330	25967	100.00%
miccflbb	1906	1422	74.61%
mlbrflma	58383	19045	32.62%
mltnflra	7829	10912	100.00%

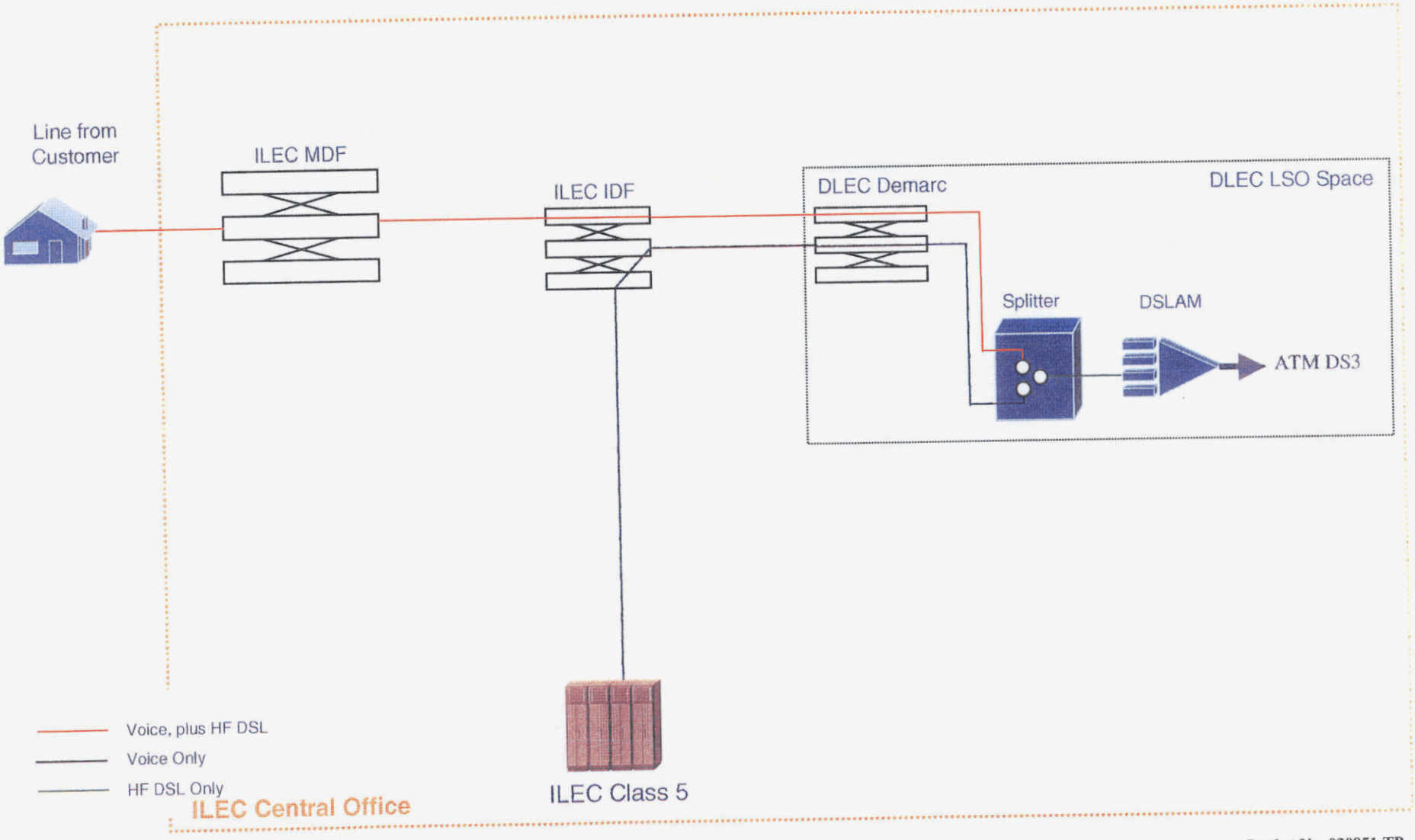
mndrflav	5678	2626	46.25%
mndrflio	22774	11182	49.10%
mndrfllw	9095	2308	25.38%
mnsnflma	0	1382	N/A
mrthflve	5549	3820	68.84%
mxvlflma	632	313	49.53%
ndadflac	6174	12597	100.00%
ndadflbr	14373	13981	97.27%
ndadflgg	3386	8653	100.00%
ndadflol	8522	17144	100.00%
nklrflma	0	2240	N/A
nsbhflma	7662	9280	100.00%
nwbyflma	1966	1325	67.40%
okhlflma	0	956	N/A
oltwflln	2272	588	25.88%
orldflap	75995	24003	31.58%
orldflcl	6918	10011	100.00%
orldflma	0	45488	N/A
orldflpc	57863	29171	50.41%
orldflph	74315	19315	25.99%
orldflsa	21231	15168	71.44%
orpkflma	12129	8595	70.86%
orpkflrw	1976	5593	100.00%
ovidflca	28998	7935	27.36%
paceflpv	5918	2499	42.23%
pahkflma	0	1782	N/A
pcbhflnt	19696	8151	41.38%
picsflma	6512	3666	56.30%
pitkflma	10967	7151	65.20%
pmbhflcs	50663	19038	37.58%
pmbhflfe	17442	19041	100.00%
pmbhflma	25156	16952	67.39%
pmbhflta	15304	7107	46.44%
pmpkflma	1496	953	63.70%
pncyflca	1132	3719	100.00%
pncyflma	14947	12069	80.75%
pnscflbl	7769	16554	100.00%
pnscflfp	29080	14760	50.76%
pnscflhc	4939	1387	28.08%
pnscflpb	4643	2328	50.14%
pnscflwa	12452	10473	84.11%
pnvdflma	13816	3696	26.75%
prrnflma	36468	33668	92.32%
prsnflfd	0	1774	N/A
ptslflma	26457	7782	29.41%
ptslflso	5694	3706	65.09%
sbstflfe	0	730	N/A
sbstflma	8434	3962	46.98%
sgkyflma	3866	940	24.31%
snfrflma	43047	17478	40.60%
stagflbs	7283	3172	43.55%
stagflma	18444	9135	49.53%
stagflsh	6093	3348	54.95%
stagflwg	2348	3202	100.00%
strtflma	31852	15917	49.97%
syhsflcc	0	1238	N/A
trenflma	2361	1192	50.49%
ttvlflma	16333	9804	60.03%
vernflma	0	797	N/A
vrbhflbe	4914	2281	46.42%
vrbhflma	20482	8504	41.52%

welkflma	1177	853	72.47%
wpbhflan	7323	18020	100.00%
wpbhflga	44186	19155	43.35%
wpbhflgr	32320	23064	71.36%
wpbhflhh	31497	18072	57.38%
wpbhflle	4361	6973	100.00%
wpbhflrb	13	16558	100.00%
wpbhflrp	43589	15347	35.21%
wwspflhi	12856	1953	15.19%
wwspflsh	25845	3287	12.72%
ynfnflma	230	981	100.00%
yntwflma	1024	556	54.30%
yuleflma	0	1089	N/A

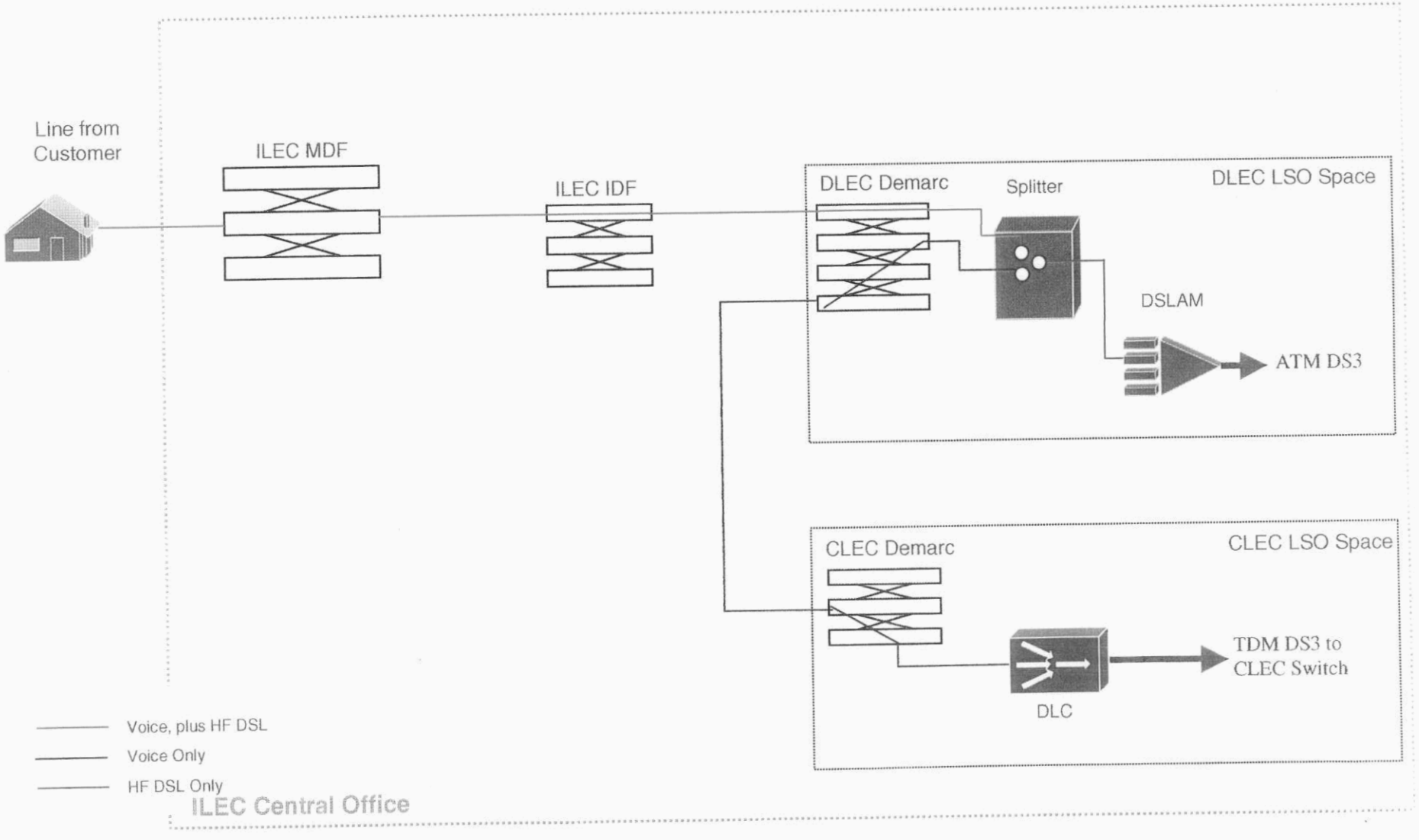
CLEC "UNE-P" Voice with DLEC DSL, (Line Splitting) using ILEC Splitter



CLEC "UNE-P" Voice with DLEC DSL, (Line Splitting) using DLEC Splitter

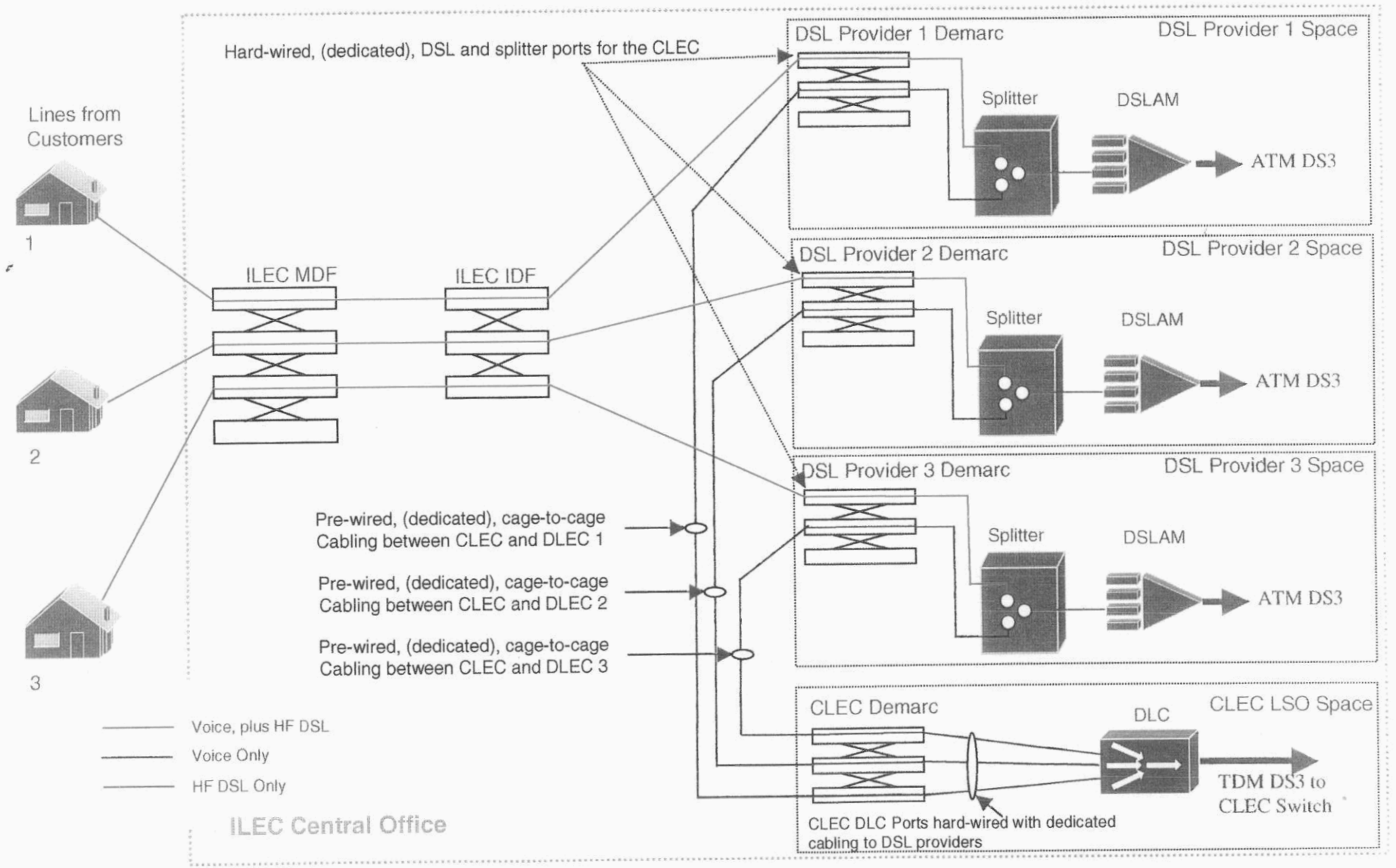


CLEC UNE-L Voice with DLEC DSL, (Loop Splitting) Using Pre-Wired "Cage-to-Cage" Dedicated Cables



Docket No. 030851-TP
M. Van de Water Exhibit No. MDV-19
Line-Splitting /One Partner

CLEC UNE-L Voice with DLEC DSL, (Loop Splitting) Using DLEC Splitters and Multiple Partners



Docket No. 030851-TP
M. Van de Water Exhibit No. MDV-20
Line-Splitting /Multiple Partners

BellSouth Interconnection Services
600 North 19th Street
8th Floor
Birmingham, Alabama

James M. Schenk
Sales AVP
205-321-4700
Fax 205-321-4757

July 21, 2003

Ms. Denise Berger
AT&T Operations – Assistant Vice President
1200 Peachtree Street NE
Room 12256
Atlanta, GA 30309

Dear Denise:

This is a follow up to telephone conversations and e-mails between BellSouth and AT&T concerning AT&T's use of Secondary Access Customer Terminal Locations (ACTLs) to Collocation sites. The Secondary ACTL process AT&T is currently utilizing requires manual processing in order for the service order(s) to flow through BellSouth's systems. The Federal Communications Commission (FCC) has issued a mandate that requires BellSouth to utilize an automated ordering process. For this reason, BellSouth has no plans to continue accepting service orders that require manual processing. AT&T has indicated there are nine (9) "FIM" Access Customer Name Abbreviation (ACNA) sites and an additional 15 "ATX" ACNA sites where a Secondary ACTL arrangement is needed.

BellSouth has previously recommended the following options to accommodate AT&T service orders while simultaneously meeting the mandated automated service order standards:

- **Use of a Single ACTL/ACNA at each Collocation Site**

  The specific root cause of this problem is AT&T's service requests that contain an ACNA in conflict with the ACNA of the collocation arrangement identified on the service order. AT&T should be aware that industry standards established by the National Exchange Carrier Association (NECA) and Telcordia subscribe to the premise of utilizing all codes consistently. Thus the option shown below :

  Use the "Transfer of Ownership" process to convert sites to one ACNA. This option eliminates the need to process orders for more than one ACNA at each site.

- **Accept the New Business Request (NBR) Option offered to convert BellSouth Databases to allow "Dual" ACNA Orders to flow through the BellSouth systems**

  In 2001, BellSouth worked with AT&T to develop a NBR for mechanization. This mechanization upgrade (involving 86 systems) would allow multiple ACNA orders to flow through BellSouth's systems without manual intervention.

Unfortunately, AT&T has rejected both of these options while requesting that BellSouth continue to manually process these service orders. Due to the FCC mandate and because of the costs of manually processing a service order, AT&T's request is unacceptable to BellSouth. In an effort to resolve this issue, BellSouth has continued to research additional options that would provide an "Order Flow Through".

The following proposal is an arrangement contained in the AT&T Interconnection Agreement that meets industry standards and allows valid service orders to flow through without manual intervention. BellSouth recommends the existing Secondary ACTL sites, additional 9 FIM sites, and 15 ATX sites use the following option to accomplish the Secondary ACTL requirement:

- **Use the 'Guest/Host' Collocation Arrangement to Establish a Guest Presence**

  Under this Collocation arrangement, each Host/Guest ACNA has unique ACTL and Connecting Facility Assignments (CFA) in the cage. The Host places a Collocation Augment Application, pursuant to its Interconnection Agreement, and submits a Letter of Authorization for the new entity (Guest). With the Guest/Host arrangement, a 30-day freeze would not be required provided applications are placed for new CFA facilities. The freeze would apply if existing CFAs were converted to a new ACNA. In addition, service order charges would apply to any services terminating in the collocation site involved in the change.

  Estimated costs to convert or add CFAs were previously provided for the ATX FTLDFLCY Collocation Site. (See Attachment.) The Guest/Host arrangement would allow orders to flow through without manual intervention since each ACNA would have a CFA and ACTL assigned in the collocation cage.

Please refer to AT&T's Interconnection Agreement or contact your Regional Collocation Manager for additional information about the Guest/Host Collocation Arrangement.

AT&T has indicated it was taking steps to resolve the need for multiple ACNA orders. Please advise BellSouth of the option AT&T prefers, thus eliminating the need for manual intervention on future service orders.

Should additional information be needed, please feel free to contact me at 205 321-4700.

Yours Truly,

ORIGINAL SIGNED BY JIM SCHENK

Attachment

Esitmate of charges to add Guest facilities (Florida Contract)							
Type Charge per contract	USOC	Description	Quantity	Charge per Unit	Total for item		
Subsequent Application Fee	PE1CA	NRC	1	$2,236.00	$2,236.00		
Cable Records fee per request	PE1CR	NRC	1	$980.22	$980.22		
VGDS0 per application	PE1CD	NRC	1	$656.50	$656.50		
VGDS0 per 100 pair	PE1C0	NRC	3425	$9.66 per 100 pair	$330.86		
DS1 PER T1TIE	PE1C1	NRC	280	4.52 per T1TIE	$1,265.60		
DS3 per T3TIE	PE1C3	NRC	48	15.82	$759.36		
Total estimate of augment w/cable records					$6,228.54		

BELLSOUTH

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Birmingham, AL 35203

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Pager 877 320 2803

June 20, 2002

Ms. Denise Berger
AT&T
Room 12256
1200 Peachtree St. NE
Atlanta, GA 30309

Dear Denise:

This is a follow up to our May 15, 2002 lunch discussion, as well as a follow-up to Jim Schenk's May 29, 2002 interim letter to your May 17, 2002 letter, concerning AT&T's use of multiple company codes. Following is BellSouth's response to each question:

1. Types of AT&T orders presently falling out for manual processing

Service requests from AT&T that are affected by the multiple Access Customer Name Abbreviation (ACNA) problem are those orders placed by one AT&T/ACNA entity designating assignment to collocation arrangements with dissimilar ACNA information. This applies to all service requests that involve collocation when the ACNA of the ordering company does not match the ACNA of the collocation arrangement. In many locations, AT&T established its collocation arrangements with the ACNA "ATX", for AT&T, but places service requests to those collocation sites using the ACNA "TPM", for Teleport Communications Group. A list of these specific collocation sites is attached.

2. Define code causing BellSouth the problem

As stated above, the specific root cause of this problem is AT&T's service requests containing an ACNA that is in conflict with the ACNA of the collocation arrangement identified on the service request. AT&T should be aware that industry standards set by National Exchange Carrier Association (NECA) and Telcordia prescribe that all codes should be used consistently.

3. Causes for orders to "fall out" for manual handling

When a CLEC orders collocation space from BellSouth, the collocation "address" is established using the ACNA of the ordering CLEC, which is built into the cable identification (ID). It is BellSouth's policy not to accept assignments from CLECs other than the owner of the collocation space and associated cable assignments. Therefore, BellSouth's ordering and provisioning systems contains edits to prevent unauthorized assignment of its customers' collocation assets. As stated above, the service requests in question are issued by AT&T with ACNAs that do not match the ACNA of the collocation arrangement designated on the service

request and, as a result, appear as though AT&T is making assignments to a different CLEC's collocation space. BellSouth must take several "out-of-process" steps to accommodate AT&T's conflicting assignments, which have come about due to AT&T establishing collocation arrangements with BellSouth initially using the ACNA of "ATX" and then places service requests to those collocation spaces using an ACNA of "TPM."

In the past, at AT&T's request, BellSouth created duplicate, additional collocation Access Customer Terminal Location (ACTL) Common Language Location Identification (CLLI) codes. This additional step has allowed BellSouth's service centers to process AT&T's Local Service Requests (LSR) without clarification. However, when the facility assignment on AT&T's service request does not match BellSouth's facility records of the collocation arrangements, additional facility assignment edits disrupt the order flow, requiring investigation of the mismatch, follow-up with the service center, and manual intervention to resolve the service order/records conflict.

4. **Additional steps taken by BellSouth to process the orders**

In addition to the steps required to create the supplemental ACTL CLLI code, as stated above, facility assignment errors must be investigated, reviewed with the service center and manually overridden before the order can be completed.

5. **Date BellSouth realized the necessity to manually process and work around these specific types of orders**

BellSouth has known from the outset that AT&T's request to make collocation facility assignments using conflicting ACNA information was outside of the process and required additional manual intervention to create the additional collocation ACTL CLLI codes and to resolve the downstream errors created by the conflicting information provided by AT&T.

6. **Implementation of the "firewall" that prevents one company from using another's facilities or assets?**

These edits have been in place by BellSouth since divestiture.

7. **Number of orders falling out for manual handling each month due to the use of multiple company codes**

AT&T has provided BellSouth a forecast of approximately 400 Unbundled Network Element (UNE) Loop orders per month for the next 6 months. Any of these orders placed with the ACNA "TPM" to collocation sites ordered with ACNA "ATX" are outside of the process and will require manual handling to complete, as would any interconnection trunk requests using the "ATX/TPM" ACNA combination.

8. **Action planned by BellSouth as of June 15, 2002**

As BellSouth advised AT&T on May 29, 2002, due to AT&T's expressed interest in pursuing the use of a single ACNA, BellSouth has elected to make no changes at this time on the existing collocation arrangements where duplicate collocation ACTL CLLI codes have been established. Please refer to the attached list of collocation sites for which supplemental ACTL CLLI codes were established.

9. **Embedded base of customers/orders/facilities**

The embedded base of circuits would require a Transfer of Ownership to convert the ACNA to match the collocation ACNA. BellSouth's Professional Services team has procedures in place to manage the associated order activity.

10. Alternative solution

Currently, AT&T is negotiating with its BellSouth Collocation Account Team regarding the development of collocation inventories that will provide AT&T circuit details, including the circuit number and/or telephone number. BellSouth anticipates that the detail supplied would provide AT&T with more than enough information to identify the assets of each of AT&T's entities.

I hope the above information supports AT&T's understanding of the current out-of-process situation and its affects on AT&T's service order flow. Regarding your request for a meeting with all of BellSouth's Subject Matter Experts (SME) on this subject, I believe that you and Jan Flint agreed on June 11, 2002, that pending further investigation by BellSouth on a long-term solution to this issue, a meeting would not be productive at this time. If I can be of additional help, please let me know.

Sincerely,

Attachment

Subject: FW: BellSouth Response to Question re: Bulk Migration Collaborative

-----Original Message-----
From: Change Control [mailto:Change.Control@BELLSOUTH.COM]
Sent: Thursday, November 20, 2003 2:21 PM
To: 80ta; a lee; a vincent; adsl technician; Alan Flanigan; alejandro; Amanda Hill; Annette Cook; Annette Hardy; asanjuan; B Murdo; B Shafer; B Stewart; B Swager; Becky Gorman; Bette Smith; Beverly Posey; Bill Czolba; Bill Gaboriski; Bill Grant; Bill York; Bob Buerrosse; Brenda Gant; Brian Feller; BSNotes; BSTCarrier; C & M; C Ashford; C Cassel; C Chiavatti; C Flanigan; C Larson; C Miller; C Smallwood; C Soptic; Caren Schaffner; Carol Asenjo; Catherine Gray; Cedric Cox; Change Control; Cheryl Acosta; Cheryl Haynes; Iacovelli,Christopher D (Chris) - ALABS; Christy Markley; Cindy Schneider; Colette Davis; Colleen Sponseller; Connie Nathan; Craig Davis; Burt,Diane P - ALABS; D Feinberg; D Kane; D Mitchell; D Nathanson; D Parobeck; D Petry; Daddy Max; Dale Donaldson; Darrin McClary; Townsend,David (Dave) - ALABS; David Burley; David Lee; DDL; Berger,Denise C - NKLAM; Desiree; Don; Donna Poe; E Goldberg; E Singleton; Ed; Elliott Wrann; Erick Melgarejo; Eyu; Gary; Ggotimer; H Carlton; Hawn Nguyen; Heather Thompson; J Britton; J David; J Johnson; J Mclau; J Nugent; J Oliver; J Perry; J T Wilson; J Wilwerding; Jake Hayes; James Childress; Janice Johnson; jason Bahr; Jason Lee; Bradbury,Jay M - LGCRP; jean Cherubin; Jeff Walker; Jennifer S; Jerry; Jerry Hill; JG6837; Joanne Baxter; John Boshier; John Duffey; John Fury; Jureidini,Jordana M - NKLAM; K Branch; K Pollard; K Turner; Karen Grim; Kraig Nielsen; Kyle Kopytchak; L Hopkins; L Looney; L Mitchell; L Ortega; Lacy Hamlin; Launch Now; Leon Bowles; Linda Minasola; Louis Toyama; Lorna Richards; Lorraine Watson; Louise Wilds; M Boner; M Connolly; M Dossey; M Mathews; Margaret Ring; Aquino,Maria D - ALABS; Mark; Mark Ozanick; Mary Conquest; Maya Mistry; Mel Wagner; Mer; Michael Britt; Michael Dekorte; Micki Jones; Midge Houghtaling; Mike Young; Mnoshay; Morgan Halliday; N Dreier; Nancy Thompson; Natalie Franklin; Neustar; Nicole Crauwels; Notifications (Ernest Group); One Point; OSS; P Barker; P Kinghorn; P McKay; P Pinick; Patricia D; Peggy Rehm; Peggy Rubino; Phil Nixon; Cole,Peter M (Pete) - ALABS; R Bennett; R Breckin; R Cairnes; R Harsila; R Maimon; R Munn; R Wilson; Rae Couvillion; Rebecca Baldwin; Regina McDay; Rick Williams; Robert; Robert Scordato; Ron Johnson; Ross Martin; Rubye; S Cogburn; S Sarem; Sandra Hendricks; Sandra Kahl; Schula Hobbs; Scott Emener; Scott Harper; Scottme; Sharon Eleazer; Sherry Lichtenberg; Steve Brown; Steve Moore; Steve Taff; Susan Sherfey; T Aziz; T Barton; T Carter; T Fry; T Norvell; T Wimmerstedt; TagTeam; Tim; Todd; Todd Sorice; Tom Hyde; Toni; Tonyam; TS1336; Tyra Hush; W Fletcher; Walter Carnes; Wendy Hernandez
Subject: BellSouth Response to Question re: Bulk Migration Collaborative

CLECs,

In response to the question from Benni Almas (Neustar) regarding BellSouth's plans
to establish a Bulk Migration collaborative with the CLEC community:

BellSouth has an effective, seamless Bulk Migration process in place. Consequently,
BellSouth has no plans to establish a Bulk Migration collaborative at this time.

If this changes in the future, CCP will forward the invitation to the CLEC community.

Thanks,

Change Management Team

*****

"The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential, proprietary, and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the material from all computers.60"

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF W. KEITH MILNER

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-55, SUB 1022

APRIL 12, 2001

Q. STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").

A. My name is W. Keith Milner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Senior Director - Interconnection Services for BellSouth. I have served in my present position since February 1996.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. My business career spans over 30 years and includes responsibilities in the areas of network planning, engineering, training, administration, and operations. I have held positions of responsibility with a local exchange telephone company, a long distance company, and a research and development company. I have extensive experience in all phases of telecommunications network planning, deployment, and operations in both the domestic and international arenas.

I graduated from Fayetteville Technical Institute in Fayetteville, North Carolina, in 1970, with an Associate of Applied Science in Business Administration degree. I later

Q. ARE CLPS ORDERING LINE SPLITTING?

A. No, not at this time. As stated above, however, BellSouth will facilitate line splitting for any CLP that requests it.

HOT CUTS

Q. GENERALLY DESCRIBE THE PROCESS KNOWN AS A "HOT CUT."

A. Hot cuts involve the conversion of an existing BellSouth customer to the network of a competitor by transferring the customer's in-service loop over to the CLP's network. BellSouth has established hot cut procedures that ensure accurate, reliable, and timely cutovers.

Q. DESCRIBE THE LOOP CUTOVER PROCEDURES ESTABLISHED BY BELLSOUTH TO ENSURE ACCURATE AND TIMELY CUTOVERS.

A. BellSouth has implemented three hot cut processes, two involving coordination at the time of the hot cut between BellSouth and the requesting CLP and one process that does not involve such coordination. The two processes for coordinated loop cutovers are a time-specific cutover, and a non-time-specific cutover. With a time-specific cutover, a CLP can set a specific date and time for a loop conversion by ordering and paying for time specific order coordination. Under this option, BellSouth commits to use best efforts to complete the conversion as specified by the CLP at the ordered date and time. *See* ICG Agmnt., Att. 2, § 2.1.4. If unforeseen circumstances occur during the

provisioning process which may cause the date or time of the conversion to be in jeopardy, BellSouth notifies CLP as soon as the jeopardy is identified to allow the CLP to respond to its customer as appropriate.

Under the second option, the CLP may request non-time specific coordination from BellSouth. Under this option, BellSouth and a CLP mutually establish a date for the conversion but do not pick a specific conversion time at the time BellSouth receives the CLP's local service request. Then, 24 to 48 hours in advance of the date of the conversion BellSouth and the CLP mutually set a time for the conversion. Like time-specific coordination, if unforeseen circumstances occur that may jeopardize BellSouth's ability to perform the conversion, BellSouth notifies the CLP as soon as the jeopardy is identified.

As a third option, the CLP may prefer no coordination of any kind between BellSouth and the CLP at the time of the hot cut. The CLP merely specifies the date upon which it wishes BellSouth to perform its cutover activities and BellSouth notifies the CLP once the hot cut is complete.

Q. DESCRIBE IN MORE DETAIL THE PROCESS FOR COORDINATED CUTOVERS.

A. Coordinated loop cutovers involve a number of steps. Exhibit WKM-2 shows, pictorially and with a brief narrative, the various work steps involved in a typical coordinated loop cutover. These photographs were taken in BellSouth's Norcross, Georgia, central office; however, the work steps are identical in all nine states in BellSouth's region. Briefly, the work steps involved are as follows:

- The BellSouth central office technician receives a call to begin cutover and asks for the cable pair number of the loop to be cutover. This is shown on page 1 of Exhibit WKM-2.
- The technician types the cable pair number into a database to find the loop cutover work order number. This is shown on page 2 of Exhibit WKM-2.
- The technician retrieves a copy of the work order for the unbundled loop. This is shown on page 3 of Exhibit WKM-2.
- The technician in the BellSouth central office responds to the BellSouth UNE Center's request to initiate coordination of the overall cutover of service from BellSouth to the CLP. This is shown on page 4 of Exhibit WKM-2.
- The technician then verifies that the correct loop has been identified for cutover. This is done using a capability referred to as Automatic Number Announcement Circuit ("ANAC"). The technician plugs a test set onto the loop and dials a special code. The telephone number associated with that loop is played audibly. This is shown on page 5 of Exhibit WKM-2.
- Next, the technician locates the existing jumper on the BellSouth Main Distributing Frame ("MDF") running between the loop and the BellSouth switch port. This is shown on pages 6-7 of Exhibit WKM-2.
- The technician locates and removes the end of the jumper connected to the BellSouth cable pair. This is shown on page 8 of Exhibit WKM-2.
- The technician then locates and removes the end of the jumper connected to the BellSouth switching equipment. This is shown on page 9 of Exhibit WKM-2.
- The technician then connects the one end of a new jumper between the loop and a connector block on a cable rack with tie cables to the CLP's collocation arrangement. This is shown on page 10 of Exhibit WKM-2.

- The technician then weaves the new jumper wire through the cable rack to reach the tie cables to the CLP's collocation arrangement. This is shown on page 11 of Exhibit WKM-2.
- The technician connects the second end of the new jumper to the connector block and thus the tie cable to the CLP's collocation equipment. This is shown on page 12 of Exhibit WKM-2.
- The technician next verifies that the loop is connected to the expected switch port and telephone number in the CLP's switch, again using ANAC capabilities. This is shown on page 13 of Exhibit WKM-2.
- Upon successful completion of the loop cutover, the technician verifies with the CLP that the order was correctly worked, closes the work order, and notifies the UNE Center. This is shown on page 14 of Exhibit WKM-2.
- Once the cutover is complete, the CLP sends appropriate messages to effect number porting.

Q. DOES BELLSOUTH DO ANY TESTING IN ADVANCE OF THE CUTOVER DATE?

A. Yes, BellSouth does advance testing for all designed circuits which come with test points. For such circuits, BellSouth will check the circuit 24 to 48 hours prior to the due date. For non-designed circuits, BellSouth performs continuity tests within the central office from the collocation to the BellSouth switch. For both designed and non-designed circuits, BellSouth tests on the cutover due date for CLP dialtone.

On the due date, BellSouth tests for CLP dialtone for all circuits, whether designed or nondesigned. BellSouth also monitors the line for use. If during the test, BellSouth does

not receive CLP dialtone, the cutover will not take place unless the CLP corrects the problem within 15 minutes or pays for standby time. Otherwise, the CLP must elect to reschedule the conversion.

Q. DOES BELLSOUTH PERFORM LOOP CUTOVERS SIMULTANEOUSLY WITH NUMBER PORTING?

A. No. BellSouth does not perform loop cutovers simultaneously with number porting for the very important reason that to do so leaves the end user customer at risk of the number porting being completed early and calls bound for the end user customer being misdirected to the CLP's switch. The loop cutover is much more complicated in terms of the work steps involved (on the part of both BellSouth and the CLP) than the number porting. BellSouth performs all "up front" work in anticipation of the loop cutover being successfully completed. BellSouth's provisioning process is discussed in the testimony of Mr. Ken Ainsworth. BellSouth's Local Number Portability ("LNP") process is discussed further in the affidavit of Mr. Dennis L. Davis, Attachment E..

The cutover process can be even more unobtrusive to the end user customer if one of several processes is followed. The CLP might, for example, schedule the cutover late at night or on a weekend or any other time when the end user customer will not be using the service. Other procedures such as pre-wiring cross connections in anticipation of BellSouth's providing the unbundled network elements likewise minimize or eliminate any inconvenience to the end user customer.

Q. DOES BELLSOUTH DOCUMENT ITS CUTOVER PROCESS SUCH THAT THE CLPS CAN REVIEW IT?

A. Yes. BellSouth has developed a detailed flow chart depicting the entire process. This process flow is attached to this testimony as Exhibit WKM-3.

Q. DOES BELLSOUTH HAVE METHODS AND PROCEDURES THAT DOCUMENT THIS PROCESS FLOW?

A. Yes. BellSouth has developed methods and procedures (M&Ps) for its process flow. BellSouth's M&Ps are attached to this testimony as Exhibit WKM-4 and address the following:

- BellSouth's processes when a CLP orders a coordinated conversion and whether the CLP wants to set the conversion time for an offered day or whether the CLP elects to have the time mutually agreed to prior to conversion.
- BellSouth's requirements to contact the CLP at any point in the provisioning process where a jeopardy condition might result in a conversion delay.
- BellSouth's commitment to contact the CLP 24 to 48 hours in advance of the cut depending on the interval for the service ordered, to negotiate a non time specific conversion and/or to verify the CLP's readiness to convert the customer's service as ordered.
- BellSouth's pre-testing responsibilities prior to conversion as well as on the conversion date to ensure the conversion is completed successfully.
- BellSouth's willingness to notify and cooperatively work with CLPs to correct any wiring defects which BellSouth identifies while performing pre-testing

REQUEST: Refer to the Direct Testimony of John Ruscilli, p. 13, lines 21-24, where he states: "As of October 2003, there are 156,745 lines in Florida served by a combination of a BellSouth unbundled loop and a CLEC's switch, which demonstrates without doubt that BellSouth has a hot cut process that has been tested and that worked." With regard to this testimony:

a. Explain what "testing" is referenced; and
b. How many of the 156,746 lines were hot cut under BellSouth's batch hot cut process?

RESPONSE: a. Mr. Ruscilli based his determination that the hot cut process had been tested upon the data demonstrating the large quantity of commercial usage of hot cuts in the state of Florida.

b. There have been a total of 82 lines requested and converted from UNE-P to UNE-L using the batch hot cut process.

RESPONSE PROVIDED BY: John Ruscilli

REQUEST: In BellSouth's Ex Parte in FCC Docket 01-338, filed December 24, 2002, on page 7, a table sets forth BellSouth's calculation of the time required to convert the "Top 20 UNE-P wire centers" to UNE-L or EELs. Provide answers to the following questions regarding that table:

(a) How many technicians were planned to work per shift, per wire center, to accomplish these conversions?
(b) How many conversions were planned per technician, per shift in each of the twenty wire centers?
(c) What is the maximum amount of new migrations BellSouth would be able to complete during the 3 –9 months these conversions would take place?
(d) How many UNE-P customers exist in these 20 wire centers as of September 1, 2003?

RESPONSE: (a) The assumption was that each of the Top 20 UNE-P wire centers, shown on page 7 of BellSouth's December 24, 2002, ex parte, have large frames and that there would typically be 6 technicians working on the frame during the normal day shift, with a maximum of 12 technicians able to work on the frame at any given time. Two shifts were assumed (except for the HLWDFLPE wire center where some third shift work was assumed) per day, with 6 technicians performing cuts during the day shift and 12 technicians performing cuts during the night shift, for an average of 9 technicians per wire center per day.

(b) The number of conversions per technician per shift in each of the twenty wire centers works out to be approximately 11.5, which results in approximately 104 conversions per wire center per day. In HLWDFLPE, assuming some third shift work, the number of conversions per technician per shift is approximately 13, which results in approximately 156 conversions per day.

(c) BellSouth's process is scalable depending on volumes.

RESPONSES (CONT.):

(d) See Attachment for response to Item No. 44(d).

RESPONSE PROVIDED BY: Lisa Brooks
Keith Milner

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
AT&T's 1st Interrogatories
October 6, 2003
Item No. 44 (d)

ATTACHMENT TO INTERROGATORY, ITEM NO. 44 (D)

Attachment
Response to Item No. 44 (d)

BellSouth's Top 20 UNE Impacted Wire Centers as of – 10/1/2003
WCs shaded are the Top Twenty Reported to FCC 12/23/2002

Rank	STATE	CLLI	Total UNE-P
1	FL	hlwdflpe	27662
2	FL	miamflhl	18049
3	FL	hlwdflwh	17955
4	GA	mrttgama	15599
5	FL	prmflma	15038
6	GA	lrvlgaos	13118
7	FL	pmbhflcs	12014
8	FL	wpbhflga	11726
9	FL	miamflca	11704
10	FL	ftldfloa	11202
11	FL	pmbhflma	10631
12	FL	ndadflbr	10330
13	GA	jnbogama	9587
14	GA	smyrgama	9572
15	GA	wdstgacr	9551
16	FL	orldflph	9407
17	FL	ftldflpl	9406
18	GA	rswlgama	9292
19	GA	alprgama	9215
20	FL	miamflwd	9051
21	FL	ftldflja	9038
22	FL	ndadflac	8937
23	FL	bybhflma	8913
24	GA	gsvlgama	8862
25	GA	cmnggama	8842
26	GA	agstgafl	8415
27	FL	pmbhflfe	8269
28	FL	hlwdflma	8256
29	GA	llbngama	8088
30	FL	ftldflmr	8084
31	FL	ndadflgg	7939
32	GA	atlngaep	7849
33	GA	panlgama	7815
34	FL	miamflpl	7790

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851-TP
AT&T's 1st Interrogatories
October 6, 2003
Item No. 45

ATTACHMENT TO INTERROGATORY, ITEM NO. 45

Attachment
Response to Item No 45 (a)

	A	B	C	D	E	F	G	H	I	J	K
1	CLLI	PROPERTY NAME	ADDRESS	CITY	STATE	ZIP	MANNED	HOST/REMOTE	HOST	# of Techs on Conv. Frame	# of Techs on Module Frame
2	ARCHFLMA	ARCHER CO	327 W ALABAMA ST	ARCHER	FL	32618	N	REMOTE	GSVLFLNW	2	
3	BCRTFLBT	Boca Teeca	5140 S Congress Av	BOCA RATON	FL	33487	Y	HOST		6	
4	BCRTFLMA	Boca Main	838 S Dixie Hwy	BOCA RATON	FL	33432	Y	HOST		10	
5	BCRTFLSA	Sandalfoot	9407 Glades Rd	BOCA RATON	FL	33433	Y	HOST		6	3
6	BGPIFLMA	Big Pine Key	US Hwy 1 MM 31	BIG PINE KEY	FL	33042	N	REMOTE	KYWSFLMA	2	
7	BKVLFLJF	BROOKSVILLE CO	201 E JEFFERSON ST	BROOKSVILLE	FL	34613	Y	HOST		6	
8	BLDWFLMA	BLDW MAIN CO	155 DREW ST	JACKSONVILLE	FL	32234	N	REMOTE	JCVLFLWC	2	
9	BLGLFLMA	Belle Glade	108 SW Av C	BELLE GLADE	FL	33430	N	HOST		6	
10	BNNLFLMA	BNNL IDLEWOOD CO	111 SOUTH CHERRY STREET	BUNNELL	FL	32110	N	REMOTE	PLCSFLMA	2	
11	BRSNFLMA	BRONSON	211 CAPITAL STREET	BRONSON	FL	32621	N	REMOTE	GSVLFLNW	2	
12	BYBHFLMA	Boynton Beach	221 SE 4th St	BOYNTON BEACH	FL	33435	Y	HOST		6	
13	CCBHFLAF	CAPE CANAVERAL	1734 CANAVERAL AIR FORCE	CAPE CANAVERAL	FL	32920	N	REMOTE	CCBHFLMA	2	
14	CCBHFLMA	COCOA BEACH	450 W CCBH CAUSEWAY	COCOA BCH	FL	32931	Y	HOST		4	
15	CDKYFLMA	CEDAR KEY	3RD STREET	CEDAR KEY	FL	32625	N	REMOTE	GSVLFLNW	2	
16	CFLDFLMA	CHIEFLAND CO	112 S.E. 1ST STREET	CHIEFLAND	FL	32626	Y	REMOTE	GSVLFLNW	2	
17	CHPLFLJA	CHIPLEY CO	689A 3RD ST.	CHIPLEY	FL	32428	Y	HOST		2	
18	CNTMFLLE	LEE CO	521 MUSCOGEE RD	CANTONEMENT	FL	32533	Y	HOST		2	
19	COCOFLMA	COCOA MAIN	712 FLORIDA AVENUE	COCOA	FL	32922	Y	HOST		8	
20	COCOFLME	MERRITT ISLAND CO	125 EAST MUSTANG WAY	MERRITT ISLAND	FL	32953	Y	HOST		8	
21	CSCYFLBA	CROSS CITY BARBER CO	410 SW 1ST ST	CROSS CITY	FL	32628	Y	REMOTE	GSVLFLNW	2	
22	DBRYFLDL	DELTONA CO	1204 PROVIDENCE BLVD	DELTONA	FL	32713	N	HOST		4	
23	DBRYFLMA	DEBARY	113 SOUTH HIGHWAY 17-92	DEBARY	FL	32713	N	REMOTE	DBRYFLDL	2	
24	DELDFLMA	DELAND	316 W NEW YORK AVE	DELAND	FL	32720	Y	HOST		6	
25	DLBHFLKP	Kings Point	6037 W Atlantic	DELRAY BEACH	FL	33445	Y	HOST		6	
26	DLBHFLMA	Delray Beach	321 SE 2nd St	DELRAY BEACH	FL	33483	Y	HOST		6	2
27	DLSPFLMA	DELEON SPRINGS	135 BERLIN STREET	DELEON SPGS	FL	32130	N	REMOTE	DELDFLMA	2	
28	DNLNFLWM	DUNNELLON CO	12060 S WILLIAMS ST	DUNNELLON	FL	34430	Y	REMOTE	WWSPFLHI	4	
29	DRBHFLMA	Deerfield Beach	780 S Deerfield Av	DEERFIELD	FL	33441	Y	HOST		10	
30	DYBHFLFN	FENTRESS CO	1861 MASON AV	DAYTONA BCH	FL	32014	N	REMOTE	DYBHFLPO	2	
31	DYBHFLMA	DAYTONA MAIN	268 N RIDGEWOOD AVE	DAYTONA BCH	FL	32114	Y	HOST		8	
32	DYBHFLOB	ORBH ORMOND BCH CO	22 S RIDGEWOOD AVE	ORMOND BCH	FL	32174	Y	HOST		8	
33	DYBHFLOS	OCEAN SHORES ESS	1776 N OCEANSHORE BLVD	ORMOND BCH	FL	32174	N	REMOTE	DYBHFLOB	2	
34	DYBHFLPO	DYBH PT ORANGE CO	829 ORANGE AVE	DAYTONA BCH	FL	32119	Y	HOST		6	

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35	EGLLFLBG	BOWE GARDENS CO	1750 CROTON AVE	MELBOURNE	FL	32935	Y	HOST		4	
36	EGLLFLIH	INDIAN HARBOR BEACH	980 PINETREE DRIVE	SATELLITE BCH	FL	32937	Y	HOST		6	
37	EORNFLMA	EAST ORANGE CO	19544 COLONIAL DR.	ORLANDO	FL	32826	N	REMOTE	ORLDFLAP	2	
38	FLBHFLMA	FLBH HEMLOCK CO	210 S DAYTONA AVE	FLAGLER BCH	FL	32136	N	REMOTE	PLCSFLMA	2	
39	FRBHFLFP	FRBH FIVE POINTS CO	1910 SOUTH 8TH STREET	FERNANDINA BCH	FL	32034	Y	HOST		4	
40	FTGRFLMA	FT GEORGE RSM	9451 HECKSCHER DRIVE	JACKSONVILLE	FL	32226	N	REMOTE	JCVLFLOW	2	
41	FTLDFLAP	Airport	200 Terminal Dr	FT. LAUDERDALE	FL	33315	N	REMOTE	HLWDFLMA	Circuits Wired at Host	
42	FTLDFLCR	Coral Ridge	2530 E Oakland Park Blvd	FT.LAUDERDALE	FL	33306	Y	HOST		8	
43	FTLDFLCY	Cypress	5395 NE 14th Av	FT.LAUDERDALE	FL	33334	Y	HOST		10	
44	FTLDFLJA	Jacaranda	10141 W Broward Blvd	FT.LAUDERDALE	FL	33324	Y	HOST		6	
45	FTLDFLMR	Ft Ldle Main Relief	211 NE 2nd St	FT.LAUDERDALE	FL	33301	Y	HOST		6	4
46	FTLDFLOA	Oakland	4200 W Oakland Park	FT.LAUDERDALE	FL	33313	Y	HOST		10	
47	FTLDFLPL	Plantation	4036 Bryan Blvd	PLANTATION	FL	33317	Y	HOST		8	
48	FTLDFLSG	Sawgrass	14000 NW 8th St	SUNRISE	FL	33325	Y	HOST		No Frame 100% ISLC	
49	FTLDFLSU	Sunrise	8750 W Oakland Park Blvd	BLVD SUNRISE	FL	33351	Y	HOST		4	5
50	FTLDFLWN	Weston	1431 Bonaventure Blvd	FT.LAUDERDALE	FL	33326	Y	HOST		4	
51	FTPRFLMA	Fort Pierce	712 Citrus Av	FT PIERCE	FL	34950	Y	HOST		10	
52	GCSPFLCN	GREEN COVE SPRINGS CO	512 CENTER STREET	GREEN COVE SPGS	FL	32043	Y	HOST		4	
53	GCVLFLMA	GRACEVILLE CO	5370 CLIFF STREET	GRACEVILLE	FL	32440	N	REMOTE	CHPLFLJA	2	
54	GENVFLMA	GENEVA	173 FIRST ST	GENEVA	FL	32732	N	REMOTE	SNFRFLMA	2	
55	GLBRFLMC	Gulf Breeze CO	98 MCCLURE DR	GULF BREEZE	FL	32561	Y	HOST		2	
56	GSVLFLMA	GSVL 2ND AV MAIN CO	400 SW 2ND AVENUE	GAINESVILLE	FL	32601	Y	HOST		8	
57	GSVLFLNW	GSVL NORTHWEST CO	7525 N.W. 5TH PLACE	GAINESVILLE	FL	32601	Y	HOST			2
58	HAVNFLMA	HAVANA CO	111 1ST STREET SE	HAVANA	FL	32333	Y	HOST		2	
59	HBSDFLMA	Hobe Sound	1500 S Dixie Hwy	HOBE SOUND	FL	33455	Y	HOST		4	
60	HLNVFLMA	HOLLEY NAVARRE CO	1810 STATE ROAD 87	NAVARRE	FL	32561	Y	HOST		2	
61	HLWDFLHA	Hallandale	120 NE 12th Av	HALLANDALE	FL	33009	Y	HOST		4	3
62	HLWDFLMA	Hollywood Main	715 N Federal Hwy	HOLLYWOOD	FL	33020	Y	HOST		8	
63	HLWDFLPE	Pembroke	61 NW 98th Av	PEMBROKE PINES	FL	33024	Y	HOST		8	
64	HLWDFLWH	West Hollywood	250 SW 62nd Av	HOLLYWOOD	FL	33023	Y	HOST		8	
65	HMSTFLEA	HMST EAST	2850 NORTH CANAL DR	HOMESTEAD	FL	33033	N	REMOTE	HMSTFLHM	2	
66	HMSTFLHM	Homestead	75 Civic Ct	HOMESTEAD	FL	33030	Y	HOST		6	
67	HMSTFLNA	Naranja	14475 SW 264th St	NARANJA	FL	33032	Y	REMOTE	HMSTFLHM	2	

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68	HTISFLMA	Hutchinson Island	10990 S A1A	JRNSEN BEACH	FL	34957	Y	HOST		6	
69	HWTHFLMA	MAIN CO	21 N.W. FIRST STREET	HAWTHORNE	FL	32640	Y	REMOTE	GSVLFLNW	4	
70	ISLMFLMA	Islamorada	US Hwy MM 182	ISLAMORADA	FL	33036	Y	REMOTE	HMSTFLHM	4	
71	JAY-FLMA	JAY CO	107 CHERRY STREET	JAY	FL	32565	N	REMOTE	CNTMFLLE	2	
72	JCBHFLAB	ATLANTIC II CO	13635 ATLANTIC BLVD.	JACKSONVILLE	FL	32225	Y	REMOTE	JCVLFLBW	2	
73	JCBHFLMA	3RD ST. MAIN CO	1824 NORTH 3RD STREET	JACKSONVILLE	FL	32250	Y	HOST		6	
74	JCBHFLSP	SAN PABLO CO	3370 THALIA RD	JACKSONVILLE	FL	32250	Y	REMOTE	JCVLFLBW	2	
75	JCVLFLAR	ARLINGTON CO /SOC	7553 ATLANTIC BLVD.	JACKSONVILLE	FL	32211	Y	HOST		8	
76	JCVLFLBW	BEACHWOOD CO	11317 BEACH BLVD.	JACKSONVILLE	FL	32216	Y	HOST		4	
77	JCVLFLCL	JCVL CLAY/PEARL CO	424 PEARL STREET	JACKSONVILLE	FL	32202	Y	HOST		10	5
78	JCVLFLFC	FT CAROLINE CO	6654 FT CAROLINE RD	JACKSONVILLE	FL	32211	Y	HOST		4	
79	JCVLFLIA	INTERNATIONAL AIRPOR	1550 AIRPORT RD	JACKSONVILLE	FL	32218	N	REMOTE	JCVLFLOW	2	
80	JCVLFLJT	JTB CO	4500 SALISBURY RD	JACKSONVILLE	FL	32216	Y	REMOTE	MNDRFLLO	2	
81	JCVLFLLF	LAKE FOREST CO	1441 W EDGEWOOD AVE	JACKSONVILLE	FL	32208	Y	HOST		8	2
82	JCVLFLNO	NORMANDY CO	6602 NORMANDY BLVD.	JACKSONVILLE	FL	32205	Y	HOST		8	
83	JCVLFLOW	JCVL OCEANWAY CO	11741 N MAIN ST	JACKSONVILLE	FL	32218	Y	HOST		4	
84	JCVLFLRV	JCVL RIVERSIDE CO	1710 TALBOT AVENUE	JACKSONVILLE	FL	32205	Y	HOST		8	3
85	JCVLFLSJ	SAN JOSE CO	6234 OLD ST AUGUSTINE RD	JACKSONVILLE	FL	32217	Y	HOST		8	
86	JCVLFLSM	SAN MARCO CO	2048 HENDRICKS AVE	JACKSONVILLE	FL	32207	Y	HOST		4	4
87	JCVLFLWC	WESCONNETT CO	5532 JAMMES RD	JACKSONVILLE	FL	32210	Y	HOST		6	
88	JPTRFLMA	Jupiter	112 Seminole Av	JUPITER	FL	33458	Y	HOST		6	
89	KYHGFLMA	KEYSTONE HEIGHTS MAIN	70 SW MAGNOLIA AVE	KEYSTONE HGHTS	FL	32656	N	REMOTE	GSVLFLNW	4	
90	KYLRFLLS	Largo Sound	US Hwy 1 MM 102.5	LARGO SOUND	FL	33037	Y	REMOTE	HMSTFLHM	4	
91	KYLRFLMA	Key Largo	US Hwy 1 MM 95	KEY LARGO	FL	33037	Y	REMOTE	HMSTFLHM	4	
92	KYWSFLMA	Key West	530 Southard St	KEY WEST	FL	33040	Y	HOST		2	
93	LKCYFLMA	LAKE CITY MAIN	130 WEST NASSAU STREET	LAKE CITY	FL	32055	Y	HOST		4	
94	LKMRFLMA	LAKE MARY DMS	365 INTERNATIONAL PARKWAY	LAKE MARY	FL	32746	Y	HOST		2	
95	LYHNFLMA	LYNNHAVEN DMS	812 OHIO AVE	LYNN HAVEN	FL	32444	Y	HOST		2	
96	MCNPFLMA	MCNP CO	101 N.E. 3RD AVE	MICANOPY	FL	32667	N	REMOTE	GSVLFLNW	2	
97	MDBGFLPM	MDBG PALMETTO CO	3906 MAIN STREET	MIDDLEBURG	FL	32068	Y	HOST		4	
98	MIAMFLAE	Alhambra	115 Alhambra Dr	CORAL GABLES	FL	33134	Y	HOST		6	3
99	MIAMFLAL	Allapattah	2470 NW 38th St	MIAMI	FL	33142	Y	HOST		10	2
100	MIAMFLAP	Airport	5275 NW 36th St	MIAMI	FL	33166	Y	HOST		8	

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101	MIAMFLBA	Bayshore	2010 NW 17th Av	MIAMI	FL	33142	Y	HOST		8	
102	MIAMFLBC	Biscayne	251 NW 29th St	MIAMI	FL	33056	Y	HOST		4	
103	MIAMFLBR	Beach Relief	1550 Lennox Av	MIAMI	FL	33127	Y	HOST		6	4
104	MIAMFLCA	Canal	2301 SW 100th Av	MIAMI	FL	33165	Y	HOST		10	
105	MIAMFLDB	Dadeland	9405 Old Dixie Hwy	MIAMI	FL	33156	N	REMOTE	MIAMFLRR	2	
106	MIAMFLFL	Flagler	2105 W. Flagler	MIAMI	FL	33135	Y	HOST		8	
107	MIAMFLGR	Grande	45 NW 5th St	MIAMI	FL	33128	Y	HOST		8	4
108	MIAMFLHL	Hialeah	1245 W 69th St	HIALEAH	FL	33141	Y	HOST		10	
109	MIAMFLIC	Indian Creek	6800 Harding Av	MIAMI BEACH	FL	33142	Y	HOST		6	
110	MIAMFLKE	Key Biscayne	89 Westwood Dr	KEY BISCAYNE	FL	33149	Y	HOST		4	
111	MIAMFLME	Miami Metro	1380 NW 21st St	MIAMI	FL	33138	Y	HOST		8	2
112	MIAMFLNM	North Miami	1360 NE 127th St	NORTH MIAMI	FL	33147	Y	HOST		6	
113	MIAMFLNS	Northside	2615 NW 79th St	MIAMI	FL	33169	Y	HOST		6	
114	MIAMFLOL	Opa Locka	2660 E Superior St	MIAMI	FL	33178	Y	HOST		10	
115	MIAMFLPB	Poinciana	25 Nahkoda Dr	MIAMI	FL	33166	Y	HOST		8	
116	MIAMFLPL	Palmetto	9056 NW 41st St	MIAMI	FL	33164	Y	HOST		10	
117	MIAMFLRR	Red Road	6100 SW 57th Av	MIAMI	FL	33143	Y	HOST		8	
118	MIAMFLSH	Miami Shores	8451 NE 1st Av	MIAMI	FL	33161	Y	HOST		6	3
119	MIAMFLSO	Silver Oaks	10701 SW 88th St	MIAMI	FL	33176	Y	HOST		4	4
120	MIAMFLWD	West Dade	15000 SW 88th St	MIAMI	FL	33196	Y	HOST		4	3
121	MIAMFLWM	West Miami	1155 SW 67th Av	MIAMI	FL	33144	Y	HOST		8	
122	MICCFLBB	Barefoot Bay	720 Egret Cir	MICCO	FL	32957	N	REMOTE	VRBHFLMA	2	
123	MLBRFLMA	MELBOURNE MAIN	728 E PALMETTO AVE	MELBOURNE	FL	32901	Y	HOST		8	
124	MLTNFLRA	MILTON CO	6749 RAVINE STREET	MILTON	FL	32570	Y	HOST		4	
125	MNDRFLAV	MNDR AVENUES CO	8923 W WAY-SUITE 100	JACKSONVILLE	FL	32217	Y	HOST		2	
126	MNDRFLLO	LORETTO CO	11498 ST. AUGUSTINE ROAD	JACKSONVILLE	FL	32223	Y	HOST		4	
127	MNDRFLLW	MNDR/LEMONWOOD CO	577 SR 13	FRUIT COVE	FL	32223	N	REMOTE	MNDRFLLO	2	
128	MNSNFLMA	MUNSON CO	11686 MUNSON WAY	MUNSON	FL	32531	N	REMOTE	CNTMFLLE	2	
129	MRTHFLVE	Marathon/Vaca	US Hwy 1 MM 54.5	MARATHON	FL	33050	Y	REMOTE	KYWSFLMA	4	
130	MXVLFLMA	MAXVILLE CO	8455 MAXVILLE BLVD	JACKSONVILLE	FL	32226	N	REMOTE	JCVLFLWC	2	
131	NDADFLAC	Arch Creek	2100 NE 164th St	MIAMI	FL	33139	Y	HOST		6	4
132	NDADFLBR	Brentwood	18560 NW 27th Av	MIAMI	FL	33179	Y	HOST		8	
133	NDADFLGG	Golden Glades	18400 NE 5th Av	MIAMI	FL	33179	Y	HOST		8	

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134	NDADFLOL	Oleta	19251 NE 26th Av	MIAMI	FL	33054	Y	HOST		8	
135	NKLRFLMA	North Key Largo	Ocean Key Club St Rd 905	NORTH KEY LARGO	FL	33037	Y	REMOTE	HMSTFLHM	2	
136	NSBHFLMA	NEW SMYRNA	100 CANAL ST	NEW SMYRNA BCH	FL	32169	Y	HOST		6	
137	NWBYFLMA	NWBY MAIN CO	25410 NW 1ST AVE	NEWBERRY	FL	32669	Y	REMOTE	GSVLFLNW	2	
138	OKHLFLMA	OKHL MAIN CO	153 BELL AVE	OAKHILL	FL	32759	N	REMOTE	DYBHFLPO	2	
139	OLTWFLLN	OLTW CO	LEON ST. NO NUMBER	OLD TOWN	FL	32680	N	REMOTE	GSVLFLNW	2	
140	ORLDFLAP	AZALEA PARK	7320 LAKE UNDER HILL RD	ORLANDO	FL	32807	Y	HOST		8	
141	ORLDFLCL	COLONIAL ESS	2315 EAST CENTRAL BLVD	ORLANDO	FL	32803	Y	HOST		6	
142	ORLDFLMA	N. MAGNOLIA ESS	45 NORTH MAGNOLIA AVENUE	ORLANDO	FL	32801	Y	HOST		10	5
143	ORLDFLPC	PINECASTLE CO	6621 SOUTH ORANGE AVENUE	ORLANDO	FL	32809	Y	HOST		8	
144	ORLDFLPH	PINE HILLS CO	5120 SILVER STAR ROAD	ORLANDO	FL	32808	Y	HOST		10	
145	ORLDFLSA	SANDLAKE ESS	4959 SANDLAKE ROAD	ORLANDO	FL	32809	Y	HOST		4	
146	ORPKFLMA	MCINTOSH MAIN CO	150 MCINTOSH AVE	ORANGE PARK	FL	32073	Y	HOST		6	
147	ORPKFLRW	RIDGEWOOD CO	721 BLANDING BLVD - B	ORANGE PARK	FL	32073	Y	HOST		2	
148	OVIDFLCA	OVIEDO	84 SOUTH CENTRAL AVE	OVIEDO	FL	32765	Y	HOST		4	
149	PACEFLPV	PACE CO	4351 HIGHWAY 90	PACE	FL	32571	Y	REMOTE	MLTNFLRA	2	
150	PAHKFLMA	Pahokee	826 E Main St	PAHOKEE	FL	33479	N	REMOTE	BLGLFLMA	4	
151	PCBHFLNT	BEACH CO	604 NAUTILUS	PANAMA CITY	FL	32401	Y	HOST		4	
152	PLCSFLMA	CLUB HOUSE DR ESS	5 CLUBHOUSE DR	PALM COAST	FL	32137	Y	HOST		2	
153	PLTKFLMA	PALATKA MAIN ST. CO	319 MAIN STREET	PALATKA	FL	32177	Y	HOST		8	
154	PMBHFLCS	PMBH Coral Springs	9420 Royal Palm Blvd	Coral Springs	FL	33065	Y	HOST		8	
155	PMBHFLFE	Pompano Federal	1230 N Federal Hwy	POMPANO BEACH	FL	33062	Y	HOST		8	
156	PMBHFLMA	Margate	1180 Banks Rd	MARGATE	FL	33063	Y	HOST		8	
157	PMBHFLNP	NORTH POWERLINE	1551 N. POWERLINE	FT. LAUDERDALE	FL		Y	REMOTE	PMBHFLTA	Circuits Wired at Host	
158	PMBHFLTA	Tamarac	7600 N University Dr	TAMARAC	FL	33321	Y	HOST		6	
159	PMPKFLMA	POMONA RSM	212 WORCHESTER RD	POMONA PARK	FL	32181	N	REMOTE	PLTKFLMA	2	
160	PNCYFLCA	CALLOWAY CO	6609 EAST ST. RD. 22	PANAMA CITY	FL	32401	Y	REMOTE	PNCYFLMA	2	
161	PNCYFLMA	PANAMA CITY DMS	111 EAST 5TH STREET	PANAMA CITY	FL	32401	Y	HOST		6	
162	PNSCFLBL	BELMONT CO	30 WEST BELMONT STREET	PENSACOLA	FL	32501	Y	HOST		8	
163	PNSCFLFP	FERRY PASS CO	1725 OLIVE ROAD	PENSACOLA	FL	32504	Y	HOST		6	
164	PNSCFLHC	HILLCREST CO	6913 PINE FOREST RD NW	PENSACOLA	FL	32506	Y	REMOTE	PNSCFLFP	4	
165	PNSCFLPB	PERDIDO CO	5575 LARIMER ST	PERDIDO	FL	32507	Y	HOST		2	
166	PNSCFLWA	WARRINGTON CO	515 S OLD CORRY FIELD RD	PENSACOLA	FL	32507	Y	HOST		6	

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167	PNVDFLMA	PONTE VEDRA MAIN CO	637 A1A N	PONTE VEDRA BCH	FL	32082	Y	HOST		4	
168	PRRNFLMA	Perrine	16645 US Hwy 1	MIAMI	FL	33157	Y	HOST		10	
169	PRSNFLFO	PIERSON	112 N FOUNTAIN DR	PIERSON	FL	32180	N	REMOTE	DELDFLMA	2	
170	PTSLFLMA	Port St. Lucie Main	450 Irving St	PT ST LUCIE	FL	34983	Y	HOST		4	
171	PTSLFLSO	Port St. Lucie South	2002 Pt St Lucie Blvd	PORT ST LUCIE SOUTH	FL	34953	N	HOST		2	
172	SBSTFLFE	Fellsmere	5 Bay St	FELLSMERE	FL	32948	N	REMOTE	VRBHFLMA	2	
173	SBSTFLMA	Sebastian	1137 US Hwy 1	SEBASTIAN	FL	32958	Y	HOST		4	
174	SGKYFLMA	Sugarloaf Key	19921 Overseas Hwy	SUGARLOAF KEY	FL	33042	N	REMOTE	KYWSFLMA	2	
175	SNFRFLMA	SANFORD	501 W 9TH ST	SANFORD	FL	32771	Y	HOST		8	
176	STAGFLBS	ST AUG BEACHES CO	4900 A1A SOUTH	ST AUGUSTINE	FL	32084	N	REMOTE	STAGFLMA	2	
177	STAGFLMA	ST AUG MAIN	69 CORDOVA STREET	ST AUGUSTINE	FL	32084	Y	HOST		4	
178	STAGFLSH	STAG SHORES ESS	4460 US #1 SOUTH	ST AUGUSTINE	FL	32084	Y	REMOTE	STAGFLMA	4	
179	STAGFLWG	WLD GOLF VILLAGE CO	4875 STATE ROAD 16	ST AUGUSTINE	FL	32095	N	REMOTE	MNDRFLLO	2	
180	STRTFLMA	Stuart	305 W 3rd St	STUART	FL	34994	Y	HOST		8	
181	SYHSFLCC	SUNNY HILLS DMS	4228 COUNTRY CLUB LANE	SUNNY HILLS	FL	32463	N	REMOTE	CHPLFLJA	2	
182	TRENFLMA	TREN MAIN CO	213 N W 1ST ST.	TRENTON	FL	32693	Y	REMOTE	GSVLFLNW	2	
183	TTVLFLMA	TITUSVILLE CO	620 HOPKINS STREET	TITUSVILLE	FL	32796	Y	HOST		6	
184	VERNFLMA	VERNON CO	3321 COURT AVENUE	VERNON	FL	32462	N	REMOTE	CHPLFLJA	2	
185	VRBHFLBE	Vero Beachland	766 Beachland Blvd	VERO BEACH	FL	32963	N	REMOTE	SBSTFLMA	4	
186	VRBHFLMA	Vero Main	1976 16th St	VERO BEACH	FL	32960	Y	HOST		10	
187	WELKFLMA	WELAKA MAIN CO	301 3RD AVE	WELAKA	FL	32193	N	REMOTE	PLTKFLMA	2	
188	WPBHFLAN	Palm Bch Annex	325 Gardenia St	WEST PALM BEACH	FL	33401	Y	HOST		8	
189	WPBHFLGA	Green Acres	3800 S Military Trail	LAKE WORTH	FL	33463	Y	HOST		8	
190	WPBHFLGR	Palm Bch Gardens	3700 RCA Blvd	PALM BEACH GARDENS	FL	33410	Y	HOST		6	
191	WPBHFLHH	Haverhill	1550 N Haverhill Rd	WEST PALM BEACH	FL	33417	Y	HOST		6	4
192	WPBHFLLE	Lake Worth	120 N K St	LAKE WORTH	FL	33460	Y	HOST		6	
193	WPBHFLRB	Riviera Beach	3640 Ave E	RIVIERA BEACH	FL	33404	Y	HOST		8	5
194	WPBHFLRP	Royal Palm	11455 State Rd 80	ROYAL PALM BEACH	FL	33411	Y	HOST		6	
195	WWSPFLHI	HIGHLAND CO	9401 CORTEZ BLVD	BROOKSVILLE	FL	34613	Y	HOST		4	
196	WWSPFLSH	SPRING HILL CO	1395 DELTONA BLVD	SPRING HILL	FL	34606	Y	HOST		4	
197	YNFNFLMA	YOUNGSTOWN CO	12102 AZALEA ST	FOUNTAIN	FL	32438	N	REMOTE	LYHNFLMA	2	
198	YNTWFLMA	YANKEETOWN CO SR40	SCHOOLCRAFT STREET	YANKEETOWN	FL	34498	N	REMOTE	BKVLFLJF	2	
199	YULEFLMA	YULEE RSC	S.R. 200 & U.S. 17	YULEE	FL	32097	N	REMOTE	JCVLFLOW	2	

REQUEST: Referring to Direct Testimony of John Ruscilli, page 18, provide all supporting documentation for the 10% discount.

RESPONSE: BellSouth has no responsive documents.

REQUEST: Refer to the Direct Testimony of Kenneth Ainsworth, page 36, what is the combined annual salary (with benefits), for the 425 CWINS personnel and 105 service representatives in the LCSCs BellSouth proposes to add to provision loops in the absence of unbundled local switching?

RESPONSE: For the period 2005 through 2007, the projected annual salary (with benefits) costs for the 425 additional CWINS personnel and the 105 additional service representatives would be $40,737,000 annually.

RESPONSE PROVIDED BY: Ken L. Ainsworth

REQUEST: Referring to Exhibit AH-1 attached to the Direct Testimony of Alfred Heartley, what is the combined annual salary (with benefits) for the 1000 additional personnel BellSouth is proposing to add to provision loops in Florida in the absence of unbundled local switching?

RESPONSE: Estimated expense due to salary, benefits, taxes and tools for 1,080 additional employees proposed in Florida is approximately $83.2M annually.

The projected force will be reduced due to a correction made to the Force and Load Model to be included with the Rebuttal Testimony of Mr. Heartley. The revised requirement for Florida is 759 employees. The expense for the revised force is estimated to be $58.5M annually.

The revised Force and Load Model is provided in BellSouth's response to AT&T's Third Request for Production, Item No. 42. The responsive document is proprietary and is being provided pursuant to the terms of the parties' protective agreement

RESPONSE PROVIDED BY: Alfred Heartley

BELLSOUTH

BellSouth Interconnection Services
1960 West Exchange Place
Suite 200
Tucker, GA 30084

AT&T Regional Account Team
770-492-7550
Fax 770-492-9412

September 20, 2002

Ms. Denise Berger
AT&T
Room 12268
1200 Peachtree St. NE
Atlanta, GA 30309

Dear Denise:

This is in response to your letter of August 30, 2002, regarding AT&T's request that BellSouth adopt a new process for coordinated conversions (hot cuts) of unbundled loop service.

At the outset, your letter makes statements about the quality of BellSouth's current hot cut process performance that do not accurately reflect the level of service BellSouth provides to AT&T. BellSouth has consistently performed AT&T's hot cuts well within the established benchmark, usually 100% within 15 minutes of AT&T's requested start time. BellSouth strongly disagrees with the characterization of its current hot cut methods as "unreliable." I have attached a copy of AT&T's Local Services' Performance trend chart for On Time Installation for Hot Cuts, January through June 2002, which AT&T presented in the last monthly Executive meeting. This chart indicates that AT&T is receiving excellent service from BellSouth on its Unbundled Network Element (UNE) Loop Hot Cut conversions. Furthermore, let me remind you that the hot cut process in your Interconnection Agreement was negotiated by you personally for numerous months. BellSouth is implementing that process not only correctly, but also at extremely high service levels.

Regarding AT&T's request that BellSouth implement a bulk conversion process to migrate AT&T's end users served by Unbundled Network Element-Platform (UNE-P) to UNE Loop, as we have discussed, BellSouth is implementing a bulk conversion process as a result of AT&T's Change Request CR0215. The final user requirements were reviewed with the CLEC community on July 9, 2002. During our conversation, however, you indicated that the new process resulting from CR0215 would not meet the needs of the internal AT&T organization. Those needs apparently have prompted the request for a different new process as outlined in your August 30 letter.

BellSouth believes that the conversion process currently in place, as a result of CR0215, will be a reliable, economical method to migrate "commercial volumes" of UNE-P customers to UNE-Loops and will be mechanized for further convenience by year-end. Nevertheless, AT&T has the option of submitting another CR for the development of a second bulk hot cut process.

Possibly, a more fitting avenue for AT&T's request is BellSouth's New Business Request (NBR). If AT&T needs bulk conversions without individual Local Service Requests (LSR), after normal business hours, with project management and real-time coordination, as well as personnel available after hours to assist AT&T in resolving Connecting Facility Assignment (CFA) discrepancies and immediate service restoration when necessary, the NBR process will allow BellSouth to develop the necessary procedures and establish the market-based rates for the additional resources this proposal would require. Contrary to

AT&T's assertions that the process described will be less costly to BellSouth and, therefore, should result in lower rates for UNE Loops, it will instead add significantly to BellSouth's cost to serve. Those costs, appropriately, will be passed on to AT&T as the recipient of these services.

If we need to further discuss BellSouth's position on AT&T's request, I can be reached at 205 321-4700.

Sincerely,

James M. Schenk

Attachment

Copy to: Greg Terry

BST Line Sharing/Line Splitting Collaborative
Conference Call Notes – December 11, 2003

ATTENDEES: Via Bridge

BellSouth	Al-Call	Sunshine State Tel	Covad	AT&T	MCI	Webshoppe	Network Telephone
Debbie Timmons	Greg Davis	Andrea Loncaric	John Boshier	Jay Bradbury	Amanda Hill	Craig Uptagrafft	Kyle Kopytchak
Tommy Williams	Theresa Hall		Brian Foor	Becky Webber	Sam Tenerelli		
Diann Hammond	Melissa Davis						
Jimmy Patrick							
Vivian Smith							

FROM: Debbie Timmons, Project Manager – BellSouth Telecommunications, Inc.

NOTES:

1. **Welcome and Opening Remarks**
   Debbie Timmons opened the meeting with roll call and agenda review.

2. **Review Process Flow: Facility Reservation Pair Change**
   Debbie Timmons lead the review of the process flow for FRN Management Process. BellSouth has proposed and the Collaborative has accepted a process change whereby when a CLEC reserves a spare loop pair, should that loop prove not viable in the field, the I&M tech will work with AFIG & SAC to identify a viable loop pair, perform the cut & work the Shared Loop service order.

   The FRN Management Process Flow will be presented for baseline at the next Collaborative meeting. Refer to the attached FRN Management Process document.

3. **Loop Characteristics for Shared Loops**
   The update to the Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters submitted November 3rd by Greg Davis of Al-Call was reviewed. Greg Davis accepted the additional language provided by Gary Tennyson of Bellsouth and stated overall agreement with and acceptance of the document as presented.

   John Boshier of Covad commented the document does not establish anything, especially since the ULM process language was removed and Covad continues to experience situations where certain Bridged Tap is detrimental to Covad's shared loop service. Debbie Timmons and Tommy Williams reviewed the history of this subject, specifically citing the need to have a specification for shared loops in the TR73600 document, that shared loop products make use of the stand-alone offering Loop Modification, and that the shared loop collaborative is not the appropriate forum to discuss the Loop Modification product as CLECs not represented in this forum use the Loop Modification process, too.

   Kyle Kopytchak of Network Telephone stated disagreement with the position that the Shared Loop Collaborative is not the proper forum to discuss Loop Modification, citing discussions with Jerry Latham, product manager for Loop Modification, wherein it was stated that this collaborative is the appropriate forum. Tommy Williams noted the previous collaborative discussions where Loop Modification discussions were dropped from this collaborative. Refer to meeting minutes of 10/23/03, 10/30/03 and 11/13/03.

   John Boshier of Covad stated changes to the Loop Modification product are underway and asked if the changes would apply to Shared Loops. Diann Hammond of BellSouth noted that Loop Modification is a stand-alone product that CLECs may choose to use in conjunction with not only Shared Loop products, but other UNE Loop products as well. Tommy Williams of BellSouth noted that any changes to the Loop Modification product would be announced via the Carrier Notification Process and that the Interconnection Standard is the vehicle that CLECs and BellSouth use to determine how we conduct business.

   Kyle Kopytchak of Network Tel and John Boshier of Covad do not accept the Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters as presented. Greg Davis of Al-Call noted that one reason the Loop Modification information was removed from the proposed standards was because

the Shared Loop CLEC representatives could not reach agreement on Bridged Tap. CLECs agreed to review the revisions to the Loop Modification, particularly relative to bridged tap removal before they can agree to the Loop Characteristics for Shared Loops.

Refer to the attached Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters document

4. **Status on Bantam Test Jacks on BST Splitters**
Tommy Williams of BellSouth introduced discussion of eliminating the Bantam Test Jacks on BellSouth Splitters, noting that it has been BellSouth's desire to do so for some time as it is costly and most CLECs don't use it. He further commented that Al-Call does use the Bantam Test Jack, but that they had not used the MLT test capability of DLEC-TAFI. When this topic was last discussed, Greg Davis of Al-Call had agreed to assess the use of the MLT capability for Al-Call's environment. Greg reported that the MLT testing does not provide them with the same capability as the Bantam Test Jack, but on the other hand, he has no objection to removing it from the offering.

A vote was called on removing the Bantam Test Jack from the BST Splitter:
Yes – Greg Davis of Al-Call
Yes – John Boshier of Covad
Yes – Sam Tenerelli of MCI
Yes – Becky Webber of AT&T
Yes – Melissa Davis of Al-Call
Yes – Craig Uptagrafft of WebShoppe
Yes – Tommy Williams of BellSouth

Tommy Williams thanked the CLECs for their support and noted that the change would become part of the 2004 Shared Loop Work Plan.

5. **Sharing to Splitting UNEL Discussion**
During the previous Collaborative meeting, it was suggested that the Collaborative review the Line Splitting Scenario Matrix, suggesting that it may serve as a starting point to define the migration scenarios being sought by the CLECs. Debbie Timmons of BellSouth lead a review of the existing matrix. Tommy Williams of BellSouth stated it would be beneficial to know what scenarios are needed and the order of importance. Readily identified as high importance were a) migrating existing UNE-P with line splitting to UNEL and retain DSL, and b) migrating line sharing to UNEL with CLEC port and retain DSL.

It was suggested to update the Line Splitting Scenario Matrix with columns to identify the voice port provider as ILEC or CLEC. Craig Uptagrafft also requested that Remote Site migrations be included. The updated matrix will be reviewed and the next Collaborative meeting.

Sam Tenerelli of MCI introduced discussion of the migration process for Batch Hot Cut to Line Splitting recently ordered by California where the voice port is provided by the CLEC - known as Loop Splitting in BellSouth. He also noted the CLECs need an originating process to order new service to establish DSL on a UNE Loop with CLEC voice port, and asked if BellSouth has any plans to develop, and if this was the proper forum for discussion. Tommy Williams of BellSouth affirmed this as the proper forum and advised the CLECs of his recent escalation seeking to understand if the TRO requires the ILEC to make the cross-connect to the second collocation space, whether new or hot cut.

Sam also introduced discussion of when two CLECs combine within the same collocation site, how loop tagging and spectrum management would be addressed. These discussions will be included on the next agenda.

Refer to the attached Line Splitting Scenario Matrix

6. **2004 Meeting Schedule**
Debbie Timmons of BellSouth lead the discussion of the proposed 2004 meeting schedule. BellSouth is recommending the meeting move to one standing meeting day per month, while holding a second day in reserve to be used on an as needed basis. The collaborative agreed to hold the two meetings in January and to decide the matter of one or two meetings on a monthly basis.

Refer to the attached 2004 Meeting Schedule

7. **New Business/New Agenda Items/Wrap-up**
Tommy Williams requested 2004 Charter for the next agenda.

Brian Foor of Covad introduced new issues pertaining to Line Splitting provisioning and repairs. For provisioning, three items were noted: a) No response from LCSC and having to escalate too often, b) Due Dates being assigned incorrectly – getting due dates 1-5 days beyond the requested date, and c) the circuit ID is the telephone number. The issue with repair is that Covad is receiving push back from the Central Office and CWINS; there is a lack of knowledge of the process. This item will be monitored and status taken at the next the meeting.

- **Agenda Items:**

  - Review FRN Process Flows
  - Loop Characteristics of Shared Loop
  - Line Sharing to Line Splitting UNEL Discussion
  - 2004 Charter
  - Status Covad's Issues on Line Splitting Provisioning & Maintenance

- **Attached Items:**

  1. FRN Management Process Flow
  2. Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters document
  3. Line Splitting Scenario Matrix
  4. 2004 Meeting Schedule

Collaborative Website:

http://www.interconnection.bellsouth.com/markets/lec/line_sharing_collab/

- **Next Meetings: Bridge: 205-968-9300 Access: 643487 Password: 6714**

  Shared Loop Collaborative Conference Call – 1/15/2004, 1:30 EST

  Shared Loop Collaborative Conference Call – 1/29/2004, 12:30 EST

Norris,Sharon E - LGCRP

From: Berger,Denise C - NKLAM
Sent: Wednesday, July 30, 2003 2:11 PM
To: Brewer, Lynne
Cc: Schenk, James M; Butler, Amanda (BST); Tousek, Albert; Hyche, Keith
Subject: RE: Loop Splitting Issues

July 30, 2003

L. Brewer
BellSouth Interconnection Services

Lynne:

I understand from Keith Hyche's message below that you are leading BellSouth's efforts to develop and deploy BellSouth's loop splitting offer. This was subsequent from the issue being removed from discussions at the BellSouth/CLEC DSL Collaborative.

I would still like to understand BellSouth's positions on the following questions:

1. How does BellSouth plan to solicit and incorporate CLEC input into the development of this capability and the subsequent offering? In which CLEC forum will this be discussed?
2. What is the timeframe for delivery of this service?
3. How does BellSouth plan to provide procedures and business rules for ordering and provisioning?
4. How does BellSouth plan to provide CLECs with information around cost/price?
5. Does BellSouth plan to provide a mechanized ordering option for CLECs? Will this interface require systems upgrades or systems work by CLECs? When does BellSouth plan to provide such information?
6. Will there be a manual ordering option for CLECs?
7. Will CLECs be able to order this functionality via a single LSR?
8. Will BellSouth require CLECs to install any special or additional collocation equipment?
9. If special equipment is required, will BellSouth offer the access to such equipment as an unbundled network element?

Finally, I'd like to make sure that I am aligned with BellSouth in understanding to which FCC mandate this offer responds.

Thank you for the information. If you would like to discuss further, please call me at the number below.

Denise C. Berger
Operations Assistant Vice President
AT&T Local Services
Telephone: 404/810-8644
Facsimile: 281/664-3648
E-Mail: deberger@att.com

-----Original Message-----
From: Hyche, Keith [mailto:Keith.Hyche@BellSouth.com]
Sent: Tuesday, July 29, 2003 3:41 PM
To: Berger, Denise C, CSLSM
Cc: Schenk, James M; Hyche, Keith; Butler, Amanda (BST); Tousek, Albert; Brewer, Lynne
Subject: RE: Loop Splitting Issues

Denise,

Docket No. 030851-TP
M. Van De Water Exhibit No. MDV-SR3, Page 1 of 3
July 30, 2003 email from Denise Berger (AT&T)

The following issue has been referred to the Collocation Development Team lead by Lynne Brewer not the Collocation User Group. I apologize for the misunderstanding. This will be mentioned Thursday, July 31st during the collaborative call lead by Al Tousek.

If you have questions about the development of this product you can contact Lynne Brewer at 404-927-7536.

Thank you!

Keith Hyche

-----Original Message-----
From: Berger, Denise C, CSLSM [mailto:deberger@att.com]
Sent: Friday, July 25, 2003 2:08 PM
To: BST-Amanda Butler (E-mail)
Cc: BST-Jim Schenk (E-mail); BST-Keith Hyche (E-mail)
Subject: Loop Splitting Issues

July 25, 2003

A. Butler
BellSouth Interconnection Services

Amanda:

I spoke with Keith regarding this issue on Tuesday afternoon. However, I'm bringing it to your attention to assist Keith in obtaining a clear and quick understanding of BellSouth's intent relative to working loop splitting issues.

Included in the May 22, 2003, DSL collaborative meeting minutes is the following:

"1. Connecting Two Collocations Update

Lynne Brewer joined the call to discuss the latest developments regarding the connecting of two collocations. Lynne reported that BellSouth has initiated the development of a tariffed product whereby BellSouth will provide a service to the CLECs to connect two collocations located in the same CO through cross connects at the frame. The rate elements are presently under study. At this time no decisions have been made regarding what recurring and/or non-recurring charges may be applicable. The target availability date is Q403."

Further the meeting minutes from the June 26, 2003, collaborative state,

* Collocation to Collocation CFA

This item will no longer be tracked in the shared loop team. This collaborative took the issue to the collocation development team, which is the responsible organization. The item is now being handled by the collocation development team and outside the control of the shared loop management team. It was suggested that those interested in following this item should join the collocation users group.

Although this is not meant to reflect harshly on Keith, but I was very confused after my discussion with him. Apparently, although the shared loop (or DSL collaborative) team believes that they have handed off the issue to the Collocation Users' group, your team is not aware of the hand-off. Somehow it fell in a black hole. Additionally, since the next Collocation Users' group meeting is not scheduled until October 14, 2003, I'm perplexed at how CLECs can participate in the development of this capability. I have numerous questions regarding BellSouth's plans.

* How does BellSouth plan to solicit and incorporate CLEC input into the development of this capability and the subsequent offering?
* How does BellSouth plan to provide procedures and business rules for ordering and provisioning?
* How does BellSouth plan to provide CLECs with information around cost/price?
* Does BellSouth plan to provide a mechanized ordering option for CLECs? Will this interface require systems upgrades or systems work by CLECs? When does BellSouth plan to provide such information?
* Will there be a manual ordering option for CLECs?
* Will CLECs be able to order this functionality via a single LSR?
* Will BellSouth require CLECs to install any special or additional collocation equipment?

Additionally, Keith indicated in our conversation on Tuesday that BellSouth was working to provide this capability in response to an FCC mandate. Can you share which FCC mandate that BellSouth is addressing?

Please let me know if you have additional questions.

Denise C. Berger
Operations Assistant Vice President
AT&T Local Services
Telephone: 404/810-8644
Facsimile: 281/664-3648
E-Mail: deberger@att.com

*****
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FAX COVER

3 Pages (Including Cover)

DATE: January 16, 2004

TO:
Ms. Denise Berger
Operations Assistant Vice President
AT&T Local Services
Phone No.: (770) 621-9136
Fax No.: (281) 664-3648

FROM:
Lynne G. Brewer
Sr. Product Manager – Collocation
BellSouth Telecommunications, Inc.
Phone No.: (404) 927-7536
Fax No.: (404) 529-7074

RE: Letter re: Availability of Collo Cross-Connects

Comments: Denise,

As you requested, attached is a copy of the original letter I sent to you in regard to the availability of cross-connects between AT&T's collocation space and the collocation space of another carrier in the same central office. As I indicated in my email earlier this week, the original letter was mailed to you on December 19, 2003, but it was returned by the post office as being "undeliverable as addressed." In addition to this faxed copy, I will send you the original letter at the new address you included in your email. Again, I apologize for any inconvenience this may have caused you. Please contact me if you have any questions.

Thank you.

Lynne Brewer

BELLSOUTH

BellSouth Interconnection Services
675 West Peachtree Street
Atlanta, Georgia 30375

December 19, 2003

Ms. Denise C Berger
Operations Assistant Vice President
AT&T Local Services
1200 Peachtree Street, NE
Atlanta, GA 30309

Dear Ms. Berger:

This is in response to your e-mail dated July 30, 2003, concerning what you referred to as BellSouth's loop splitting offer. Based on discussions in several BellSouth/CLEC DSL Collaborative meetings subsequent to your e-mail, BellSouth understands that the issue is the availability of cross-connects between AT&T's collocation space and the collocation space of another carrier. Although this issue was originally brought to the BellSouth/CLEC DSL Collaborative, it is a product development issue that has been addressed by the BellSouth Collocation Product Team.

As you may already be aware, BellSouth currently allows two collocated CLECs to place co-carrier cross connects between their collocation arrangements located in the same Central Office. This offering has been available for some time and utilizes CLEC-provisioned cable placed by the CLEC's BellSouth Certified Supplier via BellSouth's cable racking assembly, if the two arrangements are not contiguous. This co-carrier cross connect offering is made available by BellSouth pursuant to the applicable language that must be included in the ordering CLEC's Interconnection Agreement. This language must also be included in the Interconnection Agreement of the other CLEC to which the co-carrier cross connect is being placed. In addition, a Letter of Authorization (LOA) is required from the other CLEC.

A similar offering called a Direct Connect is also available. This offering permits a CLEC with multiple collocation arrangements in the same Central Office to interconnect those arrangements with each other, again utilizing CLEC-provisioned cable and BellSouth's cable racking assembly.

In addition, AT&T may request a co-carrier cross connect interstate service pursuant to Section 201 of the Communications Act. Although the FCC has yet to establish a deadline for BellSouth to offer this service pursuant to tariff, BellSouth will make this service available through its Tariff FCC No. 1 in early January 2004. In this tariff filing, BellSouth will use the name "Intra-Office Cross Connects" to distinguish this interstate service from the offering available under its Interconnection Agreements described above. This will be a service provisioned by BellSouth using CLEC-provided Connecting Facility Assignment (CFA) appearances on BellSouth's frames or panels. A complete description of the service, including the rates, terms and conditions, will be included in the tariff.

I believe the questions listed in your original e-mail will be answered in the tariff filing described above, but if not, please call me at 404-927-7536 or Lue Elder at 404-927-7558.

Sincerely,

Lynne Brewer

Lynne Brewer
Sr. Product Manager – Collocation
ICS - Marketing

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 111
COMPANY/ AT+T / WOOD
WITNESS: DJW-1 thru DJW-5
DATE: 02/24-27/04

Vita of Don J. Wood
4625 Alexander Drive, Suite 125, Alpharetta, Georgia 30022
Voice 770.475.9971, Facsimile 770.475.9972

CURRENT EMPLOYMENT

Don J. Wood is a principal in the firm of Wood & Wood. He provides economic and regulatory analysis services in telecommunications, cable, IP, and related convergence industries, specializing in economic policy related to the development of competitive markets and cost of service issues. In addition, Mr. Wood advises industry associations on regulatory and economic policy, and assists investors in their evaluation of investment opportunities in the telecommunications industry. The scope of his work has included landline and wireless voice communications, data services, and emerging technologies.

As a consultant, Mr. Wood has assisted his clients in responding to the challenges and business opportunities of the industry both before and subsequent to the Telecommunications Act of 1996. Prior to his work as a consultant, Mr. Wood was employed in a management capacity at a major Local Exchange Company and an Interexchange Carrier. In each capacity he has been directly involved in both the development and implementation of regulatory policy and business strategy.

As a part of his regulatory practice, Mr. Wood has presented testimony before the administrative regulatory bodies of thirty-five states, the District of Columbia, and Puerto Rico, and has prepared comments and testimony for filing with the Federal Communications Commission. The subject matter of his testimony has ranged from broad policy issues to detailed cost analysis.

Mr. Wood has also presented testimony in state, federal, and overseas courts regarding business plans and strategies, competition policy, and cost of service issues. He has presented studies of the damages incurred by plaintiffs and has provided rebuttal testimony to damage calculations performed by others. Mr. Wood has also testified in alternative dispute resolution proceedings conducted pursuant to both AAA and CPR rules.

Mr. Wood is certified as a Commercial Mediator in the state of Georgia.

PREVIOUS INDUSTRY EMPLOYMENT

Klick, Kent & Allen/FTI Consulting, Inc.
Regional Director.

GDS Associates, Inc.
Senior Project Manager.

MCI Telecommunications Corporation
Manager of Regulatory Analysis, Southeast Division.
Manager, Corporate Economic Analysis and Regulatory Affairs.

BellSouth Services, Inc.
Staff Manager.

EDUCATION

Emory University, Atlanta, Ga.
BBA in Finance, with Distinction.

College of William and Mary, Williamsburg, Va.
MBA, with concentrations in Finance and Microeconomics.

TESTIMONY - STATE REGULATORY COMMISSIONS:

Alabama Public Service Commission

Docket No. 19356, Phase III: Alabama Public Service Commission vs. All Telephone Companies Operating in Alabama, and Docket 21455: AT&T Communications of the South Central States, Inc., Applicant, Application for a Certificate of Public Convenience and Necessity to Provide Limited IntraLATA Telecommunications Service in the State of Alabama.

Docket No. 20895: In Re: Petition for Approval to Introduce Business Line Termination for MCI's 800 Service.

Docket No. 21071: In Re: Petition by South Central Bell for Introduction of Bidirectional Measured Service.

Docket No. 21067: In Re: Petition by South Central Bell to Offer Dial Back-Up Service and 2400 BPS Central Office Data Set for Use with PulseLink Public Packet Switching Network Service.

Docket No. 21378: In Re: Petition by South Central Bell for Approval of Tariff Revisions to Restructure ESSX and Digital ESSX Service.

Docket No. 21865: In Re: Petition by South Central Bell for Approval of Tariff Revisions to Introduce Network Services to be Offered as a Part of Open Network Architecture.

Docket No. 25703: In Re: In the Matter of the Interconnection Agreement Between AT&T Communications of the South Central States, Inc. and BellSouth Telecommunications, Inc., Pursuant to 47 U.S.C. § 252.

Docket No. 25704: In Re: Petition by AT&T Communications of the South Central States, Inc. for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE South Incorporated and CONTEL of the South, Inc. Concerning Interconnection and Resale under the Telecommunications Act of 1996.

Docket No. 25835: In Re: Petition for Approval of a Statement of Generally Available Terms and Conditions Pursuant to §252(f) of the Telecommunications Act of 1996 and Notification of Intention to File a §271 Petition for In-Region InterLATA Authority with the Federal Communications Commission Pursuant to the Telecommunications Act of 1996.

Docket No. 26029: In Re: Generic Proceeding - Consideration of TELRIC Studies.

Docket No. 25980: Implementation of the Universal Support Requirements of Section 254 of the Telecommunications Act of 1996.

Docket No. 27091: Petition for Arbitration by ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Docket No. 27821: Generic Proceeding to Establish Prices for Interconnection Services and Unbundled Network Elements.

Docket Nos. 27989 and 15957: BellSouth "Full Circle" Promotion and Generic Proceeding Considering the Promulgation of Telephone Rules Governing Promotions.

Docket No. 28841: In Re: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

The Regulatory Commission of Alaska

Case No. U-02-039: In the Matter of Request by Alaska Digitel, LLC for Designation as a Carrier Eligible To Receive Federal Universal Service Support Under the Telecommunications Act of 1996.

Arkansas Public Service Commission

Docket No. 92-337-R: In the Matter of the Application for a Rule Limiting Collocation for Special Access to Virtual or Physical Collocation at the Option of the Local Exchange Carrier.

Public Utilities Commission of the State of California

Rulemaking 00-02-005: Order Instituting Rulemaking on the Commission's Own Motion into Reciprocal Compensation for Telephone Traffic Transmitted to Internet Service Provider Modems.

Application Nos. 01-02-024, 01-02-035, 02-02-031, 02-02-032, 02-02-034, 02-03-002: Applications for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Network element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Public Utilities Commission of the State of Colorado

Docket No. 96A-345T: In the Matter of the Interconnection Contract Negotiations Between AT&T Communications of the Mountain States, Inc., and US West Communications, Inc., Pursuant to 47 U.S.C. Section 252. Docket No. 96A-366T: In the Matter of the Petition of MCIMetro Access Transmission Services, Inc., for Arbitration Pursuant to 47 U.S.C. § 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with US West Communications, Inc. (consolidated).

Docket No. 96S-257T: In Re: The Investigation and Suspension of Tariff Sheets Filed by US West Communications, Inc., with Advice Letter No. 2608 Regarding Proposed Rate Changes.

Docket No. 98F-146T: Colorado Payphone Association, Complainant, v. US West Communications, Inc., Respondent.

Docket No. 02A-276T: In the Matter of the Application of Wiggins Telephone Association for Approval of its Disaggregation Plan

Docket No. 02A-444T: In the Matter of NECC's Application to Redefine the Service Area of Eastern Slope Rural Telephone Association, Inc., Great Plains Communications, Inc., Plains Coop Telephone Association, Inc., and Sunflower Telephone Co., Inc.

State of Connecticut, Department of Utility Control

Docket 91-12-19: DPUC Review of Intrastate Telecommunications Services Open to Competition (Comments).

Docket No. 94-07-02: Development of the Assumptions, Tests, Analysis, and Review to Govern Telecommunications Service Reclassifications in Light of the Eight Criteria Set Forth in Section 6 of Public Act 94-83 (Comments).

Delaware Public Service Commission

Docket No. 93-31T: In the Matter of the Application of The Diamond State Telephone Company for Establishment of Rules and Rates for the Provision of IntelliLinQ-PRI and IntelliLinQ-BRI.

Docket No. 41: In the Matter of the Development of Regulations for the Implementation of the Telecommunications Technology Investment Act.

Docket No. 96-324: In the Matter of the Application of Bell Atlantic-Delaware, Inc. for Approval of its Statement of Terms and Conditions Under Section 252(f) of the Telecommunications Act of 1996 (Phase II).

Docket No. 02-001: In the Matter of the Inquiry into Verizon Delaware Inc.'s Compliance with the Conditions Set Forth in 47 U.S.C. § 271(c).

Florida Public Service Commission

Docket No. 881257-TL: In Re: Proposed Tariff by Southern Bell to Introduce New Features for Digital ESSX Service, and to Provide Structural Changes for both ESSX Service and Digital ESSX Service.

Docket No. 880812-TP: In Re: Investigation into Equal Access Exchange Areas (EAEAs), Toll Monopoly Areas (TMAs), 1+ Restriction to the Local Exchange Companies (LECs), and Elimination of the Access Discount.

Docket No. 890183-TL: In Re: Generic Investigation into the Operations of Alternate Access Vendors.

Docket No. 870347-TI: In Re: Petition of AT&T Communications of the Southern States for Commission Forbearance from Earnings Regulation and Waiver of Rule 25-4.495(1) and 25-24.480 (1) (b), F.A.C., for a trial period.

Docket No. 900708-TL: In Re: Investigation of Methodology to Account for Access Charges in Local Exchange Company (LEC) Toll Pricing.

Docket No. 900633-TL: In Re: Development of Local Exchange Company Cost of Service Study Methodology.

Docket No. 910757-TP: In Re: Investigation into the Regulatory Safeguards Required to Prevent Cross-Subsidization by Telephone Companies.

Docket No. 920260-TL: In Re: Petition of Southern Bell Telephone and Telegraph Company for Rate Stabilization, Implementation Orders, and Other Relief.

Docket No. 950985-TP: In Re: Resolution of Petitions to establish 1995 rates, terms, and conditions for interconnection involving local exchange companies and alternative local exchange companies pursuant to Section 364.162, Florida Statutes.

Docket No. 960846-TP: In Re: Petition by MCI Telecommunications Corporation and MCI Metro Access Transmission Services, Inc. for Arbitration of Certain Terms and Conditions of a proposed agreement with BellSouth Telecommunications, Inc. Concerning Interconnection and Resale Under the Telecommunications Act of 1996 and Docket No. 960833-TP: In Re: Petition by AT&T Communications of the Southern States, Inc. for Arbitration of Certain Terms and Conditions of a Proposed Agreement with BellSouth Telecommunications, Inc. Concerning Interconnection and Resale Under the

Telecommunications Act of 1996 (consolidated).

Docket No. 960847-TP and 960980-TP: In Re: Petition by AT&T Communications of the Southern States, Inc., MCI Telecommunications Corporation, MCI Metro Access Transmission Service, Inc., for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE Florida Incorporated Inc. Concerning Interconnection and Resale Under the Telecommunications Act of 1996 (consolidated).

Docket No. 961230-TP: In Re: Petition by MCI Telecommunications Corporation for Arbitration with United Telephone Company of Florida and Central Telephone Company of Florida Concerning Interconnection Rates, Terms, and Conditions, Pursuant to the Federal Telecommunications Act of 1996.

Docket No. 960786-TL: In Re: Consideration of BellSouth Telecommunications, Inc.'s Entry Into InterLATA Services Pursuant to Section 271 of the Federal Telecommunications Act of 1996.

Docket Nos. 960833-TP, 960846-TP, 960757-TP, and 971140-TP: Investigation to develop permanent rates for certain unbundled network elements.

Docket No. 980696-TP: In Re: Determination of the cost of basic local telecommunications service, pursuant to Section 364.025 Florida Statutes.

Docket No. 990750-TP: Petition by ITC^DeltaCom Communications, Inc., d/b/a/ ITC^DeltaCom, for arbitration of certain unresolved issues in interconnection negotiations between ITC^DeltaCom and BellSouth Telecommunications, Inc.

Docket No. 991605-TP: Petition of BellSouth Telecommunications, Inc. for Arbitration of the Interconnection Agreement Between Time Warner Telecom of Florida, L.P., pursuant to Section 252 (b) of the Telecommunications Act of 1996.

Docket No. 030137-TP: In re: Petition for Arbitration of Unresolved Issues in Negotiation of Interconnection Agreement with BellSouth Telecommunications, Inc. by ITC^DeltaCom Communications, Inc. d/b/a ITC^DeltaCom.

Georgia Public Service Commission

Docket No. 3882-U: In Re: Investigation into Incentive Telephone Regulation in Georgia.

Docket No. 3883-U: In Re: Investigation into the Level and Structure of Intrastate Access Charges.

Docket No. 3921-U: In Re: Compliance and Implementation of Senate Bill 524.

Docket No. 3905-U: In Re: Southern Bell Rule Nisi.

Docket No. 3995-U: In Re: IntraLATA Toll Competition.

Docket No. 4018-U: In Re: Review of Open Network Architecture (ONA) (Comments).

Docket No. 5258-U: In Re: Petition of BellSouth Telecommunications for Consideration and Approval of its "Georgians FIRST" (Price Caps) Proposal.

Docket No. 5825-U: In Re: The Creation of a Universal Access Fund as Required by the Telecommunications Competition and Development Act of 1995.

Docket No. 6801-U: In Re: Interconnection Negotiations Between BellSouth Telecommunications, Inc. and

AT&T Communications of the Southern States, Inc., Pursuant to Sections 251-252 and 271 of the Telecommunications Act of 1996.

Docket No. 6865-U: In Re: Petition by MCI for Arbitration of Certain Terms and Conditions of Proposed Agreement with BellSouth Telecommunications, Inc. Concerning Interconnection and Resale Under the Telecommunications Act of 1996.

Docket No. 7253-U: In Re: BellSouth Telecommunications, Inc.'s Statement of Generally Available Terms and Conditions Under Section 252 (f) of the Telecommunications Act of 1996.

Docket No. 7061-U: In Re: Review of Cost Studies and Methodologies for Interconnection and Unbundling of BellSouth Telecommunications Services.

Docket No. 10692-U: In Re: Generic Proceeding to Establish Long-Term Pricing Policies for Unbundled Network Elements.

Docket No. 10854-U: In Re: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Docket No. 16583-U: In Re: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Public Utilities Commission of Hawaii

Docket No. 7702: In the Matter of Instituting a Proceeding on Communications, Including an Investigation of the Communications Infrastructure of the State of Hawaii.

Indiana Utility Regulatory Commission

Cause No. 42303: In the Matter of the Complaint of the Indiana Payphone Association for a Commission Determination of Just and Reasonable Rates and Charges and Compliance with Federal Regulations.

Cause No. 41052-ETC-43: In the Matter of the Designation of Eligible Telecommunications Carriers by the Indiana Utility Regulatory Commission Pursuant to the Telecommunications Act of 1996 and Related FCC Orders. In Particular, the Application of NPCR, Inc. d/b/a Nextel Partners to be Designated.

Iowa Utilities Board

Docket No. RPU-95-10.

Docket No. RPU-95-11.

State Corporation Commission of the State of Kansas

Docket No. 00-GIMT-1054-GIT: In the Matter of a General Investigation to Determine Whether Reciprocal Compensation Should Be Paid for Traffic to an Internet Service Provider.

Kentucky Public Service Commission

Administrative Case No. 10321: In the Matter of the Tariff Filing of South Central Bell Telephone Company to Establish and Offer Pulselink Service.

Administrative Case No. 323: In the Matter of An Inquiry into IntraLATA Toll Competition, An Appropriate Compensation Scheme for Completion of IntraLATA Calls by Interexchange Carriers, and WATS Jurisdictionality.

- Phase IA: Determination of whether intraLATA toll competition is in the public interest.
- Phase IB: Determination of a method of implementing intraLATA competition.
- Rehearing on issue of Imputation.

Administrative Case No. 90-256, Phase II: In the Matter of A Review of the Rates and Charges and Incentive Regulation Plan of South Central Bell Telephone Company.

Administrative Case No. 336: In the Matter of an Investigation into the Elimination of Switched Access Service Discounts and Adoption of Time of Day Switch Access Service Rates.

Administrative Case No. 91-250: In the Matter of South Central Bell Telephone Company's Proposed Area Calling Service Tariff.

Administrative Case No. 96-431: In Re: Petition by MCI for Arbitration of Certain Terms and Conditions of a Proposed Agreement with BellSouth Telecommunications, Inc. Concerning Interconnection and Resale Under the Telecommunications Act of 1996.

Administrative Case No. 96-478: In Re: The Petition by AT&T Communications of the South Central States, Inc. for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE South Incorporated Concerning Interconnection and Resale Under the Telecommunications Act of 1996.

Administrative Case No. 96-482: In Re: The Interconnection Agreement Negotiations Between AT&T Communications of the South Central States, Inc. and BellSouth Telecommunications, Inc., Pursuant to 47 U.S.C. § 252.

Administrative Case No. 360: In the Matter of: An Inquiry into Universal Service and Funding Issues.

Administrative Case No. 96-608: In the Matter of: Investigation Concerning the Provision of InterLATA Services by BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Administrative Case No. 382: An Inquiry into the Development of Deaveraged Rates for Unbundled Network Elements.

Louisiana Public Service Commission

Docket No. 17970: In Re: Investigation of the Revenue Requirements, Rate Structures, Charges, Services, Rate of Return, and Construction Program of AT&T Communications of the South Central States, Inc., in its Louisiana Operations.

Docket No. U-17949: In the Matter of an Investigation of the Revenue Requirements, Rate Structures, Charges, Services, Rate of Return, and Construction Program of South Central Bell Telephone Company, Its Louisiana Intrastate Operations, The Appropriate Level of Access Charges, and All Matters Relevant to the Rates and Service Rendered by the Company.

- Subdocket A (SCB Earnings Phase)

- Subdocket B (Generic Competition Phase)

Docket No. 18913-U: In Re: South Central Bell's Request for Approval of Tariff Revisions to Restructure ESSX and Digital ESSX Service.

Docket No. U-18851: In Re: Petition for Elimination of Disparity in Access Tariff Rates.

Docket No. U-22022: In Re: Review and Consideration of BellSouth Telecommunications, Inc.'s TSLRIC and LRIC Cost Studies Submitted Pursuant to Sections 901(C) and 1001(E) of the Regulations for Competition in the Local Telecommunications Market as Adopted by General Order Dated March 15, 1996 in Order to Determine the Cost of Interconnection Services and Unbundled Network Components to Establish Reasonable, Non-Discriminatory, Cost Based Tariffed Rates and Docket No. U-22093: In Re: Review and Consideration of BellSouth Telecommunications, Inc.'s Tariff Filing of April 1, 1996, Filed Pursuant to Section 901 and 1001 of the Regulations for Competition in the Local Telecommunications Market Which Tariff Introduces Interconnection and Unbundled Services and Establishes the Rates, Terms and Conditions for Such Service Offerings (consolidated).

Docket No. U-22145: In the Matter of Interconnection Agreement Negotiations Between AT&T Communications of the South Central States, Inc. and BellSouth Telecommunications, Inc., Pursuant to 47 U.S.C. § 252.

Docket No. U-22252: In Re: Consideration and Review of BST's Preapplication Compliance with Section 271 of the Telecommunications Act of 1996, including but not limited to the fourteen requirements set forth in Section 271 (c) (2) (b) in order to verify compliance with section 271 and provide a recommendation to the FCC regarding BST's application to provide interLATA services originating in-region.

Docket No. U-20883 Subdocket A: In Re: Submission of the Louisiana Public Service Commission's Forward Looking Cost Study to the FCC for Purposes of Calculating Federal Universal Service Support.

Docket No. U-24206: In Re: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Docket No. U-22632: In Re: BellSouth Telecommunications, Inc. Filing of New Cost Studies for Providing Access Line Service for Customer Provided Public Telephones and Smartline Service for Public Telephone Access.

Docket No. Docket No. U-24714-A: In Re: Final Deaveraging of BellSouth Telecommunications, Inc. UNE Rates Pursuant to FCC 96-45 Ninth Report and Order and Order on Eighteenth Order on Reconsideration Released November 2, 1999.

Public Service Commission of Maryland

Case 8584, Phase II: In the Matter of the Application of MFS Intelenet of Maryland, Inc. for Authority to Provide and Resell Local Exchange and Intrastate Telecommunications Services in Areas Served by C&P Telephone Company of Maryland.

Case 8715: In the Matter of the Inquiry into Alternative Forms of Regulating Telephone Companies.

Case 8731: In the Matter of the Petitions for Approval of Agreements and Arbitration of Unresolved Issues Arising Under Section 252 of the Telecommunications Act of 1996.

Massachusetts Department of Telecommunications and Energy

D.P.U./D.T.E. 97088/97-18 (Phase II): Investigation by the Department of Telecommunications & Energy on its own motion regarding (1) implementation of section 276 of the Telecommunications Act of 1996 relative to public interest payphones, (2) Entry and Exit Barriers for the Payphone Marketplace, (3) New England Telephone and Telegraph Compnay d/b/a NYNEX's Public Access Smart-Pay Service, and (4) the rate policy for operator service providers.

Minnesota Public Utilities Commission

PUC Docket No. PT6153/AM-02-686, OAH Docket No. 3-2500-14980-2: In the Matter of Petition of Midwest Wireless Communications, LLC for Designation as an Eligible Communications carrier under 47 U.S.C. § 214(e)(2).

PUC Docket No. PT-6182, 6181/M-02-1503: In the Matter of RCC Minnesota, Inc. and Wireless Alliance, LLC for Designation as an Eligible Telecommunications Carrier under 47 U.S.C. § 214(e)(2).

Mississippi Public Service Commission

Docket No. U-5086: In Re: MCI Telecommunications Corporation's Metered Use Service Option D (Prism I) and Option E (Prism II).

Docket No. U-5112: In Re: MCI Telecommunications Corporation's Metered Use Option H (800 Service).

Docket No. U-5318: In Re: Petition of MCI for Approval of MCI's Provision of Service to a Specific Commercial Banking Customers for Intrastate Interexchange Telecommunications Service.

Docket 89-UN-5453: In Re: Notice and Application of South Central Bell Telephone Company for Adoption and Implementation of a Rate Stabilization Plan for its Mississippi Operations.

Docket No. 90-UA-0280: In Re: Order of the Mississippi Public Service Commission Initiating Hearings Concerning (1) IntraLATA Competition in the Telecommunications Industry and (2) Payment of Compensation by Interexchange Carriers and Resellers to Local Exchange Companies in Addition to Access Charges.

Docket No. 92-UA-0227: In Re: Order Implementing IntraLATA Competition.

Docket No. 96-AD-0559: In Re: In the Matter of the Interconnection Agreement Negotiations Between AT&T Communications of the South Central States, Inc. and BellSouth Telecommunications, Inc., Pursuant to 47 U.S.C. § 252.

Docket No. 98-AD-035: Universal Service.

Docket No. 97-AD-544: In Re: Generic Proceeding to Establish Permanent Prices for BellSouth Interconnection and Unbundled Network Elements.

Public Service Commission of the State of Montana

Docket No. D2000.8.124: In the Matter of Touch America, Inc.'s Petition for Arbitration Pursuant to

Section 252(b) of the Telecommunications Act of 1996 of the Terms and Conditions of Interconnection with Qwest Corporation, f/k/a US West Communications, Inc.

Docket No. D2000.6.89: In the Matter of Qwest Corporation's Application to Establish Rates for Interconnection, Unbundled Network Elements, Transport and Termination, and Resale Services.

Nebraska Public Service Commission

Docket No. C-1385: In the Matter of a Petition for Arbitration of an Interconnection Agreement Between AT&T Communications of the Midwest, Inc., and US West Communications, Inc.

New York Public Service Commission

Case No. 28425: Proceeding on Motion of the Commission as to the Impact of the Modification of Final Judgement and the Federal Communications Commission's Docket 78-72 on the Provision of Toll Service in New York State.

North Carolina Public Utilities Commission

Docket No. P-100, Sub 72: In the Matter of the Petition of AT&T to Amend Commission Rules Governing Regulation of Interexchange Carriers (Comments).

Docket No. P-141, Sub 19: In the Matter of the Application of MCI Telecommunications Corporation to Provide InterLATA Facilities-Based Telecommunications Services (Comments).

Docket No. P-55, Sub 1013: In the Matter of Application of BellSouth Telecommunications, Inc. for, and Election of, Price Regulation.

Docket Nos. P-7, Sub 825 and P-10, Sub 479: In the Matter of Petition of Carolina Telephone and Telegraph and Central Telephone Company for Approval of a Price Regulation Plan Pursuant to G.S. 62-133.5.

Docket No. P-19, Sub 277: In the Matter of Application of GTE South Incorporated for and Election of, Price Regulation.

Docket No. P-141, Sub 29: In the Matter of: Petition of MCI Telecommunications Corporation for Arbitration of Interconnection with BellSouth Telecommunications, Inc., Petition of AT&T Communications of the Southern States, Inc. for Arbitration of Interconnection with BellSouth Telecommunications, Inc. (consolidated).

Docket No. P-141, Sub 30: In the Matter of: Petition of MCI Telecommunications Corporation for Arbitration of Interconnection with General Telephone Company of North Carolina, Inc., Petition of AT&T Communications of the Southern States, Inc. for Arbitration of Interconnection with General Telephone Company of North Carolina, Inc. (consolidated).

Docket No. P-100, Sub 133b: Re: In the Matter of Establishment of Universal Support Mechanisms Pursuant to Section 254 of the Telecommunications Act of 1996.

Docket No. P-100, Sub 133d: Re: Proceeding to Determine Permanent Pricing for Unbundled Network Elements.

Docket No. P-100, Sub 84b: Re: In the Matter of Petition of North Carolina Payphone Association for Review of Local Exchange Company Tariffs for Basic Payphone Services (Comments).

Docket No. P-561, Sub 10: BellSouth Telecommunications, Inc., Complainant, v. US LEC of North Carolina, LLC, and Metacomm, LLC, Respondents.

Docket No. P-472, Sub 15: In the Matter of the Interconnection Agreement Between BellSouth Telecommunications, Inc. and Time Warner Telecom of North Carolina, L.P. Pursuant to Section 252(b) of the Telecommunications Act of 1996.

Docket Nos. P-7, Sub 995; P-10, Sub 633: ALEC., Inc. v. Carolina Telephone and Telegraph Company and Central Telephone Company.

Docket No. P-500, Sub 18: In the Matter of: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Public Utilities Commission of Ohio

Case No. 93-487-TP-ALT: In the Matter of the Application of The Ohio Bell Telephone Company for Approval of an Alternative Form of Regulation.

Oklahoma Corporation Commission

Cause No. PUD 01448: In the Matter of the Application for an Order Limiting Collocation for Special Access to Virtual or Physical Collocation at the Option of the Local Exchange Carrier.

Cause No. PUD 200300195: Application of United States Cellular Corporation for Designation as an Eligible Telecommunications Carrier Pursuant to the Telecommunications Act of 1996.

Cause No. PUD 200300239: Application of Dobson Cellular Systems, Inc. for Designation as an Eligible Telecommunications Carrier Pursuant to the Telecommunications Act of 1996.

Public Utility Commission of Oregon

Docket No. UT 119: In the Matter of an Investigation into Tariffs Filed by US West Communications, Inc., United Telephone of the Northwest, Pacific Telecom, Inc., and GTE Northwest, Inc. in Accordance with ORS 759.185(4).

Docket No. ARB 3: In the Matter of the Petition of AT&T Communications of the Pacific Northwest, Inc., for Arbitration of Interconnection Rates, Terms, and Conditions Pursuant to 47 U.S.C. § 252(b) of the Telecommunications Act of 1996. Docket No. ARB 6: In the Matter of the Petition of MCIMetro Access Transmission Services, Inc. for Arbitration of Interconnection Rates, Terms, and Conditions Pursuant to 47 U.S.C. § 252(b) of the Telecommunications Act of 1996 (consolidated).

Docket No. ARB 9: In the Matter of the Petition of an Interconnection Agreement Between MCIMetro Access Transportation Services, Inc. and GTE Northwest Incorporated, Pursuant to 47 U.S.C. Section 252.

Docket No. UT-125: In the Matter of the Application of US West Communications, Inc. for an Increase in Revenues.

Pennsylvania Public Utilities Commission

Docket No. I-00910010: In Re: Generic Investigation into the Current Provision of InterLATA Toll Service.

Docket No. P-00930715: In Re: The Bell Telephone Company of Pennsylvania's Petition and Plan for Alternative Form of Regulation under Chapter 30.

Docket No. R-00943008: In Re: Pennsylvania Public Utility Commission v. Bell Atlantic-Pennsylvania, Inc. (Investigation of Proposed Promotional Offerings Tariff).

Docket No. M-00940587: In Re: Investigation pursuant to Section 3005 of the Public Utility Code, 66 Pa. C. S. §3005, and the Commission's Opinion and Order at Docket No. P-930715, to establish standards and safeguards for competitive services, with particular emphasis in the areas of cost allocations, cost studies, unbundling, and imputation, and to consider generic issues for future rulemaking.

South Carolina Public Service Commission

Docket No. 90-626-C: In Re: Generic Proceeding to Consider Intrastate Incentive Regulation.

Docket No. 90-321-C: In Re: Petition of Southern Bell Telephone and Telegraph Company for Revisions to its Access Service Tariff Nos. E2 and E16.

Docket No. 88-472-C: In Re: Petition of AT&T of the Southern States, Inc., Requesting the Commission to Initiate an Investigation Concerning the Level and Structure of Intrastate Carrier Common Line (CCL) Access Charges.

Docket No. 92-163-C: In Re: Position of Certain Participating South Carolina Local Exchange Companies for Approval of an Expanded Area Calling (EAC) Plan.

Docket No. 92-182-C: In Re: Application of MCI Telecommunications Corporation, AT&T Communications of the Southern States, Inc., and Sprint Communications Company, L.P., to Provide IntraLATA Telecommunications Services.

Docket No. 95-720-C: In Re: Application of BellSouth Telecommunications, Inc. d/b/a Southern Bell Telephone and Telegraph Company for Approval of an Alternative Regulation Plan.

Docket No. 96-358-C: In Re: Interconnection Agreement Negotiations Between AT&T Communications of the Southern States, Inc. and BellSouth Telecommunications, Inc., Pursuant to 47 U.S.C. § 252.

Docket No. 96-375-C: In Re: Interconnection Agreement Negotiations Between AT&T Communications of the Southern States, Inc. and GTE South Incorporated Pursuant to 47 U.S.C. § 252.

Docket No. 97-101-C: In Re: Entry of BellSouth Telecommunications, Inc. into the InterLATA Toll Market.

Docket No. 97-374-C: In Re: Proceeding to Review BellSouth Telecommunications, Inc. Cost for Unbundled Network Elements.

Docket No. 97-239-C: Intrastate Universal Service Fund.

Docket No. 97-124-C: BellSouth Telecommunications, Inc. Revisions to its General Subscriber Services Tariff and Access Service Tariff to Comply with the FCC's Implementation of the Pay Telephone

Reclassification and Compensation Provisions of the Telecommunications Act of 1996.

Docket No. 1999-268-C: Petition of Myrtle Beach Telephone, LLC, for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Horry Telephone Cooperative, Inc.

Docket No. 1999-259-C: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.

Docket No. 2001-65-C: Generic Proceeding to Establish Prices for BellSouth's Interconnection Services, Unbundled Network Elements and Other Related Elements and Services.

Tennessee Public Service Commission

Docket No. 90-05953: In Re: Earnings Investigation of South Central Bell Telephone Company.

Docket Nos. 89-11065, 89-11735, 89-12677: AT&T Communications of the South Central States, MCI Telecommunications Corporation, US Sprint Communications Company -- Application for Limited IntraLATA Telecommunications Certificate of Public Convenience and Necessity.

Docket No. 91-07501: South Central Bell Telephone Company's Application to Reflect Changes in its Switched Access Service Tariff to Limit Use of the 700 Access Code.

Tennessee Regulatory Authority

Docket No. 96-01152: In Re: Petition by AT&T Communications of the South Central States, Inc. for Arbitration under the Telecommunications Act of 1996 and Docket No. 96-01271: In Re: Petition by MCI Telecommunications Corporation for Arbitration of Certain Terms and Conditions of a Proposed Agreement with BellSouth Telecommunications, Inc. Concerning Interconnection and Resale Under the Telecommunications Act of 1996 (consolidated).

Docket No. 96-01262: In Re: Interconnection Agreement Negotiations Between AT&T of the South Central States, Inc. and BellSouth Telecommunications, Inc. Pursuant to 47 U.S.C. § 252.

Docket No. 97-01262: Proceeding to Establish Permanent Prices for Interconnection and Unbundled Network Elements.

Docket No. 97-00888: Universal Service Generic Contested Case.

Docket No. 99-00430: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. pursuant to the Telecommunications Act of 1996.

Docket No. 97-00409: In Re: All Telephone Companies Tariff Filings Regarding Reclassification of Pay Telephone Service as Required by Federal Communications Commission Docket No. 96-128.

Docket No. 03-00119: In Re: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc.

Public Utility Commission of Texas

Docket No. 12879: Application of Southwestern Bell Telephone Company for Expanded Interconnection

for Special Access Services and Switched Transport Services and Unbundling of Special Access DS1 and DS3 Services Pursuant to P. U. C. Subst. R. 23.26.

Docket No. 18082: Complaint of Time Warner Communications against Southwestern Bell Telephone Company.

Docket No. 21982: Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996.

Docket No. 23396: Joint Petition of CoServ, LLC d/b/a CoServ Communications and Multitechnology Services, LP d/b/a CoServ Broadband Services for Arbitration of Interconnection Rates, Terms, Conditions, and Related Arrangements with Southwestern Bell Telephone Company.

Docket No. 24015: Consolidated Complaints and Requests of Post-Interconnection Dispute Resolution Regarding Inter-Carrier Compensation for FX-Type Traffic Against Southwestern Bell Telephone Company.

PUC Docket No. 27709: Application of NPCR, Inc., dba Nextel Partners for Eligible Telecommunications Carrier Designation (ETC).

State of Vermont Public Service Board

Docket No. 6533: Application of Verizon New England Inc. d/b/a Verizon Vermont for a Favorable Recommendation to Offer InterLATA Services Under 47 U.S.C. 271.

Virginia State Corporation Commission

Case No. PUC920043: Application of Virginia Metrotel, Inc. for a Certificate of Public Convenience and Necessity to Provide InterLATA Interexchange Telecommunications Services.

Case No. PUC920029: Ex Parte: In the Matter of Evaluating the Experimental Plan for Alternative Regulation of Virginia Telephone Companies.

Case No. PUC930035: Application of Contel of Virginia, Inc. d/b/a GTE Virginia to implement community calling plans in various GTE Virginia exchanges within the Richmond and Lynchburg LATAs.

Case No. PUC930036: Ex Parte: In the Matter of Investigating Telephone Regulatory Methods Pursuant to Virginia Code § 56-235.5, & Etc.

Washington Utilities and Transportation Commission

Docket Nos. UT-941464, UT-941465, UT-950146, and UT-950265 (Consolidated): Washington Utilities and Transportation Commission, Complainant, vs. US West Communications, Inc., Respondent; TCG Seattle and Digital Direct of Seattle, Inc., Complainant, vs. US West Communications, Inc., Respondent; TCG Seattle, Complainant, vs. GTE Northwest Inc., Respondent; Electric Lightwave, Inc., vs. GTE Northwest, Inc., Respondent.

Docket No. UT-950200: In the Matter of the Request of US West Communications, Inc. for an Increase in its Rates and Charges.

Docket No. UT-000883: In the Matter of the Petition of U S West Communications, Inc. for Competitive

Classification.

Public Service Commission of West Virginia

Case No. 02-1453-T-PC: Highland Cellular, Inc. Petition for consent and approval to be designated as an eligible telecommunications carrier in the areas served by Citizens Telecommunications Company of West Virginia.

Public Service Commission of Wyoming

Docket No. 70000-TR-95-238: In the Matter of the General Rate/Price Case Application of US West Communications, Inc. (Phase I).

Docket No. PSC-96-32: In the Matter of Proposed Rule Regarding Total Service Long Run Incremental Cost (TSLRIC) Studies.

Docket No. 70000-TR-98-420: In the Matter of the Application of US West Communications, Inc. for authority to implement price ceilings in conjunction with its proposed Wyoming Price Regulation Plan for essential and noncompetitive telecommunications services (Phase III).

Docket No. 70000-TR-99-480: In the Matter of the Application of US West Communications, Inc. for authority to implement price ceilings in conjunction with its proposed Wyoming Price Regulation Plan for essential and noncompetitive telecommunications services (Phase IV).

Docket No. 70000-TR-00-556: In the Matter of the Filing by US West Communications, Inc. for Authority to File its TSLRIC 2000 Annual Input Filing and Docket No. 70000-TR-00-570: In the Matter of the Application of US West Communications, Inc. for Authority to File its 2000 Annual TSLRIC Study Filing.

Public Service Commission of the District of Columbia

Formal Case No. 814, Phase IV: In the Matter of the Investigation into the Impact of the AT&T Divestiture and Decisions of the Federal Communications Commission on Bell Atlantic - Washington, D. C. Inc.'s Jurisdictional Rates.

Puerto Rico Telecommunications Regulatory Board

Case No. 98-Q-0001: In Re: Payphone Tariffs.

Docket No.: JRT-2001-AR-0002: In the Matter of Interconnection Rates, Terms and Conditions between WorldNet Telecommunications, Inc. and Puerto Rico Telephone Company.

COMMENTS/DECLARATIONS - FEDERAL COMMUNICATIONS COMMISSION

CC Docket No. 92-91: In the Matter of Open Network Architecture Tariffs of Bell Operating Companies.

CC Docket No. 93-162: Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection for Special Access.

CC Docket No. 91-141: Common Carrier Bureau Inquiry into Local Exchange Company Term and Volume Discount Plans for Special Access.

CC Docket No. 94-97: Review of Virtual Expanded Interconnection Service Tariffs.

CC Docket No. 94-128: Open Network Architecture Tariffs of US West Communications, Inc.

CC Docket No. 94-97, Phase II: Investigation of Cost Issues, Virtual Expanded Interconnection Service Tariffs.

CC Docket No. 96-98: In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

CC Docket No. 97-231: Application by BellSouth to Provide In-Region InterLATA Services

CC Docket No. 98-121: Application by BellSouth to Provide In-Region InterLATA Services

CCB/CPD No. 99-27: In the Matter of Petition of North Carolina Payphone Association for Expedited Review of, and/or Declaratory Ruling Concerning, Local Exchange Company Tariffs for Basic Payphone Services.

CC Docket No. 96-128: In the Matter of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, CCB/CPD No. 99-31: Oklahoma Independent Telephone Companies Petition for Declaratory Ruling (consolidated).

CCB/CPD No. 00-1: In the Matter of the Wisconsin Public Service Commission Order Directing Filings.

CC Docket No. 99-68: In the Matter of Inter-Carrier Compensation for ISP-Bound Traffic

File No. EB-01-MD-020: In the Matter of Sprint Communications Company, L.P., Complainant v. Time Warner Telecom, Inc. Defendant.

Request by the American Public Communications Council that the Commission Issue a Notice of Proposed Rulemaking to Update the Dial-Around Compensation Rate

File Nos. EB-02-MD-018-030: In the Matter of Communications Vending Corp. of Arizona, et. al., Complainants, v. Citizens Communications Co. f/k/a Citizens Utilities Co. and Citizens Telecommunications Co., et. al., Defendants.

CC Docket No. 96-45: In the Matter of Federal-State Joint Board on Universal Service, Cellular South License, Inc., RCC Holdings, Inc., Petitions for designation as an Eligible Telecommunications Carrier in the State of Alabama.

CC Docket No. 96-45: In the Matter of Federal-State Joint Board on Universal Service, Declaration in Support of the Comments to the Federal-State Joint Board of the Rural Cellular Association and the Alliance of Rural CMRS Carriers.

REPRESENTATIVE TESTIMONY – STATE, FEDERAL, AND OVERSEAS COURTS

Court of Common Pleas, Philadelphia County, Pennsylvania

Shared Communications Services of 1800-80 JFK Boulevard, Inc., Plaintiff, v. Bell Atlantic Properties, Inc., Defendant.

Texas State Office of Administrative Hearings

Office of Customer Protection (OCP) Investigation of Axces, Inc. for Continuing Violations of PUC Substantive Rule §26.130, Selection of Telecommunications Utilities, Pursuant to Procedural Rules 22.246 Administrative Penalties.

Superior Court for the State of Alaska, First Judicial District

Richard R. Watson, David K. Brown and Ketchikan Internet Services, a partnership of Richard R. Watson and David K. Brown, plaintiffs, v. Karl Amylon and the City of Ketchikan, Defendants.

United States District Court for the District of South Carolina, Columbia Division

Brian Wesley Jeffcoat, on behalf of himself and others similarly situated, Plaintiffs, v. Time Warner Entertainment - Advance/Newhouse Partnership, Defendant.

United States District Court for the Northern District of Texas, Fort Worth Division

Multitechnology Services, L. P. d/b/a CoServ Broadband Services, Plaintiffs, v. Southwestern Bell Telephone Company, Defendant.

Multitechnology Services, L. P. d/b/a CoServ Broadband Services, Plaintiffs, v. Verizon Southwest f/k/a GTE Southwest Incorporated.

High Court of the Hong Kong Special Administrative Region, Court of First Instance

Commercial List No. 229 of 1999: Cable and Wireless HKT International Limited, Plaintiff v. New World Telephone Limited, Defendant.

REPRESENTATIVE TESTIMONY – PRIVATE COMMERCIAL ARBITRATION TRIBUNALS

American Arbitration Association

Southwestern Bell Telephone Company, Claimant vs. Time Warner Telecom, Respondent.

CPR Institute for Dispute Resolution

Supra Telecommunications and Information Systems, Inc., Claimant vs. BellSouth Telecommunications, Inc., Respondent.

A3. BASIC LOCAL EXCHANGE SERVICE

A3.4 Flat Rate Service

A3.4.1 General

A. Monthly exchange rates shown in A3.4.2 are applicable in each exchange for classes of basic local exchange service offered.

A3.4.2 Monthly Rates

A. The rates specified herein entitle subscribers to an unlimited number of messages to all exchange access lines bearing the designation of central offices within the serving exchange and extended area service additional exchanges or portions of exchanges as shown in A3.3.1 of this Tariff.

B. Residence and Business Exchange Access Line Rates

1. Flat Rate Service

a. Residence Service

(1) Rate Groups 1 - 6

	Group 1	2	3	4	5	6	USOC	
(a) Individual service	$7.57	$7.98	$8.39	$8.71	$9.12	$9.49	1FR++	(I)

(2) Rate Groups 7 - 12

	Group 7	8	9	10	11	12	USOC	
(a) Individual service	$9.85	$10.16	$10.42	$10.68	$10.83	$11.04	1FR++	(I)

b. Business Service

(1) Rate Groups 1-6

	Group 1	2	3	4	5	6	USOC	
(a) Individual line service	$20.55	$21.58	$22.72	$23.76	$24.75	$25.84	1FB	(I)
(b) Multi-line Exchange Access Line[1]	25.95	26.95	28.95	29.95	30.95	32.95	MFB	

(2) Rate Groups 7 - 12

	Group 7	8	9	10	11	12	USOC	
(a) Individual line service	$26.72	$27.61	$28.43	$29.05	$29.68	$30.20	1FB	(I)
(b) Multi-line Exchange Access Line[1]	33.95	34.95	36.95	36.95	36.95	36.95	MFB	

2. Residence and Business Basic Rates by Exchanges:

Exchange	Residence Individual	Business Individual	Business Multi-Line[1]	
Archer (Group 5)	$9.12	$24.75	$30.95	(I)
Baldwin (Group 9)	10.42	28.43	36.95	(I)
Belle Glade (Group 3)	8.39	22.72	28.95	(I)
Boca Raton (Group 10)	10.68	29.05	36.95	(I)
Boynton Beach (Group 10)	10.68	29.05	36.95	(I)

Note 1: The Multi-line Exchange Access Line rate applies per line to subscribers with more than one exchange access line. (C)

A3. BASIC LOCAL EXCHANGE SERVICE

A3.4 Flat Rate Service (Cont'd)

A3.4.2 Monthly Rates (Cont'd)

B. Residence and Business Exchange Access Line Rates (Cont'd)

2. Residence and Business Basic Rates by Exchanges: (Cont'd)

Exchange	Residence Individual	Business Individual	Business Multi-Line[1]	
Bronson (See A3.8.6)	$ -	$ -	$ -	
Brooksville (Group 5)	9.12	24.75	30.95	(I)
Bunnell (Group 3)	8.39	22.72	28.95	(I)
Cantonment (Group 6)	9.49	25.84	32.95	(I)
Cedar Keys (Group 1)	7.57	20.55	25.95	(I)
Century (Group 6)	9.49	25.84	32.95	(I)
Chiefland (Group 3)	8.39	22.72	28.95	(I)
Chipley (Group 3)	8.39	22.72	28.95	(I)
Cocoa (Group 7)				
Cocoa Main (West of Indian River)	9.85	26.72	33.95	(I)
Cocoa Merritt Island (East of Indian River)	9.85	26.72	33.95	(I)
Cocoa Beach (Group 7)	9.85	26.72	33.95	(I)
Coral Springs (Group 12)	11.04	30.20	36.95	(I)
Cross City (Group 2)	7.98	21.58	26.95	(I)
Daytona Beach (Group 6)	9.49	25.84	32.95	(I)
DeBary (Group 5)	9.12	24.75	30.95	(I)
Deerfield Beach (Group 12)	11.04	30.20	36.95	(I)
Deland (Group 5)	9.12	24.75	30.95	(I)
DeLeon Springs (Group 4)	8.71	23.76	29.95	(I)
Delray Beach (Group 8)	10.16	27.61	34.95	(I)

Note 1: The Multi-line Exchange Access Line rate applies per line to subscribers with more than one exchange access line. (C)

A3. BASIC LOCAL EXCHANGE SERVICE

A3.4 Flat Rate Service (Cont'd)

A3.4.2 Monthly Rates (Cont'd)

B. Residence and Business Exchange Access Line Rates (Cont'd)

2. Residence and Business Basic Rates by Exchanges: (Cont'd)

Exchange	Residence Individual	Business Individual	Business Multi-Line[1]	
Dunnellon (Group 6)	*$9.49*	*$25.84*	$32.95	(I)
East Orange (Group 11)	*10.83*	*29.68*	36.95	(I)
Eau Gallie Area (Group 7) (West of Indian River)	*9.85*	*26.72*	33.95	(I)
Eau Gallie Beach Area (Group 7) (East of Indian River)	*9.85*	*26.72*	33.95	(I)
Fernandina Beach (Group 3)	*8.39*	*22.72*	28.95	(I)
Flagler Beach (Group 3)	*8.39*	*22.72*	28.95	(I)
Ft. Lauderdale (Group 12)	*11.04*	*30.20*	36.95	(I)
Ft. Pierce (Group 5)	*9.12*	*24.75*	30.95	(I)
Gainesville (Group 6)	*9.49*	*25.84*	32.95	(I)
Geneva (Group 7)	*9.85*	*26.72*	33.95	(I)
Graceville (Group 3)	*8.39*	*22.72*	28.95	(I)
Green Cove Springs (See A3.8.11)	-	-	-	
Gulf Breeze (Group 6)	*9.49*	*25.84*	32.95	(I)
Havana (Group 6)	*9.49*	*25.84*	32.95	(I)
Hawthorne (Group 5)	*9.12*	*24.75*	30.95	(I)
Hobe Sound (Group 6)	*9.49*	*25.84*	32.95	(I)
Holley Navarre (Group 6)	*9.49*	*25.84*	32.95	(I)

Note 1: The Multi-line Exchange Access Line rate applies per line to subscribers with more than one exchange access line. (C)

A3. BASIC LOCAL EXCHANGE SERVICE

A3.4 Flat Rate Service (Cont'd)

A3.4.2 Monthly Rates (Cont'd)

B. Residence and Business Exchange Access Line Rates (Cont'd)

2. Residence and Business Basic Rates by Exchanges: (Cont'd)

Exchange	Residence Individual	Business Individual	Business Multi-Line[1]	
Hollywood (Group 12)	*$11.04*	*$30.20*	$36.95	(I)
Homestead (Group 12)	*11.04*	*30.20*	36.95	(I)
Jacksonville (Group 10)	*10.68*	*29.05*	36.95	(I)
Jacksonville Beach (Group 9)	*10.42*	*28.43*	36.95	(I)
Jay (See A3.8.15)	-	-	-	
Jensen Beach (Group 5)	*9.12*	*24.75*	30.95	(I)
Julington (Group 9)	*10.42*	*28.43*	36.95	(I)
Jupiter (Group 9)	*10.42*	*28.43*	36.95	(I)
Keys (See A3.8.10)	-	-	-	
Keystone Heights (Group 3)	*8.39*	*22.72*	28.95	(I)
Lake City (Group 4)	*8.71*	*23.76*	29.95	(I)
Lynn Haven (Group 5)	*9.12*	*24.75*	30.95	(I)
Maxville (Group 9)	*10.42*	*28.43*	36.95	(I)
Melbourne (Group 7)	*9.85*	*26.72*	33.95	(I)
Miami (Group 12)	*11.04*	*30.20*	36.95	(I)
Micanopy (Group 5)	*9.12*	*24.75*	30.95	(I)
Middleburg (Group 9)	*10.42*	*28.43*	36.95	(I)
Milton (Group 6)	*9.49*	*25.84*	32.95	(I)
Munson (Group 6)	*9.49*	*25.84*	32.95	(I)
Newberry (Group 5)	*9.12*	*24.75*	30.95	(I)

Note 1: The Multi-line Exchange Access Line rate applies per line to subscribers with more than one exchange access line. (C)

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A3. BASIC LOCAL EXCHANGE SERVICE

A3.4 Flat Rate Service (Cont'd)

A3.4.2 Monthly Rates (Cont'd)

B. Residence and Business Exchange Access Line Rates (Cont'd)

2. Residence and Business Basic Rates by Exchanges: (Cont'd)

Exchange	Residence Individual	Business Individual	Business Multi-Line[1]	
New Smyrna Beach (Group 4)	$8.71	$23.76	$29.95	(I)
North Dade (Group 12)	11.04	30.20	36.95	(I)
Oak Hill (Group 4)	8.71	23.76	29.95	(I)
Old Town (Group 2)	7.98	21.58	26.95	(I)
Orange Park (See A3.8.18)	-	-	-	
Orlando (Group 11)	10.83	29.68	36.95	(I)
Oviedo (Group 11)	10.83	29.68	36.95	(I)
Pace (Group 6)	9.49	25.84	32.95	(I)
Palmetto (Group 3)	8.39	22.72	28.95	(I)
Palatka (Group 4)	8.71	23.76	29.95	(I)
Palm Coast (Group 3)	8.39	23.76	28.95	(I)
Panama City (Group 5)	9.12	24.75	30.95	(I)
Panama City Beach (Group 5)	9.12	24.75	30.95	(I)
Pensacola (Group 6)	9.49	25.84	32.95	(I)
Perrine (Group 12)	11.04	30.20	36.95	(I)
Pierson (Group 4)	8.71	23.76	29.95	(I)
Pomona Park (Group 4)	8.71	23.76	29.95	(I)
Pompano Beach (Group 12)	11.04	30.20	36.95	(I)
Ponte Vedra Beach (Group 9)	10.42	28.43	36.95	(I)
Port St. Lucie (Group 6)	9.49	25.84	32.95	(I)

Note 1: The Multi-line Exchange Access Line rate applies per line to subscribers with more than one exchange access line. (C)

A3. BASIC LOCAL EXCHANGE SERVICE

A3.4 Flat Rate Service (Cont'd)

A3.4.2 Monthly Rates (Cont'd)

B. Residence and Business Exchange Access Line Rates (Cont'd)

2. Residence and Business Basic Rates by Exchanges: (Cont'd)

Exchange	Residence Individual	Business Individual	Business Multi-Line[1]	
St. Augustine (Group 4)	*$8.71*	*$23.76*	$29.95	(I)
St. Johns (See A3.8.33)	-	-	-	
Sanford (Group 8)	*10.16*	*27.61*	34.95	(I)
Sebastian (Group 6)	*9.49*	*25.84*	32.95	(I)
Stuart (Group 6)	*9.49*	*25.84*	32.95	(I)
Sunny Hills (Group 3)	*8.39*	*22.72*	28.95	(I)
Titusville (Group 5)	*9.12*	*24.75*	30.95	(I)
Trenton (See A3.8.24)	-	-	-	
Vernon (Group 3)	*8.39*	*22.72*	28.95	(I)
Vero Beach (Group 5)	*9.12*	*24.75*	30.95	(I)
Weekiwachee Springs (Group 5)	*9.12*	*24.75*	30.95	(I)
Welaka (Group 4)	*8.71*	*23.76*	29.95	(I)
West Palm Beach (Group 9)	*10.42*	*28.43*	36.95	(I)
Yankeetown (Group 4)	*8.71*	*23.76*	29.95	(I)
Youngstown-Fountain (Group 5)	*9.12*	*24.75*	30.95	(I)
Yulee (Group 8)	*10.16*	*27.61*	34.95	(I)

Note 1: The Multi-line Exchange Access Line rate applies per line to subscribers with more than one exchange access line. (C)

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BellSouth UNE Zones

Wire Center	Zone
BCRTFLBT	1
BCRTFLMA	1
CCBHFLMA	1
DLBHFLMA	1
DYBHFLFN	1
FTLDFLCR	1
FTLDFLCY	1
FTLDFLMR	1
FTLDFLOA	1
FTLDFLSG	1
FTLDFLSU	1
HLWDFLHA	1
HLWDFLMA	1
JCVLFLCL	1
JCVLFLIA	1
JCVLFLJT	1
JCVLFLSJ	1
JCVLFLSM	1
KYWSFLMA	1
MIAMFLAE	1
MIAMFLAL	1
MIAMFLAP	1
MIAMFLBA	1
MIAMFLBC	1
MIAMFLBR	1
MIAMFLDB	1
MIAMFLFL	1
MIAMFLGR	1
MIAMFLIC	1
MIAMFLKE	1
MIAMFLME	1
MIAMFLNM	1
MIAMFLPB	1
MIAMFLPL	1
MIAMFLSO	1
MIAMFLWD	1
MIAMFLWM	1
MNDRFLAV	1
NDADFLAC	1
NDADFLOL	1
NKLRFLMA	1
ORLDFLMA	1
PMBHFLTA	1
WPBHFLAN	1
BCRTFLSA	2
BKVLFLJF	2
BLGLFLMA	2
BYBHFLMA	2
CNTMFLLE	2
COCOFLMA	2
COCOFLME	2
DBRYFLDL	2
DBRYFLMA	2
DELDFLMA	2
DLBHFLKP	2

BellSouth UNE Zones

Wire Center	Zone
DLSPFLMA	2
DRBHFLMA	2
DYBHFLMA	2
DYBHFLOB	2
DYBHFLOS	2
DYBHFLPO	2
EGLLFLBG	2
EGLLFLIH	2
FLBHFLMA	2
FRBHFLFP	2
FTLDFLJA	2
FTLDFLPL	2
FTLDFLWN	2
FTPRFLMA	2
GLBRFLMC	2
GSVLFLMA	2
GSVLFLNW	2
HBSDFLMA	2
HLNVFLMA	2
HLWDFLPE	2
HLWDFLWH	2
HMSTFLHM	2
HMSTFLNA	2
HTISFLMA	2
ISLMFLMA	2
JCBHFLAB	2
JCBHFLMA	2
JCBHFLSP	2
JCVLFLAR	2
JCVLFLBW	2
JCVLFLFC	2
JCVLFLLF	2
JCVLFLNO	2
JCVLFLOW	2
JCVLFLRV	2
JCVLFLWC	2
JPTRFLMA	2
KYLRFLLS	2
KYLRFLMA	2
LKMRFLMA	2
LYHNFLOH	2
MIAMFLCA	2
MIAMFLHL	2
MIAMFLNS	2
MIAMFLOL	2
MIAMFLRR	2
MIAMFLSH	2
MICCFLBB	2
MLBRFLMA	2
MNDRFLLO	2
MNDRFLLW	2
MRTHFLVE	2
NDADFLBR	2
NDADFLGG	2
NSBHFLMA	2

BellSouth UNE Zones

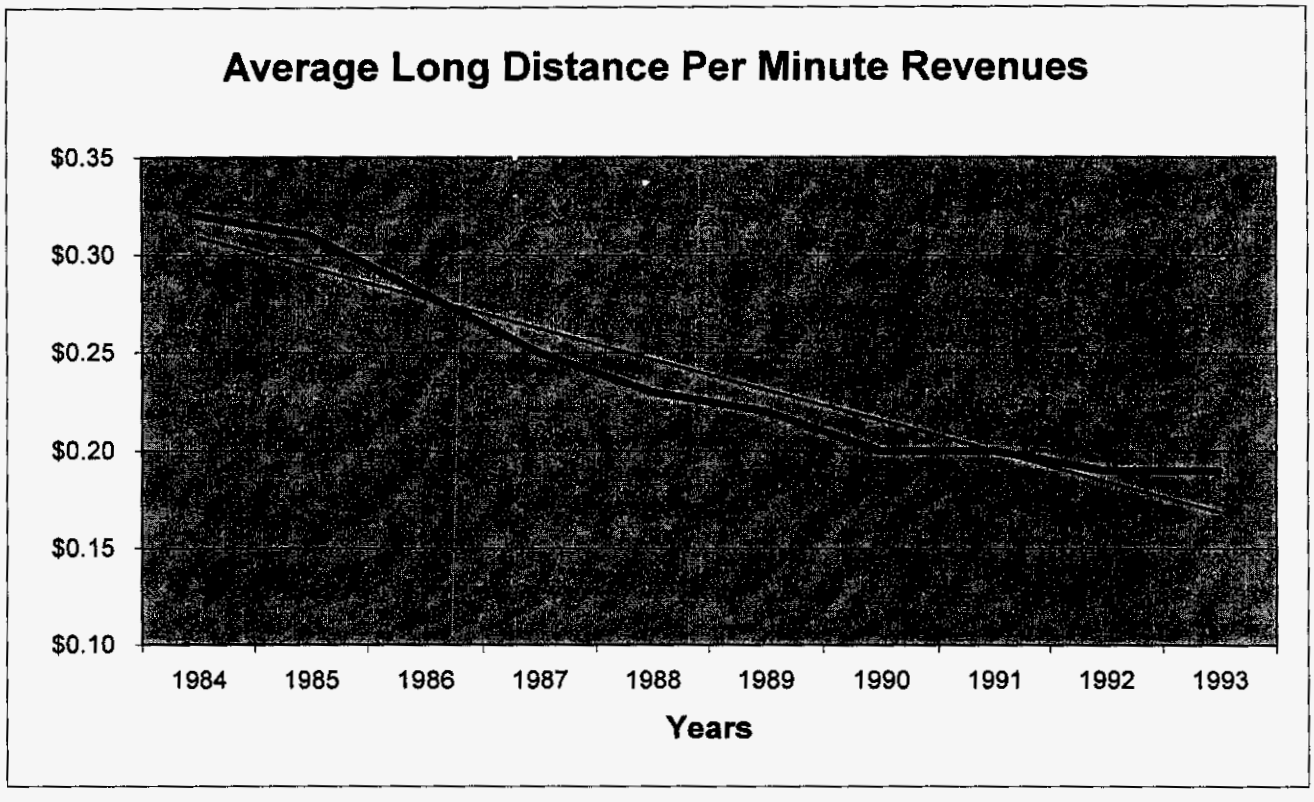
Wire Center	Zone
ORLDFLAP	2
ORLDFLCL	2
ORLDFLPC	2
ORLDFLPH	2
ORLDFLSA	2
ORPKFLMA	2
ORPKFLRW	2
OVIDFLCA	2
PACEFLPV	2
PAHKFLMA	2
PCBHFLNT	2
PLCSFLMA	2
PMBHFLCS	2
PMBHFLFE	2
PMBHFLMA	2
PMBHFLNP	2
PNCYFLCA	2
PNCYFLMA	2
PNSCFLBL	2
PNSCFLFP	2
PNSCFLHC	2
PNSCFLPB	2
PNSCFLWA	2
PNVDFLMA	2
PRRNFLMA	2
PTSLFLMA	2
PTSLFLSO	2
SBSTFLMA	2
SNFRFLMA	2
STAGFLBS	2
STAGFLMA	2
STAGFLSH	2
STRTFLMA	2
TTVLFLMA	2
VRBHFLBE	2
VRBHFLMA	2
WPBHFLGA	2
WPBHFLGR	2
WPBHFLHH	2
WPBHFLLE	2
WPBHFLRB	2
WPBHFLRP	2
WWSPFLHI	2
WWSPFLSH	2
XXXXXXXX	2
ARCHFLMA	3
BGPIFLMA	3
BLDWFLMA	3
BNNLFLMA	3
BRSNFLMA	3
CDKYFLMA	3
CFLDFLMA	3
CHPLFLJA	3
CSCYFLBA	3
DNLNFLWM	3

BellSouth UNE Zones

Wire Center	Zone
EORNFLMA	3
FTGRFLMA	3
GCSPFLCN	3
GCVLFLMA	3
GENVFLMA	3
HAVNFLMA	3
HMSTFLEA	3
HWTHFLMA	3
JAY FLMA	3
KYHGFLMA	3
LKCYFLMA	3
MCNPFLMA	3
MDBGFLPM	3
MLTNFLRA	3
MNSNFLMA	3
MXVLFLMA	3
NWBYFLMA	3
OKHLFLMA	3
OLTWFLLN	3
PLTKFLMA	3
PMPKFLMA	3
PRSNFLFD	3
SBSTFLFE	3
SGKYFLMA	3
STAGFLWG	3
SYHSFLCC	3
TRENFLMA	3
VERNFLMA	3
WELKFLMA	3
YNFNFLMA	3
YNTWFLMA	3
YULEFLMA	3
CCBHFLAF	0
COCYFL13	0
FMTNALMT	0

Year	Average Revenue Per Minute for Interstate and International Calls	
1984	$ 0.32	
1985	$ 0.31	
1986	$ 0.28	
1987	$ 0.25	
1988	$ 0.23	
1989	$ 0.22	
1990	$ 0.20	
1991	$ 0.20	
1992	$ 0.19	
1993	$ 0.19	

Average Yearly Decrease	-5.08%



Answers



CEO Duane Ackerman responds to shareholders' questions about four important issues that impact BellSouth's business.



In December 2002, BellSouth received Federal Communications Commission approval to provide long distance services in all of the markets where we operate. Adding this capability to our other customer offerings will enhance our ability to meet the competition head-on in 2003 with new products and packages, superior service and targeted customer reacquisition initiatives.

Along with BellSouth's reputation for reliability and service, the centerpiece of our customer reacquisition initiatives is the flexibility and value of our new BellSouth Answers℠ packages. Answers combines on a single bill any or all of the data, voice and Internet services residential customers want – long distance and local, wireline and wireless. Just five months after the product's introduction in late July 2002, we had nearly 1.2 million customers using BellSouth Answers.

BellSouth continues to lead the industry in independent surveys of customer satisfaction and service excellence. We have highlighted these recognitions for 2002 throughout this annual report.

These awards mean a lot more than a boost to BellSouth's marketing efforts. Virtually every consumer research organization, from J.D. Power and Associates to the National Quality Research Center, correlates customer satisfaction with customer loyalty. In turn, satisfied customers translate into higher revenues, lower marketing costs and reduced expenses associated with customer "churn."

Our customer reacquisition initiatives are based on *listening* to what people and businesses want, and *answering* with the products, services and solutions they need. It's working. We slashed competitive line loss by 24 percent in small business in 2002, compared to the previous year, and by 23 percent in large business. At the same time, in terms of access lines, we increased reacquisition in small business by 22 percent. In large business, the reacquisition rate last year was six times higher than in 2001.

We also are continuing to adjust BellSouth's cost structure in response to generally weak demand in the economy, as well as to competitive loss. In 2002, we took the difficult but necessary measures to reduce our workforce by nearly 11,000.



Docket No. 030851-TP
Exhibit ____, DJW-5
Summary of BACE Model Results

SCENARIO	Changes in Inputs	NPV Mass Market	% Change from BellSouth Default
1	BellSouth Default	$322,546,087.00	0%
2	7% Yearly Price Decreases	$9,677,550.00	-97%
3	Billingsley Cost of Capital (20.87% COE, 70% E/D, and 15.36% WACC)	$208,461,570.00	-35%
4	CLEC Market Share Reflecting Impact of BellSouth Win-Back Program (p=0.25, terminal % =1/2 Projected Amount)	$100,272,790.37	-69%

I received the Ph.D. degree from the College of Communications of the University of Texas at Austin, in December, 1982. My doctoral program concentrated on the economics and regulation of the telecommunications and broadcast industries. The title of my dissertation was "Competition, Concentration, and Diversity of Expression in the Cable Communications Industry." It was an analysis of the trend toward increasing vertical and horizontal integration in the cable communications industry, and the implications of that trend for competition within that industry.

Following completion of my doctoral program, I was appointed Assistant Professor in the Department of Telecommunications at the University of Kentucky. In that position, I taught both graduate and undergraduate courses in telecommunications and broadcast regulation, in statistics, and in television programming, including graduate seminars in the regulation of telecommunications utilities and the history and implications of the MFJ. I also was responsible for the development of a new curriculum for the College of Communications in the regulation of telecommunications utilities.

I assumed the position of Staff Administrator with MCI Telecommunications in September of 1984. From April of 1985 until January of 1991, I was Manager, Texas Regulatory Affairs for MCI. From January of 1991 until September of 2002, I was Executive Staff Member, Regulatory and Economic Analysis in MCI's corporate regulatory organization. In that current position, I was responsible for the analysis of regulatory proceedings at the FCC and in various states across the nation, and for assisting in the development of MCI policy in regulatory matters.

I currently am self-employed as a consulting economist.

I have previously filed testimony in the following proceedings:

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 112 Con
COMPANY/ MCI / BRYANT
WITNESS. MTB-1, 3, 5 + 10 → 14
DATE: 02/24-27/04

Docket

Public Utility Commission of Texas

5610 Application of GTE Southwest, Inc. for a Rate Increase

7160 Application of Southwestern Bell Telephone Company for Authority to Implement Rates and Regulations for Intrastate Interim 800 Service.

7330 Inquiry into WATS Competition on Multi-Jurisdictional WATS Access Lines.

7790 Petition of the General Counsel for an Evidentiary Proceeding to Determine Market Dominance Among Interexchange Telecommunications Carriers.

8585 Inquiry of the General Counsel into the Reasonableness of the Rates and Services of Southwestern Bell Telephone Company.

8790 Application of Southwestern Bell Telephone Company to Offer an Experimental Optional Calling Plan (Discounted IntraLATA Rates).

9301 Southwestern Bell Telephone Company Statement of Intent and Application under Subst. R. 23.27 Requesting the Service Market for Central Office Local Area Network (C.O. LAN) Service to be Declared Subject to Significant Competition and to use Customer Specific Pricing.

10131 Petition of Southwestern Bell Telephone Company for Approval of Maximizer 800 Common Line 800 Service.

10817 Treatment of franchise tax reduction under SWB incentive regulation program.

18515 Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan.

In addition, I testified in Travis County District Court, Cause No. 458,204, *US Sprint, et. al., v. P.U.C. of Texas, et. al.*

Oklahoma Corporation Commission

PUD 000837 In the Matter of the Application of Southwestern Bell Telephone Company for Approval of Telestate/21, A Proposal for Rate Stability, Network Modernization, and Price Regulation.

California Public Utility Commission

I.87-11-033 In the Matter of Alternative Regulatory Frameworks for Local Exchange Carriers.

01-02-035 Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Loops in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Washington Utilities and Transportation Commission

U-89-3245-P Evaluation of US West Incentive Regulation Program.

UT-911488 UT-911490 UT-920252	WUTC v. US West Communications Centrex Plus Costing and Pricing

South Carolina Public Service Commission

93-036-C	Generic Proceeding to Review Intrastate Open Network Architecture (ONA) Services

Illinois Commerce Commission

94-0048 94-0049 94-0096 94-0117 94-0146	Consolidated proceedings generally dealing with conditions necessary for the establishment of local exchange competition

Pennsylvania Public Utility Commission

I-940035	Formal Investigation to Examine and Establish Updated Universal Service Principles and Policies for Telecommunications Services in the Commonwealth
M-00001353	Re: Structural Separation of Bell Atlantic-Pennsylvania, Inc.'s Retail and Wholesale Operations

New Mexico Public Regulation Commission

Utility Case 3495	In the Matter of the Consideration of Costing and Pricing Rules for OSS, Collocation, Shared Transport, Non-Recurring Charges, Spot Frames, Combination of Network Elements, and Switching

Federal Communications Commission

CC 96-98	Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Triennial Review, 1999). Declaration regarding economies of scale in the provision of local exchange services.
CC 96-98	Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (Second Triennial Review, 2002). Declaration regarding economies of scale in the provision of local exchange services.
CC 99-273	In the Matter of Provision of Directory Listing Information Under the Communications Act of 1934, as amended. Declaration regarding economic feasibility of implenting 411 presubscription.

Japanese Ministry of Posts and Telecommunications, Tokyo, Japan

Public Hearing on Interconnection Rates and Rate Structure (11/99)

Selected Papers and Presentations at Professional Meetings and Conferences

9/92 Paper, "Unbundling of Local Exchange Network Functions and Related Costing Issues." Eighth NARUC Biennial Regulatory Information Conference, Columbus, OH

6/93 Panelist, NASUCA Mid-Year Meeting, St. Louis, MO

6/93 Panelist, 16th Annual NARUC Regulatory Attorneys Conference, Whitefish, MT

12/93 Panelist, NTIA Hearings on Universal Service, Albuquerque, NM

8/94 Panelist, TSTCI Futures Conference, Austin, TX

12/95 Panelist, Telecommunications Policy Research Conference, Williamsburg, VA

11/96 Panelist, NARUC Annual Convention, San Francisco, CA

1/97 Panelist, Federal-State Joint Board workshops on Universal Service, Washington, DC

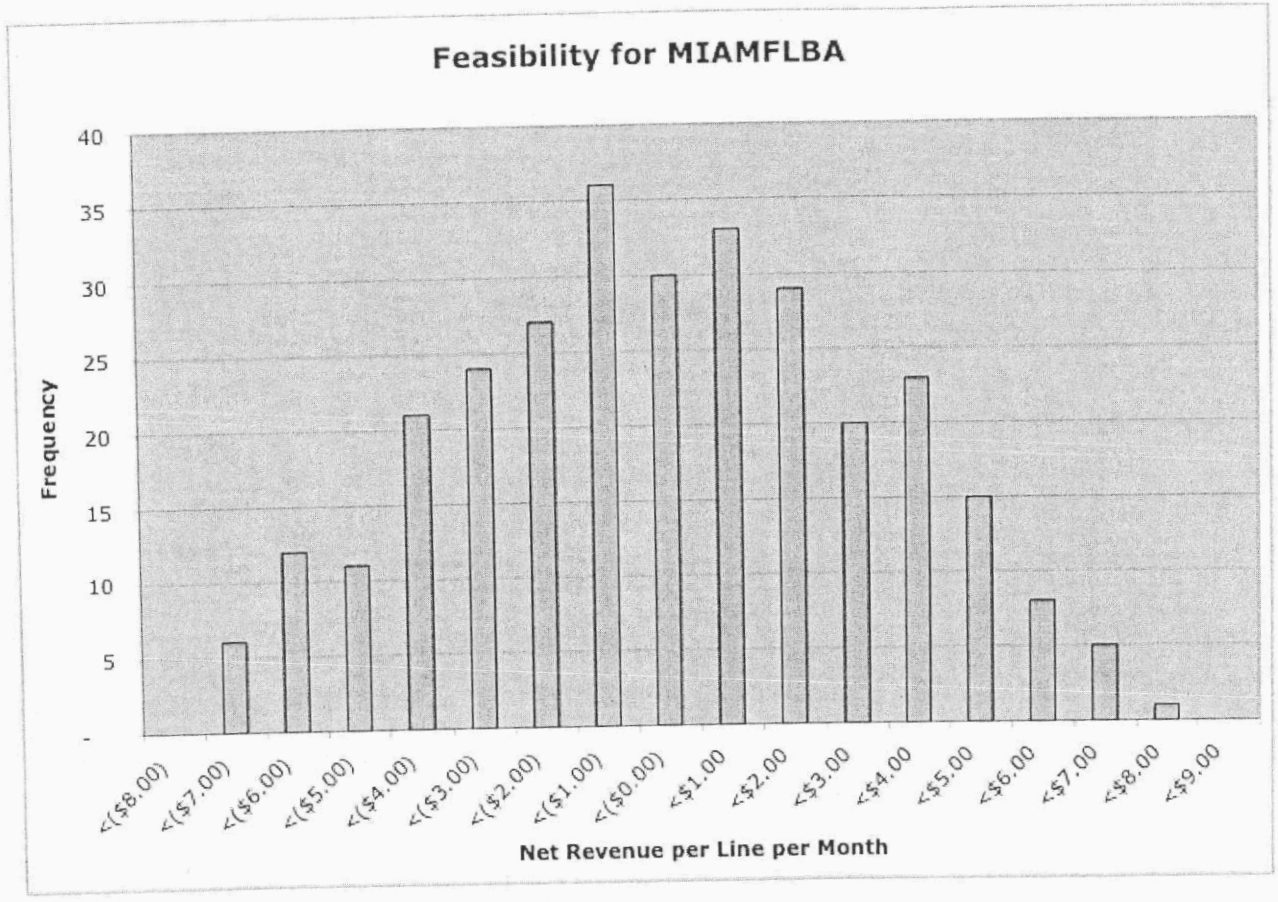
3/97 Panelist, New Mexico State University Center for Public Utilities Annual Conference, Santa Fe, NM

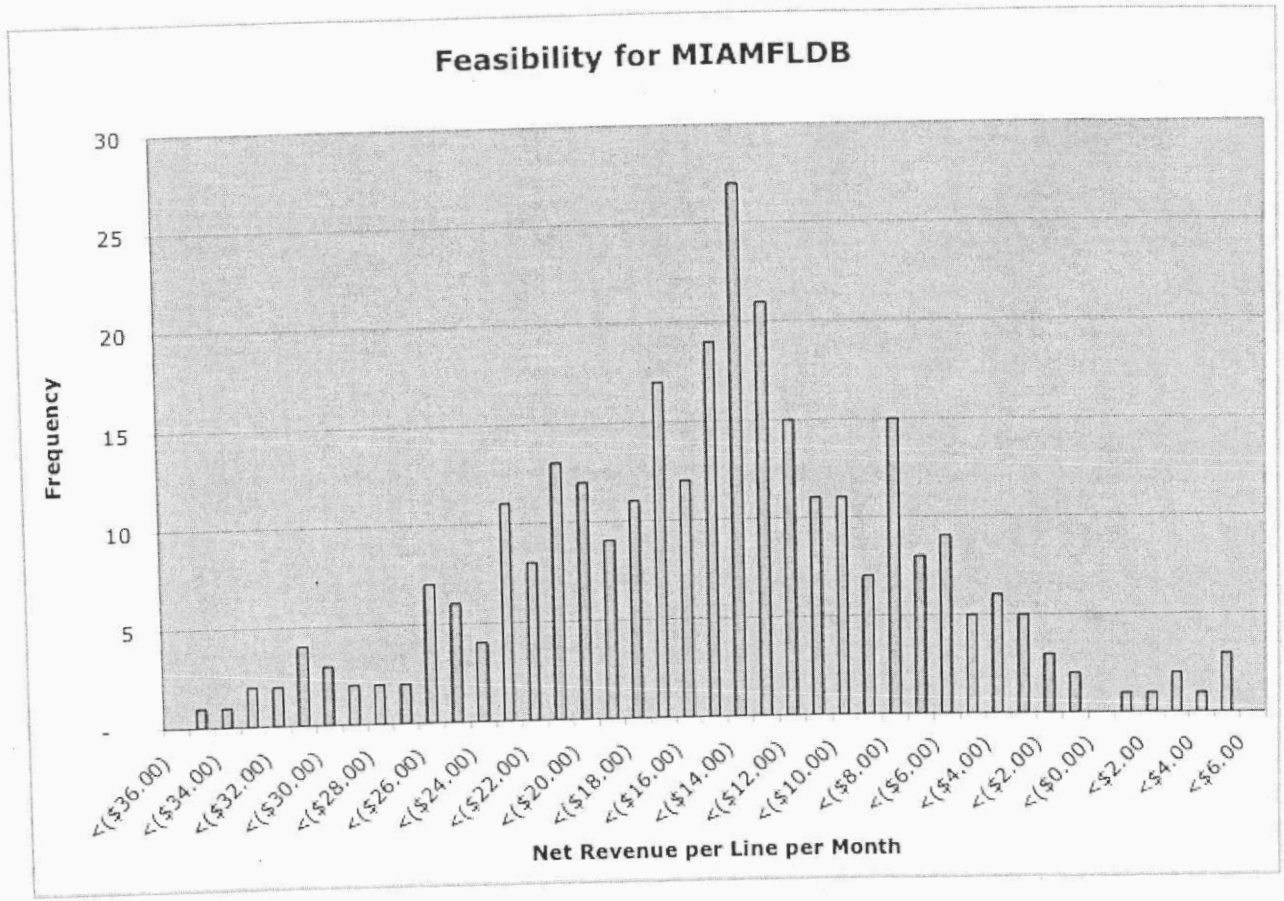
6/97 Panelist, University of Florida workshops on Universal Service, Gainesville, FL

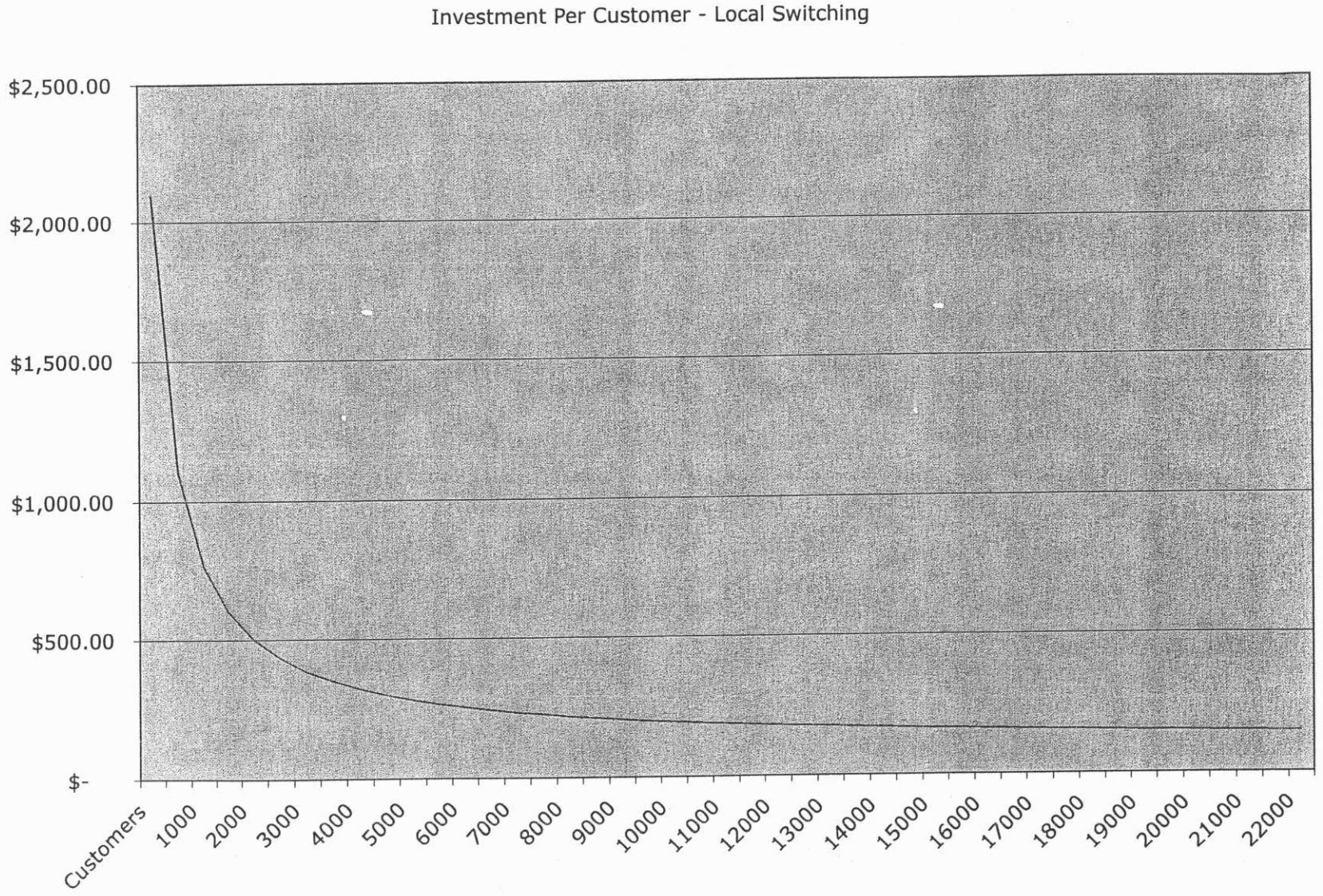
6/97 Panelist, NARUC Summer Meetings, San Francisco, CA

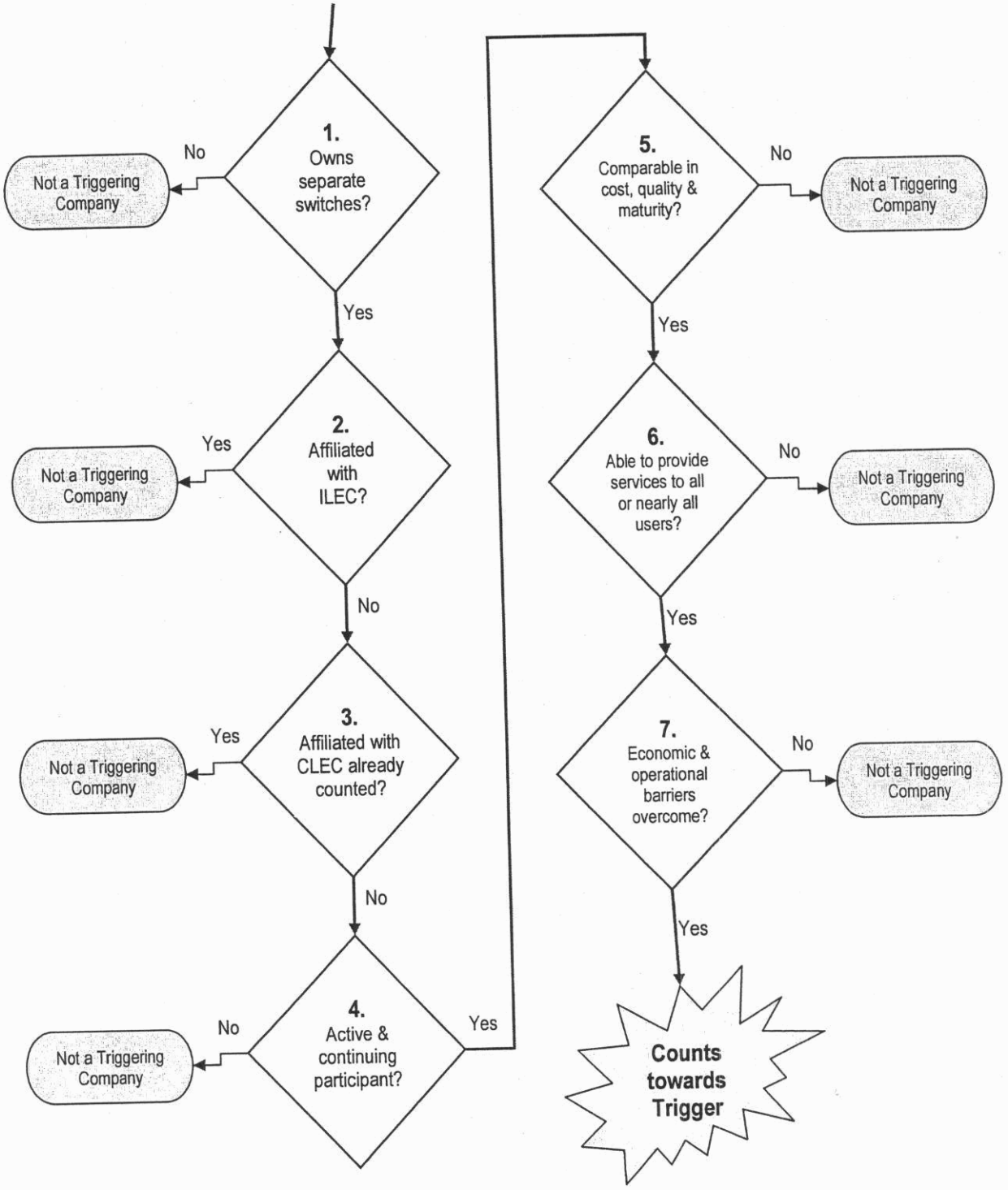
11/97 Panelist, NARUC Annual Convention, Boston, MA

11/00 Panelist, NARUC Annual Convention, San Diego, CA


Feasibility for MIAMFLBA
Frequency
40
35
30
25
20
15
10
5
-
<($8.00)
<($7.00)
<($6.00)
<($5.00)
<($4.00)
<($3.00)
<($2.00)
<($1.00)
<($0.00)
<$1.00
<$2.00
<$3.00
<$4.00
<$5.00
<$6.00
<$7.00
<$8.00
<$9.00
Net Revenue per Line per Month


Feasibility for MIAMFLDB
Frequency
30
25
20
15
10
5
-
<($36.00)
<($34.00)
<($32.00)
<($30.00)
<($28.00)
<($26.00)
<($24.00)
<($22.00)
<($20.00)
<($18.00)
<($16.00)
<($14.00)
<($12.00)
<($10.00)
<($8.00)
<($6.00)
<($4.00)
<($2.00)
<($0.00)
<$2.00
<$4.00
<$6.00
Net Revenue per Line per Month


Investment Per Customer - Local Switching
$2,500.00
$2,000.00
$1,500.00
$1,000.00
$500.00
$-
Customers
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000
14000
15000
16000
17000
18000
19000
20000
21000
22000


1. Owns separate switches?
No
Not a Triggering Company
Yes
2. Affiliated with ILEC?
Yes
Not a Triggering Company
No
3. Affiliated with CLEC already counted?
Yes
Not a Triggering Company
No
4. Active & continuing participant?
No
Not a Triggering Company
Yes
5. Comparable in cost, quality & maturity?
No
Not a Triggering Company
Yes
6. Able to provide services to all or nearly all users?
No
Not a Triggering Company
Yes
7. Economic & operational barriers overcome?
No
Not a Triggering Company
Yes
Counts towards Trigger

Model Assumptions	Number of Wire Centers with Negative Net Present Value	% of Wire Centers with Negative Net Present Value
BS Default - No Exclusions	42	21.4%
CLEC Capital Cost @ 15%	45	23.0%
CLEC Capital Cost @ 17%	46	23.5%
Monthly Churn (res) at 5%, Capital Cost at 15%	47	24.0%
Monthly Churn (res) at 6.5%, Capital Cost at 15%	53	27.0%
Monthly Churn (res) at 8.33%., Capital Cost @ 15%	56	28.6%
Capital Structure 50/50	45	23.0%
Mkt Share all MM segments 10%, slow penetration	59	30.1%
Mkt Share all MM segments 5%, slow penetration	73	37.2%
Res Sales cost @ $140	51	26.0%

Model Assumptions	Number of Wire Centers with Negative Net Present Value	% of Wire Centers with Negative Net Present Value
BS Default - No Exclusions	42	21.4%
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Capital Structure 50/50	45	23.0%
Mkt Share all MM segments 10%, slow penetration	59	30.1%
Mkt Share all MM segments 5%, slow penetration	73	37.2%
Res Sales cost @ $140	51	26.0%

BST Default Inputs
Include all LATAs, customers, markets, report by wire centers, separately for MM and Enterprise

Wire Center	Net Present Value	NPV for Mass Market	NPV for Enterprise	Zone	CEA
DYBHFLFN	$179,140.21	80,594.33	98,545.89	Zone1	Daytona Beach FL
DBRYFLDL	$824,828.18	774,399.01	50,429.17	Zone2	Daytona Beach FL
DBRYFLMA	$462,363.73	416,661.19	45,702.54	Zone2	Daytona Beach FL
DELDFLMA	$1,352,383.10	1,043,135.21	309,247.88	Zone2	Daytona Beach FL
DYBHFLMA	$2,226,829.88	1,302,328.57	924,501.31	Zone2	Daytona Beach FL
DYBHFLOB	$1,821,821.20	1,350,122.38	471,698.82	Zone2	Daytona Beach FL
DYBHFLOS	$196,460.42	183,699.51	12,760.92	Zone2	Daytona Beach FL
DYBHFLPO	$1,969,686.88	1,565,299.15	404,387.73	Zone2	Daytona Beach FL
FLBHFLMA	$185,680.38	87,745.16	97,935.22	Zone2	Daytona Beach FL
NSBHFLMA	$1,316,873.77	1,010,089.04	306,784.73	Zone2	Daytona Beach FL
Total	$10,356,927.54	$7,733,479.22	$2,623,448.32		
BNNLFLMA	($43,187.71)	(44,811.76)	1,624.05	Zone3	Daytona Beach FL
DLSPFLMA	($92,548.40)	(88,494.94)	(4,053.47)	Zone3	Daytona Beach FL
OKHLFLMA	($100,803.34)	(99,464.01)	(1,339.33)	Zone3	Daytona Beach FL
PLCSFLMA	$152,583.39	(32,171.92)	184,755.31	Zone3	Daytona Beach FL
PRSNFLFD	($130,637.63)	(124,379.24)	(6,258.39)	Zone3	Daytona Beach FL
Total	($214,593.68)	($389,321.86)	$174,728.17		
CHPLFLJA	($184,661.14)	(188,319.64)	3,658.50	Zone3	Dothan AL-FL-GA
SYHSFLCC	($178,690.54)	(180,687.15)	1,996.61	Zone3	Dothan AL-FL-GA
VERNFLMA	($163,625.78)	(151,830.97)	(11,794.81)	Zone3	Dothan AL-FL-GA
Total	($526,977.45)	($520,837.75)	($6,139.70)		
FTLDFLCR	$4,160,626.17	3,407,799.43	752,826.74	Zone1	Fort Lauderdale FL
FTLDFLCY	$3,758,349.93	2,550,604.16	1,207,745.77	Zone1	Fort Lauderdale FL
FTLDFLMR	$8,054,211.49	4,508,559.92	3,545,651.57	Zone1	Fort Lauderdale FL
FTLDFLOA	$5,598,595.76	4,503,292.90	1,095,302.86	Zone1	Fort Lauderdale FL
FTLDFLSG	$867,295.78	152,563.51	714,732.27	Zone1	Fort Lauderdale FL
FTLDFLSU	$3,832,685.73	3,132,217.76	700,467.97	Zone1	Fort Lauderdale FL
HLWDFLHA	$2,566,533.32	2,172,408.88	394,124.44	Zone1	Fort Lauderdale FL
HLWDFLMA	$4,785,881.58	3,576,072.07	1,209,809.52	Zone1	Fort Lauderdale FL
PMBHFLTA	$3,367,554.06	2,860,525.47	507,028.59	Zone1	Fort Lauderdale FL
Total	$36,991,733.83	$26,864,044.11	$10,127,689.73		
DRBHFLMA	$4,353,826.15	3,488,621.80	865,204.34	Zone2	Fort Lauderdale FL
FTLDFLJA	$5,852,086.18	4,940,554.71	911,531.48	Zone2	Fort Lauderdale FL
FTLDFLPL	$5,024,936.94	4,042,930.74	982,006.19	Zone2	Fort Lauderdale FL
FTLDFLWN	$3,413,418.24	2,901,565.80	511,852.44	Zone2	Fort Lauderdale FL
HLWDFLPE	$11,144,945.38	9,613,384.83	1,531,560.55	Zone2	Fort Lauderdale FL
HLWDFLWH	$7,093,469.08	5,764,723.30	1,328,745.78	Zone2	Fort Lauderdale FL
PMBHFLCS	$8,065,471.06	6,906,632.11	1,158,838.95	Zone2	Fort Lauderdale FL
PMBHFLFE	$5,581,453.85	4,015,794.22	1,565,659.64	Zone2	Fort Lauderdale FL
PMBHFLMA	$6,129,779.96	4,390,428.86	1,739,351.09	Zone2	Fort Lauderdale FL
Total	$56,659,386.84	$46,064,636.37	$10,594,750.47		
HBSDFLMA	$604,579.23	538,237.92	66,341.32	Zone2	Fort Pierce-Port St. Lucie FL
HTISFLMA	$970,068.00	879,427.22	90,640.78	Zone2	Fort Pierce-Port St. Lucie FL
PTSLFLSO	$1,191,048.89	930,747.45	260,301.44	Zone2	Fort Pierce-Port St. Lucie FL
STRTFLMA	$5,406,346.28	3,966,777.03	1,439,569.25	Zone2	Fort Pierce-Port St. Lucie FL
VRBHFLBE	$1,025,554.84	868,073.49	157,481.34	Zone2	Fort Pierce-Port St. Lucie FL
VRBHFLMA	$3,687,354.15	2,406,062.74	1,281,291.41	Zone2	Fort Pierce-Port St. Lucie FL
Total	$12,884,951.39	$9,589,325.85	$3,295,625.54		
FTPRFLMA	$987,378.97	457,396.23	529,982.73	Zone3	Fort Pierce-Port St. Lucie FL
PTSLFLMA	$1,632,422.48	1,358,377.66	274,044.83	Zone3	Fort Pierce-Port St. Lucie FL
SBSTFLFE	($88,108.45)	(66,472.03)	(21,636.43)	Zone3	Fort Pierce-Port St. Lucie FL
SBSTFLMA	$45,268.38	11,230.48	34,037.91	Zone3	Fort Pierce-Port St. Lucie FL
Total	$2,576,961.38	$1,760,532.34	$816,429.04		
GSVLFLMA	$4,818,533.82	3,667,854.62	1,150,679.20	Zone2	Gainesville FL
GSVLFLNW	$1,005,643.46	805,350.83	200,292.63	Zone2	Gainesville FL
Total	$5,824,177.28	$4,473,205.46	$1,350,971.83		

ARCHFLMA	($152,052.08)	(148,068.68)	(3,983.40)	Zone3	Gainesville FL
BRSNFLMA	($121,541.38)	(125,565.30)	4,023.91	Zone3	Gainesville FL
CDKYFLMA	($88,385.78)	(70,945.06)	(17,440.73)	Zone3	Gainesville FL
CFLDFLMA	($160,569.31)	(150,914.88)	(9,654.43)	Zone3	Gainesville FL
CSCYFLBA	($90,546.30)	(80,767.06)	(9,779.25)	Zone3	Gainesville FL
HWTHFLMA	($130,423.94)	(123,729.18)	(6,694.76)	Zone3	Gainesville FL
LKCYFLMA	$503,552.89	193,707.02	309,845.87	Zone3	Gainesville FL
MCNPFLMA	($96,348.26)	(90,714.64)	(5,633.63)	Zone3	Gainesville FL
NWBYFLMA	($110,535.24)	(106,338.53)	(4,196.71)	Zone3	Gainesville FL
OLTWFLLN	($235,203.88)	(238,087.81)	2,883.93	Zone3	Gainesville FL
PLTKFLMA	$230,159.59	102,056.98	128,102.61	Zone3	Gainesville FL
PMPKFLMA	($159,355.06)	(160,576.69)	1,221.63	Zone3	Gainesville FL
TRENFLMA	($131,528.47)	(128,306.17)	(3,222.30)	Zone3	Gainesville FL
WELKFLMA	($182,412.48)	(165,366.10)	(17,046.38)	Zone3	Gainesville FL
YNTWFLMA	($98,458.28)	(95,227.66)	(3,230.62)	Zone3	Gainesville FL
Total	($1,023,647.99)	($1,388,843.75)	$365,195.76		
JCBHFLSP	$1,068,109.31	976,952.20	91,157.11	Zone1	Jacksonville FL-GA
JCVLFLCL	$3,612,454.69	1,536,197.76	2,076,256.93	Zone1	Jacksonville FL-GA
JCVLFLFC	$1,573,102.58	1,379,325.07	193,777.51	Zone1	Jacksonville FL-GA
JCVLFLJT	$605,162.53	81,521.01	523,641.52	Zone1	Jacksonville FL-GA
JCVLFLSM	$2,389,267.97	921,031.10	1,468,236.87	Zone1	Jacksonville FL-GA
Total	$9,248,097.08	$4,895,027.14	$4,353,069.94		
FRBHFLFP	$1,205,974.14	1,028,905.82	177,068.32	Zone2	Jacksonville FL-GA
JCBHFLAB	$1,082,512.41	1,048,767.16	33,745.25	Zone2	Jacksonville FL-GA
JCBHFLMA	$2,174,970.93	1,796,026.15	378,944.77	Zone2	Jacksonville FL-GA
JCVLFLAR	$1,706,849.98	1,350,163.55	356,686.42	Zone2	Jacksonville FL-GA
JCVLFLBW	$2,864,864.23	2,296,728.27	568,135.96	Zone2	Jacksonville FL-GA
JCVLFLIA	$211,590.51	20,299.99	191,290.52	Zone2	Jacksonville FL-GA
JCVLFLNO	$1,923,940.15	1,422,487.35	501,452.80	Zone2	Jacksonville FL-GA
JCVLFLRV	$1,924,868.43	1,380,986.00	543,882.43	Zone2	Jacksonville FL-GA
JCVLFLSJ	$2,335,304.60	1,618,789.10	716,515.49	Zone2	Jacksonville FL-GA
JCVLFLWC	$3,038,306.32	2,525,706.97	512,599.35	Zone2	Jacksonville FL-GA
MNDRFLAV	$714,769.36	463,234.13	251,535.23	Zone2	Jacksonville FL-GA
MNDRFLLO	$2,916,350.25	2,173,307.27	743,042.98	Zone2	Jacksonville FL-GA
ORPKFLMA	$2,193,174.83	1,802,105.16	391,069.67	Zone2	Jacksonville FL-GA
ORPKFLRW	$1,212,296.42	935,737.39	276,559.02	Zone2	Jacksonville FL-GA
PNVDFLMA	$1,729,179.23	1,366,526.88	362,652.35	Zone2	Jacksonville FL-GA
STAGFLBS	$745,798.84	639,524.33	106,274.51	Zone2	Jacksonville FL-GA
STAGFLSH	$629,025.69	551,170.66	77,855.02	Zone2	Jacksonville FL-GA
Total	$28,609,776.31	$22,420,466.19	$6,189,310.11		
BLDWFLMA	($13,489.19)	(12,441.21)	(1,047.98)	Zone3	Jacksonville FL-GA
FTGRFLMA	($33,044.28)	(34,604.47)	1,560.19	Zone3	Jacksonville FL-GA
GCSPFLCN	$108,050.84	84,476.96	23,573.87	Zone3	Jacksonville FL-GA
JCVLFLLF	$473,124.39	316,119.80	157,004.60	Zone3	Jacksonville FL-GA
JCVLFLOW	$384,454.00	127,543.21	256,910.79	Zone3	Jacksonville FL-GA
KYHGFLMA	($123,747.54)	(117,129.09)	(6,618.45)	Zone3	Jacksonville FL-GA
MDBGFLPM	$227,120.16	205,535.66	21,584.50	Zone3	Jacksonville FL-GA
MNDRFLLW	$450,432.37	452,950.34	(2,517.96)	Zone3	Jacksonville FL-GA
MXVLFLMA	($89,742.65)	(90,685.64)	942.99	Zone3	Jacksonville FL-GA
STAGFLMA	$785,741.38	575,439.30	210,302.08	Zone3	Jacksonville FL-GA
STAGFLWG	($69,548.50)	(95,691.71)	26,143.21	Zone3	Jacksonville FL-GA
YULEFLMA	$4,865.13	806.62	4,058.51	Zone3	Jacksonville FL-GA
Total	$2,104,216.12	$1,412,319.77	$691,896.35		
CCBHFLAF	$22,524.12	4,441.93	18,082.20	Zone2	Melbourne-Titusville-Palm Bay FL
CCBHFLMA	$1,135,915.34	798,426.10	337,489.24	Zone2	Melbourne-Titusville-Palm Bay FL
COCOFLMA	$1,654,465.56	1,311,531.17	342,934.39	Zone2	Melbourne-Titusville-Palm Bay FL
COCOFLME	$828,508.36	670,010.64	158,497.72	Zone2	Melbourne-Titusville-Palm Bay FL
EGLLFLBG	$3,250,415.48	2,563,509.90	686,905.59	Zone2	Melbourne-Titusville-Palm Bay FL
EGLLFLIH	$1,101,347.42	976,858.79	124,488.63	Zone2	Melbourne-Titusville-Palm Bay FL
MICCFLBB	$207,851.82	197,365.52	10,486.31	Zone2	Melbourne-Titusville-Palm Bay FL
MLBRFLMA	$4,708,235.59	3,409,012.03	1,299,223.56	Zone2	Melbourne-Titusville-Palm Bay FL
TTVLFLMA	$1,818,365.67	1,366,850.20	451,515.46	Zone2	Melbourne-Titusville-Palm Bay FL
Total	$14,727,629.36	$11,298,006.28	$3,429,623.09		
KYWSFLMA	$2,510,146.00	1,921,217.37	588,928.62	Zone1	Miami FL

MIAMFLAE	$6,654,894.34	4,799,969.94	1,854,924.40	Zone1	Miami FL
MIAMFLAP	$475,014.02	223,599.98	251,414.04	Zone1	Miami FL
MIAMFLBA	$3,183,786.13	2,668,547.20	515,238.93	Zone1	Miami FL
MIAMFLBC	$1,424,004.60	1,038,801.75	385,202.85	Zone1	Miami FL
MIAMFLBR	$4,551,489.14	3,679,929.92	871,559.22	Zone1	Miami FL
MIAMFLDB	$501,771.98	59,228.51	442,543.47	Zone1	Miami FL
MIAMFLFL	$2,931,011.35	2,415,936.95	515,074.40	Zone1	Miami FL
MIAMFLGR	$8,514,920.64	1,808,796.39	6,706,124.25	Zone1	Miami FL
MIAMFLIC	$3,916,254.28	3,353,694.07	562,560.21	Zone1	Miami FL
MIAMFLKE	$1,133,058.16	927,118.77	205,939.39	Zone1	Miami FL
MIAMFLME	$1,745,436.99	1,070,988.16	674,448.84	Zone1	Miami FL
MIAMFLNM	$2,856,704.77	2,277,285.67	579,419.10	Zone1	Miami FL
MIAMFLPB	$4,271,150.38	3,008,246.40	1,262,903.97	Zone1	Miami FL
MIAMFLPL	$8,272,180.54	3,239,688.57	5,032,491.97	Zone1	Miami FL
MIAMFLWD	$6,345,345.66	6,005,108.67	340,236.99	Zone1	Miami FL
MIAMFLWM	$4,897,699.32	3,417,209.02	1,480,490.30	Zone1	Miami FL
NDADFLAC	$4,498,205.53	3,536,420.29	961,785.24	Zone1	Miami FL
NDADFLOL	$4,930,749.61	3,899,793.82	1,030,955.79	Zone1	Miami FL
Total	$73,613,823.41	$49,351,581.45	$24,262,241.96		
ISLMFLMA	$158,168.18	132,289.54	25,878.64	Zone2	Miami FL
KYLRFLLS	$456,561.20	384,369.50	72,191.70	Zone2	Miami FL
KYLRFLMA	$505,545.52	451,618.18	53,927.34	Zone2	Miami FL
MIAMFLAL	$2,356,386.74	1,955,832.43	400,554.31	Zone2	Miami FL
MIAMFLCA	$8,558,433.89	7,912,507.34	645,926.55	Zone2	Miami FL
MIAMFLHL	$10,544,927.38	8,547,029.73	1,997,897.65	Zone2	Miami FL
MIAMFLNS	$2,609,651.14	1,986,515.76	623,135.38	Zone2	Miami FL
MIAMFLOL	$2,775,210.63	2,226,453.67	548,756.96	Zone2	Miami FL
MIAMFLRR	$5,009,521.21	3,800,513.42	1,209,007.79	Zone2	Miami FL
MIAMFLSH	$3,248,596.99	2,584,752.38	663,844.62	Zone2	Miami FL
MIAMFLSO	$5,657,175.29	4,475,257.99	1,181,917.30	Zone2	Miami FL
MRTHFLVE	$622,565.75	472,075.56	150,490.19	Zone2	Miami FL
NDADFLBR	$4,046,856.15	3,287,971.53	758,884.62	Zone2	Miami FL
NDADFLGG	$3,082,450.18	2,223,689.50	858,760.68	Zone2	Miami FL
NKLRFLMA	$93,541.30	87,676.58	5,864.72	Zone2	Miami FL
PRRNFLMA	$10,268,743.11	8,752,325.37	1,516,417.74	Zone2	Miami FL
Total	$59,994,334.67	$49,280,878.48	$10,713,456.19		
BGPIFLMA	($109,300.10)	(80,464.96)	(28,835.14)	Zone3	Miami FL
HMSTFLEA	($34,129.05)	(33,084.10)	(1,044.96)	Zone3	Miami FL
HMSTFLHM	$1,089,227.67	891,789.73	197,437.94	Zone3	Miami FL
HMSTFLNA	$209,894.53	177,947.96	31,946.57	Zone3	Miami FL
SGKYFLMA	($101,979.58)	(75,564.88)	(26,414.69)	Zone3	Miami FL
DNLNFLWM	($358,466.72)	(335,068.50)	(23,398.22)	Zone3	Ocala FL
Total	$695,246.75	$545,555.25	$149,691.51		
ORLDFLMA	$5,488,561.98	2,615,360.80	2,873,201.17	Zone1	Orlando FL
LKMRFLMA	$997,388.18	666,349.16	331,039.03	Zone2	Orlando FL
ORLDFLAP	$7,335,126.55	6,454,171.74	880,954.81	Zone2	Orlando FL
ORLDFLCL	$2,036,315.31	1,494,992.32	541,322.99	Zone2	Orlando FL
ORLDFLPC	$5,731,773.79	4,062,473.19	1,669,300.60	Zone2	Orlando FL
ORLDFLPH	$8,536,577.98	6,449,182.88	2,087,395.09	Zone2	Orlando FL
ORLDFLSA	$2,942,837.24	1,498,573.31	1,444,263.94	Zone2	Orlando FL
OVIDFLCA	$2,704,452.19	2,435,196.08	269,256.11	Zone2	Orlando FL
SNFRFLMA	$4,781,283.94	3,695,544.60	1,085,739.34	Zone2	Orlando FL
Total	$35,065,755.19	$26,756,483.27	$8,309,271.91		
EORNFLMA	($33,901.67)	(38,104.10)	4,202.42	Zone3	Orlando FL
GENVFLMA	($44,738.13)	(44,184.58)	(553.55)	Zone3	Orlando FL
Total	($78,639.80)	($82,288.67)	$3,648.87		
PCBHFLNT	$728,276.38	414,909.21	313,367.17	Zone2	Panama City FL
PNCYFLMA	$1,643,324.37	982,686.66	660,637.71	Zone2	Panama City FL
Total	$2,371,600.75	$1,397,595.87	$974,004.88		
LYHNFLOH	($96,666.62)	(97,729.50)	1,062.88	Zone3	Panama City FL
PNCYFLCA	($340,919.19)	(331,203.87)	(9,715.32)	Zone3	Panama City FL
YNFNFLMA	($242,321.91)	(232,865.31)	(9,456.60)	Zone3	Panama City FL

Total	($679,907.72)	($661,798.68)	($18,109.03)		
GLBRFLMC	$1,163,875.27	972,085.01	191,790.26	Zone2	Pensacola FL
PNSCFLBL	$2,338,056.78	1,465,816.39	872,240.39	Zone2	Pensacola FL
PNSCFLFP	$3,017,091.18	2,161,867.24	855,223.94	Zone2	Pensacola FL
PNSCFLHC	$451,230.36	379,766.83	71,463.53	Zone2	Pensacola FL
PNSCFLPB	$384,139.76	353,867.16	30,272.59	Zone2	Pensacola FL
PNSCFLWA	$1,703,438.36	1,400,869.18	302,569.18	Zone2	Pensacola FL
Total	$9,057,831.71	$6,734,271.82	$2,323,559.89		
CNTMFLLE	($111,976.25)	(125,624.80)	13,648.55	Zone3	Pensacola FL
HLNVFLMA	$34,470.60	12,080.62	22,389.99	Zone3	Pensacola FL
JAY-FLMA	$29,333.78	9,234.53	20,099.26	Zone3	Pensacola FL
MLTNFLRA	$110,168.18	70,542.59	39,625.58	Zone3	Pensacola FL
MNSNFLMA	($107,585.60)	(103,253.03)	(4,332.57)	Zone3	Pensacola FL
PACEFLPV	$228,202.80	188,220.21	39,982.59	Zone3	Pensacola FL
Total	$182,613.51	$51,200.11	$131,413.39		
GCVLFLMA	($217,709.47)	(189,804.90)	(27,904.57)	Zone3	Tallahassee FL-GA
HAVNFLMA	($248,830.77)	(224,049.40)	(24,781.37)	Zone3	Tallahassee FL-GA
Total	($466,540.24)	($413,854.30)	($52,685.94)		
WWSPFLSH	$704,016.22	509,407.58	194,608.64	Zone2	Tampa-St. Petersburg-Clearwater FL
BKVLFLJF	($300,115.89)	(329,098.38)	28,982.49	Zone3	Tampa-St. Petersburg-Clearwater FL
WWSPFLHI	($430,411.39)	(486,368.28)	55,956.88	Zone3	Tampa-St. Petersburg-Clearwater FL
Total	($730,527.28)	($815,466.66)	$84,939.37		
BCRTFLBT	$3,326,037.80	2,303,067.29	1,022,970.52	Zone1	West Palm Beach-Boca Raton FL
BCRTFLMA	$7,850,702.00	5,694,406.94	2,156,295.06	Zone1	West Palm Beach-Boca Raton FL
WPBHFLAN	$5,262,872.45	2,370,812.35	2,892,060.10	Zone1	West Palm Beach-Boca Raton FL
Total	$16,439,612.25	$10,368,286.57	$6,071,325.67		
BCRTFLSA	$4,739,560.12	4,316,630.63	422,929.49	Zone2	West Palm Beach-Boca Raton FL
BLGLFLMA	$721,926.98	547,167.69	174,759.29	Zone2	West Palm Beach-Boca Raton FL
BYBHFLMA	$5,308,263.59	4,599,773.28	708,490.32	Zone2	West Palm Beach-Boca Raton FL
DLBHFLKP	$2,577,369.46	2,168,880.22	408,489.24	Zone2	West Palm Beach-Boca Raton FL
DLBHFLMA	$2,999,925.55	2,179,698.54	820,227.00	Zone2	West Palm Beach-Boca Raton FL
JPTRFLMA	$4,295,884.32	3,710,098.50	585,785.82	Zone2	West Palm Beach-Boca Raton FL
PAHKFLMA	$159,086.27	143,488.51	15,597.76	Zone2	West Palm Beach-Boca Raton FL
WPBHFLGA	$7,549,243.58	6,489,729.38	1,059,514.19	Zone2	West Palm Beach-Boca Raton FL
WPBHFLGR	$5,692,137.96	3,959,752.95	1,732,385.01	Zone2	West Palm Beach-Boca Raton FL
WPBHFLHH	$5,848,324.59	3,670,081.08	2,178,243.51	Zone2	West Palm Beach-Boca Raton FL
WPBHFLLE	$3,060,277.61	2,260,328.72	799,948.89	Zone2	West Palm Beach-Boca Raton FL
WPBHFLRB	$3,587,559.39	2,582,678.62	1,004,880.77	Zone2	West Palm Beach-Boca Raton FL
Total	$46,539,559.42	$36,628,308.14	$9,911,251.28		
WPBHFLRP	$2,893,868.28	2,389,393.91	504,474.37	Zone3	West Palm Beach-Boca Raton FL

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
WCs with Negative Net Present Value	49	167	176	196	196
Wire Center	10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, $47.25 revenue, $130 cust acquisition	10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size	5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size
ARCHFLMA	$1,757,821	($553,774)	($424,696)	($311,885)	($302,657)
BCRTFLBT	($1,451,047)	$191,265	$37,948	($694,819)	($720,468)
BCRTFLMA	($4,244,027)	$631,255	$254,848	($1,594,553)	($1,662,883)
BCRTFLSA	$2,605,403	($1,426,681)	($971,837)	($2,508,180)	($2,539,133)
BGPIFLMA	$1,985,525	($636,355)	($454,778)	($436,954)	($426,220)
BKVLFLJF	$7,254,493	($2,364,479)	($1,599,073)	($1,416,559)	($1,385,186)
BLDWFLMA	$940,148	($300,876)	($243,971)	($210,710)	($206,281)
BLGLFLMA	$408,778	($210,464)	($154,989)	($332,414)	($337,071)
BNNLFLMA	$3,198,850	($1,036,207)	($710,456)	($686,566)	($672,453)
BRSNFLMA	$1,733,592	($548,383)	($411,078)	($335,177)	($326,016)
BYBHFLMA	$2,551,492	($1,554,579)	($1,059,223)	($2,574,467)	($2,615,881)
CCBHFLAF	($751)	($1,037)	($700)	($8,914)	($8,663)
CCBHFLMA	$1,749,584	($732,054)	($556,838)	($772,287)	($775,269)
CDKYFLMA	$922,853	($285,632)	($210,501)	($178,538)	($172,595)
CFLDFLMA	$2,198,603	($702,704)	($494,344)	($414,998)	($404,168)
CHPLFLJA	$2,873,391	($908,336)	($626,973)	($461,719)	($450,230)
CNTMFLLE	$3,184,319	($1,034,227)	($709,846)	($613,253)	($603,120)
COCOFLMA	$8,419,045	($2,923,266)	($2,337,859)	($1,623,159)	($1,668,407)
COCOFLME	$4,576,743	($1,575,105)	($1,235,174)	($858,261)	($881,378)
CSCYFLBA	$1,539,480	($492,761)	($371,714)	($323,335)	($315,497)
DBRYFLDL	$1,031,994	($454,815)	($369,951)	($538,465)	($544,240)
DBRYFLMA	$645,053	($273,299)	($235,893)	($319,664)	($322,178)
DELDFLMA	$2,883,332	($1,131,099)	($855,917)	($955,271)	($964,767)
DLBHFLKP	$3,542,056	($1,538,335)	($1,009,576)	($1,673,910)	($1,685,766)
DLBHFLMA	$1,585,936	($857,152)	($591,194)	($1,297,897)	($1,314,436)
DLSPFLMA	$1,253,882	($394,093)	($320,195)	($229,884)	($223,503)
DNLNFLWM	$5,863,245	($1,882,193)	($1,297,994)	($1,091,577)	($1,063,573)
DRBHFLMA	$1,248,967	($909,579)	($617,755)	($1,775,296)	($1,804,390)
DYBHFLFN	$364,191	($129,672)	($74,486)	($73,196)	($73,681)
DYBHFLMA	$3,504,901	($1,402,737)	($1,041,099)	($1,228,161)	($1,238,882)
DYBHFLOB	$3,125,907	($1,259,960)	($959,170)	($1,131,401)	($1,144,810)
DYBHFLOS	$1,396,148	($491,323)	($391,135)	($319,575)	($319,359)
DYBHFLPO	$7,937,239	($2,927,095)	($2,035,979)	($2,112,720)	($2,115,594)
EGLLFLBG	$1,288,936	($840,671)	($660,664)	($1,500,799)	($1,526,170)
EGLLFLIH	$1,129,886	($537,316)	($471,311)	($726,733)	($733,349)
EORNFLMA	$2,118,052	($693,560)	($479,943)	($474,627)	($466,349)
FLBHFLMA	$1,142,479	($390,802)	($299,778)	($284,559)	($280,140)
FRBHFLFP	$1,293,104	($587,754)	($491,759)	($757,352)	($763,381)
FTGRFLMA	$318,725	($101,967)	($60,295)	($135,860)	($130,160)
FTLDFLCR	($2,548,208)	$339,567	$108,220	($989,654)	($1,029,112)
FTLDFLCY	($2,255,693)	$371,310	$130,524	($686,315)	($717,069)
FTLDFLJA	$220,943	($663,761)	($463,191)	($2,246,095)	($2,287,299)
FTLDFLMR	($3,216,351)	$385,059	$149,727	($1,373,834)	($1,425,384)
FTLDFLOA	($3,574,458)	$531,649	$217,001	($1,267,175)	($1,322,424)
FTLDFLPL	($1,171,450)	($161,088)	($182,826)	($1,610,135)	($1,650,738)
FTLDFLSG	$616,652	($239,946)	($142,548)	($188,860)	($189,151)
FTLDFLSU	($1,842,283)	$139,599	($12,287)	($993,531)	($1,029,165)
FTLDFLWN	$82,889	($346,963)	($294,412)	($1,294,611)	($1,317,872)
FTPRFLMA	$12,157,442	($4,118,493)	($2,545,494)	($3,025,252)	($2,987,697)
GCSPFLCN	$2,277,026	($760,211)	($501,982)	($517,836)	($511,746)
GCVLFLMA	$2,111,415	($658,400)	($482,385)	($339,247)	($329,206)
GENVFLMA	$1,292,728	($411,426)	($333,684)	($280,323)	($273,584)
GLBRFLMC	$1,055,097	($485,784)	($508,330)	($602,817)	($614,875)

NPV for Mass Market

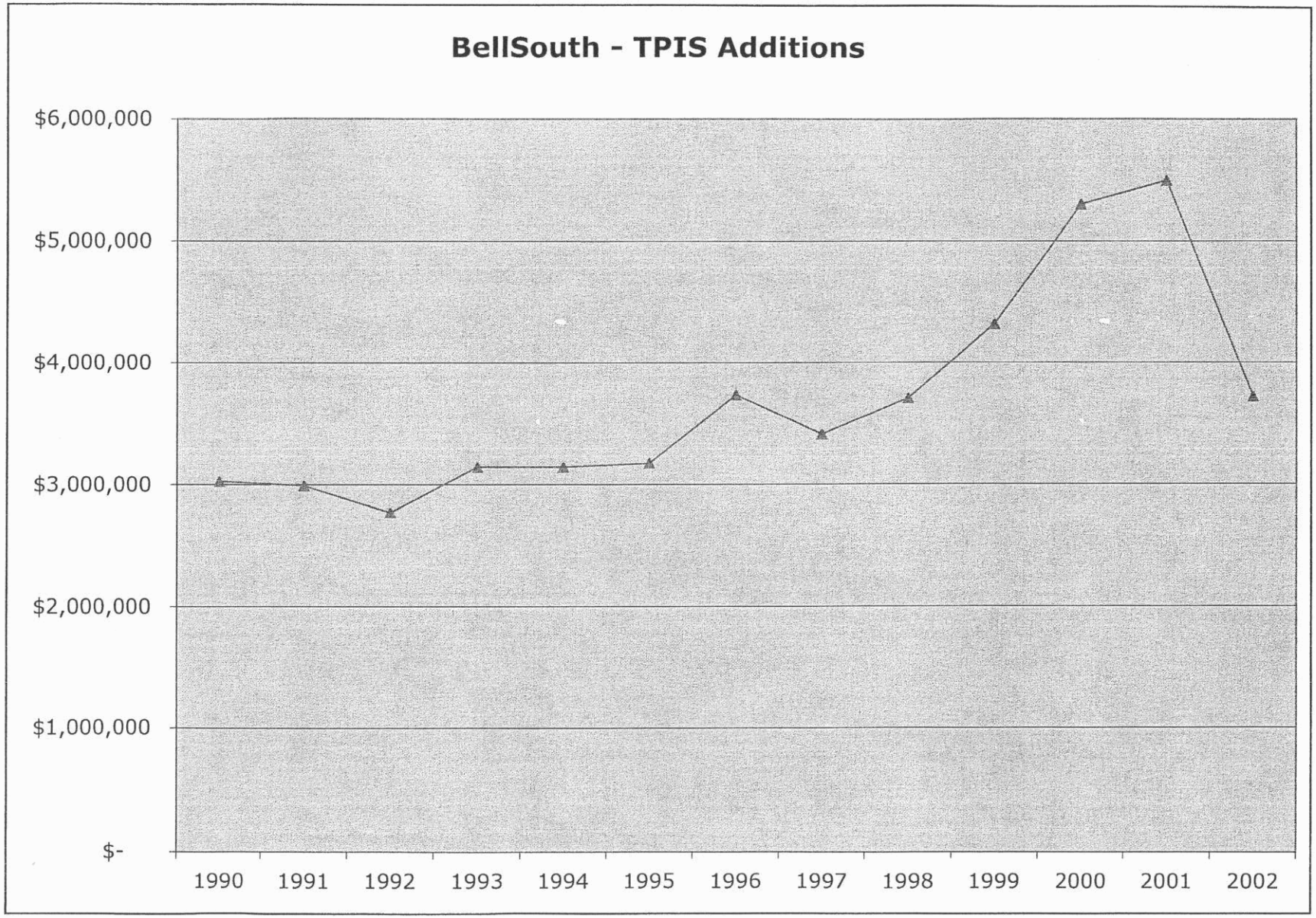
	(a)	(b)	(c)	(d)	(e)
WCs with Negative Net Present Value	**49**	**167**	**176**	**196**	**196**
Wire Center	**10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, $47.25 revenue, $130 cust acquisition**	**10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size**
GSVLFLMA	$5,422,992	($2,375,440)	($1,967,050)	($2,483,711)	($2,525,454)
GSVLFLNW	$993,099	($430,487)	($350,464)	($516,448)	($524,735)
HAVNFLMA	$2,786,625	($873,047)	($637,707)	($462,725)	($450,256)
HBSDFLMA	$1,266,010	($488,448)	($350,918)	($487,531)	($487,898)
HLNVFLMA	$4,112,494	($1,348,848)	($889,020)	($824,778)	($815,427)
HLWDFLHA	($1,160,333)	$48,133	($65,418)	($693,530)	($719,041)
HLWDFLMA	($2,569,817)	$311,340	$105,374	($1,048,267)	($1,091,334)
HLWDFLPE	($353,413)	($1,093,558)	($808,170)	($4,294,199)	($4,380,572)
HLWDFLWH	$30,494	($835,017)	($630,531)	($2,631,972)	($2,686,206)
HMSTFLEA	$754,441	($234,804)	($142,410)	($157,182)	($152,642)
HMSTFLHM	$5,771,872	($2,031,963)	($1,260,982)	($1,793,512)	($1,782,022)
HMSTFLNA	$1,895,826	($640,436)	($430,355)	($522,370)	($516,930)
HTISFLMA	$1,366,834	($594,785)	($524,438)	($829,737)	($826,077)
HWTHFLMA	$1,752,443	($557,052)	($414,936)	($316,782)	($308,567)
ISLMFLMA	$762,465	($267,904)	($209,568)	($256,011)	($252,623)
JAY-FLMA	$51,135	($20,256)	($12,909)	($32,235)	($31,583)
JCBHFLAB	$294,887	($213,445)	($246,921)	($518,849)	($528,025)
JCBHFLMA	$291,541	($361,095)	($349,224)	($864,632)	($883,622)
JCBHFLSP	($159,095)	($79,010)	($156,145)	($377,685)	($388,573)
JCVLFLAR	$622,443	($404,014)	($362,067)	($746,440)	($758,706)
JCVLFLBW	$874,277	($614,956)	($523,423)	($1,296,488)	($1,316,917)
JCVLFLCL	($1,054,525)	$83,058	($805,541)	($500,986)	($522,353)
JCVLFLFC	($438,300)	($57,780)	($181,131)	($532,554)	($547,978)
JCVLFLIA	$48,309	($22,281)	($12,956)	($28,557)	($28,336)
JCVLFLJT	($61,573)	$4,554	$1,450	($16,465)	($17,907)
JCVLFLLF	$6,516,071	($2,211,890)	($1,423,545)	($1,617,420)	($1,600,414)
JCVLFLNO	$1,153,205	($605,683)	($473,501)	($913,003)	($924,943)
JCVLFLOW	$3,975,839	($1,334,513)	($875,104)	($951,216)	($939,595)
JCVLFLRV	$873,822	($503,705)	($415,232)	($783,044)	($795,953)
JCVLFLSJ	$1,455,655	($736,458)	($563,552)	($1,055,159)	($1,067,201)
JCVLFLSM	($479,227)	$11,059	($497,476)	($283,654)	($296,201)
JCVLFLWC	$456,557	($501,555)	($469,757)	($1,266,106)	($1,291,695)
JPTRFLMA	$35,922	($525,188)	($404,247)	($1,704,377)	($1,740,386)
KYHGFLMA	$2,534,579	($818,926)	($578,882)	($485,873)	($476,387)
KYLRFLLS	$931,431	($350,815)	($254,003)	($397,852)	($395,204)
KYLRFLMA	$1,104,622	($412,553)	($300,167)	($468,624)	($465,301)
KYWSFLMA	($482,809)	($105,892)	($152,892)	($877,084)	($889,386)
LKCYFLMA	$6,264,197	($2,104,889)	($1,350,621)	($1,530,631)	($1,511,290)
LKMRFLMA	$329,008	($176,732)	($130,973)	($336,541)	($342,283)
LYHNFLOH	$3,718,084	($1,193,347)	($842,685)	($653,154)	($641,236)
MCNPFLMA	$1,052,588	($327,736)	($187,751)	($191,925)	($185,873)
MDBGFLPM	$3,819,477	($1,285,380)	($864,172)	($943,523)	($933,844)
MIAMFLAE	($4,619,509)	$846,819	$413,852	($1,158,529)	($1,218,147)
MIAMFLAL	($637,893)	($77,319)	($130,646)	($806,616)	($827,259)
MIAMFLAP	$206,327	($96,207)	($56,418)	($68,922)	($71,550)
MIAMFLBA	($2,096,105)	$318,105	$101,383	($756,532)	($788,303)
MIAMFLBC	($744,400)	$107,629	($369,089)	($283,958)	($295,629)
MIAMFLBR	($2,923,268)	$421,200	$145,803	($1,037,261)	($1,081,229)
MIAMFLCA	($2,487,672)	($242,546)	($308,314)	($3,172,235)	($3,254,176)
MIAMFLDB	($52,997)	$6,840	$3,667	($9,934)	($10,875)
MIAMFLFL	($2,131,350)	$327,353	$109,352	($657,785)	($688,764)
MIAMFLGR	$1,579,364	($707,153)	($417,152)	($369,909)	($393,505)
MIAMFLHL	($3,451,455)	($14,891)	($156,641)	($3,267,224)	($3,357,283)

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
WCs with Negative Net Present Value	**49**	**167**	**176**	**196**	**196**
Wire Center	**10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, $47.25 revenue, $130 cust acquisition**	**10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.1 *CLEC purchasing* power, medium CLEC size**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size**
MIAMFLIC	($2,134,971)	$235,544	$30,253	($1,086,759)	($1,123,197)
MIAMFLKE	($260,624)	($23,773)	($64,885)	($319,367)	($328,569)
MIAMFLME	($699,389)	$60,428	($40,149)	($356,291)	($368,910)
MIAMFLNM	($1,661,855)	$234,055	$56,626	($669,871)	($695,936)
MIAMFLNS	($430,574)	($150,701)	($168,163)	($885,883)	($906,239)
MIAMFLOL	($781,190)	($61,296)	($119,321)	($909,632)	($932,939)
MIAMFLPB	($3,220,994)	$608,099	$274,960	($695,993)	($734,631)
MIAMFLPL	$1,996,668	($950,765)	($561,430)	($586,003)	($624,002)
MIAMFLRR	($842,557)	($204,433)	($196,872)	($1,517,823)	($1,553,758)
MIAMFLSH	($211,977)	($301,106)	($268,718)	($1,200,278)	($1,224,236)
MIAMFLSO	($823,990)	($297,353)	($244,247)	($1,867,945)	($1,910,960)
MIAMFLWD	($4,823,199)	$819,753	$345,723	($1,707,422)	($1,776,321)
MIAMFLWM	($3,390,764)	$619,012	$283,601	($819,935)	($863,257)
MICCFLBB	$810,150	($306,112)	($272,617)	($269,005)	($268,366)
MLBRFLMA	$6,461,676	($2,801,545)	($1,893,498)	($3,081,057)	($3,097,946)
MLTNFLRA	$5,476,486	($1,819,134)	($1,308,191)	($1,144,769)	($1,133,386)
MNDRFLAV	$362,858	($163,907)	($115,346)	($252,067)	($256,008)
MNDRFLLO	$616,525	($518,180)	($454,268)	($1,175,996)	($1,196,167)
MNDRFLLW	$2,179,658	($752,133)	($552,617)	($660,562)	($658,070)
MNSNFLMA	$371,271	($117,680)	($71,605)	($132,694)	($127,133)
MRTHFLVE	$1,214,626	($462,736)	($365,668)	($532,150)	($527,531)
MXVLFLMA	$768,364	($246,240)	($145,745)	($187,048)	($180,996)
NDADFLAC	($2,678,512)	$372,417	$120,923	($1,064,325)	($1,105,166)
NDADFLBR	($466,976)	($293,064)	($275,950)	($1,495,553)	($1,526,648)
NDADFLGG	($236,851)	($214,701)	($206,865)	($965,239)	($986,157)
NDADFLOL	($2,570,893)	$319,390	$102,834	($1,185,800)	($1,229,822)
NKLRFLMA	$574,677	($193,939)	($169,753)	($183,418)	($180,366)
NSBHFLMA	$5,092,595	($1,879,938)	($1,327,517)	($1,335,938)	($1,339,106)
NWBYFLMA	$1,938,949	($622,709)	($460,944)	($370,660)	($362,316)
OKHLFLMA	$1,266,286	($395,407)	($261,296)	($221,717)	($215,082)
OLTWFLLN	$2,499,185	($786,357)	($563,060)	($446,109)	($432,870)
ORLDFLAP	$1,138,391	($1,309,320)	($1,104,530)	($3,405,104)	($3,466,947)
ORLDFLCL	$551,722	($409,559)	($346,426)	($800,680)	($814,634)
ORLDFLMA	($2,065,792)	$259,900	($1,171,618)	($788,559)	($822,861)
ORLDFLPC	$2,215,421	($1,341,514)	($982,197)	($2,511,574)	($2,542,583)
ORLDFLPH	$859,315	($1,185,326)	($986,241)	($3,301,693)	($3,363,261)
ORLDFLSA	$1,050,598	($560,073)	($1,238,803)	($960,139)	($970,281)
ORPKFLMA	$174,980	($301,547)	($310,200)	($859,683)	($878,238)
ORPKFLRW	$281,241	($227,937)	($251,195)	($499,526)	($508,505)
OVIDFLCA	$81,901	($349,333)	($348,849)	($1,149,305)	($1,174,082)
PACEFLPV	$3,122,470	($1,044,758)	($716,758)	($676,424)	($673,134)
PAHKFLMA	$527,044	($188,863)	($165,862)	($192,456)	($190,891)
PCBHFLNT	$5,146,494	($1,746,694)	($1,188,769)	($859,605)	($869,533)
PLCSFLMA	$6,731,070	($2,204,093)	($1,493,900)	($1,361,430)	($1,341,775)
PLTKFLMA	$4,864,972	($1,625,668)	($1,107,150)	($1,190,698)	($1,168,940)
PMBHFLCS	($693,898)	($546,115)	($468,624)	($2,910,195)	($2,969,718)
PMBHFLFE	($299,110)	($502,824)	($384,177)	($1,753,489)	($1,794,597)
PMBHFLMA	$802,375	($919,601)	($648,907)	($2,104,671)	($2,145,261)
PMBHFLTA	($1,489,351)	$61,487	($72,855)	($957,597)	($990,105)
PMPKFLMA	$1,795,880	($561,968)	($413,322)	($321,235)	($310,866)
PNCYFLCA	$3,606,126	($1,130,994)	($796,410)	($563,145)	($547,013)
PNCYFLMA	$4,747,164	($1,696,293)	($1,183,318)	($992,636)	($1,017,904)
PNSCFLBL	$2,209,326	($981,137)	($867,608)	($1,020,817)	($1,039,923)

NPV for Mass Market

	(a)	(b)	(c)	(d)	(e)
WCs with Negative Net Present Value	**49**	**167**	**176**	**196**	**196**
Wire Center	**10% MS, Medium Penetration, 14.01% capcost, 6.5% churn, $47.25 revenue, $130 cust acquisition**	**10% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $130 cust acquisition**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.1 CLEC purchasing power, medium CLEC size**	**5% MS, Medium Penetration, 14.01% capcost, 8.33% churn, $47.25 revenue, $140 cust acquisition, 1.2 CLEC purchasing power, small CLEC size**
PNSCFLFP	$3,314,630	($1,442,462)	($1,218,200)	($1,520,894)	($1,547,014)
PNSCFLHC	$1,568,853	($574,398)	($433,045)	($448,150)	($449,965)
PNSCFLPB	$1,225,198	($455,685)	($359,882)	($374,741)	($377,239)
PNSCFLWA	$2,996,764	($1,214,852)	($1,014,912)	($1,136,785)	($1,152,501)
PNVDFLMA	$417,201	($314,320)	($316,935)	($709,736)	($721,945)
PRRNFLMA	($2,170,109)	($416,860)	($409,733)	($3,607,326)	($3,691,271)
PRSNFLFD	$1,468,506	($463,001)	($291,041)	($259,274)	($251,993)
PTSLFLMA	$8,518,595	($2,982,740)	($1,919,351)	($2,642,308)	($2,625,517)
PTSLFLSO	$785,492	($395,505)	($355,583)	($660,304)	($664,440)
SBSTFLFE	$982,674	($306,524)	($254,864)	($207,104)	($200,964)
SBSTFLMA	$4,845,888	($1,604,752)	($1,131,411)	($1,202,059)	($1,177,271)
SGKYFLMA	$1,760,533	($559,215)	($415,326)	($393,887)	($384,009)
SNFRFLMA	$355,733	($648,065)	($557,790)	($1,844,358)	($1,882,019)
STAGFLBS	$1,095,415	($463,516)	($361,500)	($461,185)	($466,782)
STAGFLMA	$4,071,787	($1,437,904)	($949,343)	($1,137,831)	($1,132,639)
STAGFLSH	$836,361	($357,924)	($288,404)	($388,093)	($392,689)
STAGFLWG	$943,927	($296,347)	($156,833)	($160,683)	($155,921)
STRTFLMA	$322,240	($722,584)	($550,519)	($1,993,584)	($2,032,233)
SYHSFLCC	$1,609,405	($494,501)	($373,631)	($244,618)	($235,965)
TRENFLMA	$1,851,142	($589,367)	($423,982)	($352,687)	($343,492)
TTVLFLMA	$2,527,352	($1,094,250)	($773,821)	($1,192,018)	($1,200,059)
VERNFLMA	$1,562,687	($482,621)	($339,728)	($256,856)	($248,333)
VRBHFLBE	$992,531	($437,316)	($376,444)	($680,141)	($678,635)
VRBHFLMA	$2,730,871	($1,316,601)	($923,489)	($1,809,873)	($1,822,418)
WELKFLMA	$1,692,987	($526,887)	($405,115)	($300,668)	($290,257)
WPBHFLAN	($2,180,634)	$373,724	($895,910)	($578,368)	($609,180)
WPBHFLGA	$2,121,307	($1,646,971)	($1,132,213)	($3,367,297)	($3,427,034)
WPBHFLGR	$951,353	($874,755)	($592,688)	($2,012,930)	($2,048,360)
WPBHFLHH	$1,983,890	($1,202,698)	($786,152)	($2,064,580)	($2,094,962)
WPBHFLLE	$2,001,964	($1,027,955)	($701,694)	($1,472,793)	($1,488,936)
WPBHFLRB	$242,336	($468,156)	($358,504)	($1,251,059)	($1,275,811)
WPBHFLRP	$10,322,006	($3,661,382)	($2,215,671)	($3,418,549)	($3,407,485)
WWSPFLHI	$6,758,830	($2,160,942)	($1,492,541)	($1,187,531)	($1,153,784)
WWSPFLSH	$7,540,126	($2,628,146)	($1,813,388)	($1,701,171)	($1,677,904)
YNFNFLMA	$2,473,942	($771,553)	($576,379)	($399,236)	($387,166)
YNTWFLMA	$1,307,845	($410,615)	($316,391)	($240,003)	($232,827)
YULEFLMA	$1,332,777	($437,929)	($313,623)	($303,249)	($298,399)


BellSouth - TPIS Additions
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$-
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002

INVESTMENT IS APPROPRIATELY STIMULATED BY TELRIC

Robert D. Willig[1]

1. *Introduction*

In the debate over the implementation of the Telecommunications Act of 1996, incumbent local exchange carriers (ILECs) have claimed that its requirements suppress incentives for investment in network infrastructure. They argue that they are denied a compensatory ("fair") return on their investments by the requirement that they unbundle their local networks and lease use of the unbundled network elements (UNEs) at prices based on total element long-run incremental cost (TELRIC). The ILECs further argue that the mandated availability of UNEs at these regulated prices permits competitive local exchange carriers (CLECs) to "free ride" on ILEC networks and discourages CLEC investments, as well their own. Based on their claims that both CLECs' and their own investments are suppressed, the ILECs argue that policy changes should be made to remove requirements that they provide CLECs with access to TELRIC-priced UNEs.

In sharp contrast, the CLECs assert that the availability of UNEs at TELRIC based prices is necessary for competition. It is this competition that enables them to invest, and that motivates the ILECs to increase their investment in network facilities. The CLECs argue that the competition created by access to UNEs brings about lower prices, better quality and more service, and does not discourage any efficient ILEC investment. Under this view, the previous lack of competition in monopoly local

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telephone markets may have dissuaded the ILECs from making certain investments, and the competitive stimulus from CLEC entry under the 1996 Act may have encouraged greater investment by both the ILECs and the CLECs.

These two competing views may be termed the *Investment Deterrence Hypothesis* and the *Competitive Stimulus Hypothesis*, respectively. These hypotheses can be examined from both theoretical and empirical standpoints. I believe that the *Competitive Stimulus Hypothesis* stands on much firmer theoretical ground than the *Investment Deterrence Hypothesis* in this setting. Nonetheless, I recognize that amidst the contention and complex regulatory dynamics that surround local telecommunications today, the question of which hypothesis is correct should be put to a sound empirical test.

This essay concludes both that the *Investment Deterrence Hypothesis* is refuted by the empirical evidence and that the data provide reasonable support for the *Competitive Stimulus Hypothesis*. The analysis shows that there is no valid foundation for the view that investment would be enhanced by any effort to reinterpret current TELRIC rules in a manner that raises UNE prices. To the contrary, the data indicate that higher UNE prices would weaken competition and discourage investment by both ILECs and CLECs.

2. Investment Theory

The *Competitive Stimulus Hypothesis* is far more consistent with economic theory than the *Investment Deterrence Hypothesis* in the setting of local telecommunications today. The availability of UNEs facilitates entry and activity by local telephone competitors, and total industry investment expands as this competition results in lower prices, increased demand, and improved customer choice and service quality.

Indeed, without access to TELRIC-priced UNEs, CLEC investment may well be suppressed because the ILECs enjoy enormous advantages over new entrants as a result of their legacy as protected franchise monopolists that currently serve over 90% of existing demand. ILECs benefit from large economies of scale and scope and enjoy important first mover advantages relative to CLECs with respect to rights-of-way and placement of outside plant and its supporting structures. The ILECs are also protected by sunk cost entry barriers – *i.e.*, competitive facilities-based entry by CLECs would be very risky because much of the costs of local network facilities are sunk, and therefore cannot be recovered if the CLEC ultimately is unable to remain viable in its competition with the incumbents. The economies of scale and scope endemic to local telephony imply that CLEC entry with cost-efficient facilities would be likely to create excess supply and strong pressure to move prices downwards towards marginal costs and below average costs. Thus, without access to UNEs at competitive prices, it is unlikely that CLECs could overcome profitably the daunting barriers to entry, and local telephony would remain the domain of monopoly.

According to the *Investment Deterrence Hypothesis*, the availability of UNEs for lease at TELRIC-based prices discourages ILEC investment by rendering it less profitable than it would be without the unbundling mandate. In this view, unbundling rules compel the ILEC to lease portions of its local exchange network to CLECs at returns that are lower than it could earn if it used this network to provide retail services

directly to customers.[2] The combined return accruing to the ILEC from its local network investment is thereby diminished, and along with this return (it is argued) goes the ILECs' incentive to invest.

The ILECs contend that the TELRIC methodology adopted by the Federal Communications Commission (FCC) to determine the rates that CLECs pay for UNEs does not adequately compensate ILECs for their investments in assets that are long-lived and may be partially or wholly sunk.[3] Although it goes without saying that the ILECs are motivated to seek from regulation more rather than less compensation, the key issue is whether TELRIC compensation provides for efficient investment by the ILECs. By its very definition, TELRIC allows the ILECs to recover their full economic costs, including the risk-adjusted competitive rates of return on capital and forward-looking depreciation with lives that reflect both technological and economic obsolescence.[4] Thus, because TELRIC provides ILECs with the same investment incentives as are faced by participants in competitive markets, the ILECs' *Investment Deterrence Hypothesis* would appear to be either an illogical indictment of investment incentives in competitive markets generally, or just a complaint about the regulatory process constraining their pricing and profits.

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[2] The proponents of this theory are rarely clear as to whether their retail pricing benchmark is an efficient structure of regulated retail prices, or substantially higher prices that regulation has somehow allowed the ILECs to impose on their captive retail customers.

[3] Reply Affidavit of Jerry A. Hausman, In the Matter of Implementation of Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (filed May 30, 1996). For a critique of the foregoing, see R. Glenn Hubbard and William H. Lehr, "Capital Recovery Issues In TSLRIC Pricing: Response To Professor Jerry A. Hausman", submitted *ex parte* by AT&T to the FCC, In the Matter of Implementation of Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (July 18, 1996).

[4] See companion essays by William Baumol, Glenn Hubbard and William Lehr, and Richard Clarke for further elaboration of the compensatory nature of TELRIC.

There is powerful economic logic that goes the other way in showing that competition is an impetus to investment, as compared to monopoly. Consider a monopoly ILEC that does not face mandatory unbundling. Like any rational firm, the firm's investment will be governed by the perspective that the firm will install further units of capital so long as the incremental expected revenues from these units exceed the costs (inclusive of risks) of acquiring them. Because the services produced by this further capital may compete with (and bid down the price for) other services produced by the ILEC's current capital, the profitability of additional investment by the monopoly ILEC is attenuated.

Competition changes the ILEC's perspective on what is profitable. In a competitive environment, new investment by the ILEC doesn't simply have the effect of reducing the profitability of its former production. Rather, this investment may be used as a competitive weapon (*e.g.*, by producing more and higher quality service) to increase the ILEC's overall business by defending and taking market share from its competitors. Due to these potential positive effects of investment on the profitability of an ILEC exposed to competition and the heightened threat of loss of business to rivals, the ILEC (and its rival CLECs) are impelled to lower prices, produce more, innovate and invest more to accomplish these goals. The result is that incentives for investment and innovation are greater under the pressures of a competitive environment.[5]

[5] The only set of circumstances under which this comparison might be distorted by CLECs' use of UNEs would be if CLECs' use of UNEs degraded the potential productivity of these facilities in serving the ILECs' customers. I am aware of no evidence that this is the case.

A classic illustration of these investment incentives is provided by the digital subscriber line (DSL) experience of the late 1990s. Prior to the '90s, T1 was the only available technology for data services, and it was controlled by the ILECs. Although the ILECs developed more efficient DSL technologies in the early '90s, they chose not to invest and deploy these innovative technologies because this would bid down the price of their pre-existing monopoly T1 data services. With the advent of competitive cable modem technology in the late '90s and the ability of CLECs to use UNEs to provision their own competitive DSL services, ILEC investment in DSL technology exploded in response.

Thus far, this discussion has focused on the incentives for ILEC investment. I now turn to CLEC investment. When it is economically viable to do so, a CLEC would likely prefer to deploy its own facilities and avoid being dependent on its largest competitor for essential inputs. But because of scale economies, it is not economically practical for CLECs to replicate ILEC networks or, in many instances, even particular portions of the extant networks. UNEs, however, permit CLECs to share incumbent scale economies and provide efficient competition using shared facilities in those many instances where deploying alternative facilities is not economically feasible.

UNEs can facilitate deployment of alternative facilities by CLECs when it is potentially economic to do so. For example, UNEs allow CLECs to acquire a customer base and adequate scale to justify investment in their own facilities and, thus, may allow a CLEC dynamically to overcome sunk cost entry barriers.

Overall, the *Competitive Stimulus Hypothesis* follows naturally from basic economic theory and its understanding of competitive markets. Increased competition enabled by UNEs can be expected to result in lower retail prices both because of efficiency improvements induced by competition and because of the pressure competition places on above-cost pricing. Lower prices result in increased demand. Growing demand will induce additional facilities investment by both ILECs and CLECs. Additionally, in a competitive environment, both the incumbent and the entrant will face enhanced incentives to improve quality and innovate with respect to services, leading to further investment.

3. The Historical Record

The theory behind the *Competitive Stimulus Hypothesis* is borne out by a rigorous econometric empirical analysis of CLEC and ILEC investment behavior since the passage of the Telecommunications Act in 1996. But before describing the econometrics, it is useful to review summary data on the recent history of telecommunications investment. The attached chart shows the course of investment by ILECs in local telecommunications for the 1992-2001 period,[6] and by the CLECs over the 1996-2002 period.

[Insert Chart here]

The first point to note is that over the half decade prior to the '96 Act, investment by the monopoly ILECs was stagnant. With the advent of the Act, it accelerated markedly for

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[6] Although 2002 data are also available from BellSouth, SBC and Verizon, due to accounting irregularities, Qwest has not yet filed audited financial reports with the FCC for 2002.

four years, then in 2000 began to tail off. CLEC investment followed the same pattern – dramatic growth for the first four years after the Act, then a decline.

Some analysts have looked at this history and focused on only the most recent several years. From evidence of the decline that occurred since 2000, they have concluded that CLECs' use of UNEs priced at TELRIC was the cause of this fall-off.[7] Other analysts have focused on evidence of the stagnancy of ILEC investment in the pre-competitive era and the flowering of investment immediately following the Act. They have concluded that CLEC competitive pressure affirmatively stimulated investment.[8] The later tail-off in investment is ascribed to transition towards a more sustainable long-run path, and it is observed that despite this tail-off, net telecommunications plant remains well above its levels prior to the '96 Act.[9]

4. Empirical Tests and Results

I now discuss empirical research that I have performed, along with studies performed by others, that address the issue of whether the availability of UNEs at TELRIC-based prices enhances or detracts from telecommunications investment.

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[7] See, for example, J. A. Eisenach and T. M. Leonard, *Telecom Deregulation and the Economy: The Impact of UNE-P on Jobs, Investment and Growth*, Progress & Freedom Foundation, Progress On Point, Release 10.3 (January 2003).

[8] See, for example, Phoenix Center for Advanced Legal and Economic Studies, "The Truth about Telecommunications Investment," Phoenix Center Policy Bulletin, No. 4, June 24, 2003.

[9] Nortel chief executive Frank Dunn also agrees that telecommunications capital spending rose to unsustainable levels in the late '90s. "Everybody is looking for this big capital spending to start again. Well it's not going to happen. What was spent in 1999-2000 was unaffordable. Carriers were running to some 20 to 22 percent of their revenue in capex spending. ... There is no business model that could afford that kind of spending. So we're back down to the low teens. And, historically, that's where this industry has always been. And that's where it should be." *Reuters*, "Nortel CEO Sees No Surge in Telecoms Spending," November 17, 2003.

A. My Own Analysis

As discussed above, the *Investment Deterrence* and *Competitive Stimulus Hypotheses* make different predictions regarding the effect of UNE prices on ILEC investment. In an analysis that I developed with several co-authors, we employed a state-by-state cross section of data to carry out regression analyses to test which of these two hypotheses has greater empirical support.[10] The cross-sectional variation in the terms and conditions at which UNEs are available in the different states allows us to determine the linkages among the availability of UNEs, CLEC competitive activity and ILEC investment in network infrastructure.

This analysis employed standard econometric tools that are widely accepted in the field. We used a variety of these techniques to estimate directly how ILEC network investment is positively influenced by competition from CLECs – and to measure how CLEC entry is positively influenced by the availability of UNEs. The directions and magnitudes of these impacts are estimated controlling for state-by-state variations in other supply and demand influences on CLEC activity and ILEC investment. This research design avoids the ambiguity of time series analysis of investment that is unable to control for all of the other forces likely to bear on the recent progress of local telecommunications investment.

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[10] See, "Stimulating Investment and the Telecommunications Act of 1996," by Robert D. Willig, William H. Lehr, John P. Bigelow and Stephen B. Levinson, October 2002, attached to *ex parte* letter of Joan Marsh, AT&T, to Marlene Dortch, FCC, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, (October 11, 2002).

As explained in greater detail in the Technical Appendix to this essay, our results unambiguously refute the *Investment Deterrence Hypothesis* and provide strong support for the *Competitive Stimulus Hypothesis*. Overall, we estimated that each 1% *reduction* in UNE rates corresponds with rigorous statistical significance to approximately a 2.1% to 2.9% *increase* in ILEC investment. Thus, raising TELRIC or restricting access to UNEs, as the ILECs advocate, would *both* reduce the competitive alternatives available to consumers *and* reduce the ILECs' capital spending on their own networks.

B. Complementary Analyses

Numerous other empirical studies have similarly concluded that the availability of UNEs at TELRIC has not impeded telecommunications investment.

One study by the Phoenix Center examined data from the Commerce Department's Bureau of Economic Analysis (BEA), and found that an additional $267 billion in telecommunications industry capital spending was generated between 1996 and 2001.[11] That is, the BEA reported total telecommunications investment of $572 billion during the period 1996-2001, compared to investment of only $305 billion that would have been expected based on historic investment levels from the fifteen years preceding the '96 Act. According to this Phoenix study:

> Plainly, investment by telecommunications firms skyrocketed after the passage of the 1996 Act. From 1980 through 1995, investment by telecommunications firms grew at an annual rate of 2.8%, with average investment level of about $38.8 billion. After the 1996 Act, investment by telecommunications firm[s] has grown at an average annual rate of 22.3%, with $95.3 billion invested annually (on average) for a total of about $572 billion during this time.

[11] Phoenix Center for Advanced Legal and Economic Studies, "The Truth about Telecommunications Investment," Phoenix Center Policy Bulletin, No. 4, June 24, 2003.

Willig – Investment Incentives **3.11**

A second Phoenix study used a model that regressed indicators of UNE competition and RBOC size on net investment by state, and demonstrated that the RBOCs invested more heavily in their networks in states where the competition they faced was most intense.[12] This study found that net investment by BellSouth, SBC and Verizon increased on average by $759 for every UNE-P access line leased by a CLEC. The study further concluded:

> . . . UNE-P competition is shown to positively affect BOC net investment. So, while BOC net investment may be down relative to previous years due to economic conditions and other factors, *UNE-P itself exerts a positive influence on investment.* Thus, it appears that factors other than UNE-P are fully responsible for the lower investment levels by the BOCs in 2002. In fact, UNE-P competition is shown to offset investment reductions in 2002 by about 50%.[13]

The empirical model estimated in this Phoenix study provoked a debate among several economic analysts.[14] The Phoenix Center responded to these criticisms by observing:

> In their review of BULLETIN NO. 5, HHB recommend three major changes to our empirical model. First, HHB suggest making the empirical model dynamic by including the existing capital stock in the regression and lagged values of some explanatory variables. Second, they recommend letting the cost of capital vary by Bell Company. Third, they propose estimating the models using weighted least squares where all variables are weighted by (the inverse of) access lines. Many of our new empirical models incorporate these suggestions, and in some cases adopt more dynamic specifications than proposed by HHB. In every

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[12] Phoenix Center for Advanced Legal and Economic Studies, "Competition and Bell Company Investment in Telecommunications Plant: The Effects of UNE-P," Phoenix Center Policy Bulletin, No. 5, July 9, 2003, updated September 17, 2003. The study is based on 2002 data filed by BellSouth, SBC and Verizon with the FCC. Qwest had not yet filed its 2002 financial data at the time of the study.

[13] *Ibid.* at p. 14.

[14] See, Declaration of Thomas W. Hazlett, Ph.D., Arthur M. Havenner, Ph.D., and Coleman Bazelon, Ph.D., on Behalf of Verizon Communications, Inc., Reply Comments of Verizon Telephone Companies in Support of Petition for Expedited Forbearance from the Current Pricing Rules for the Unbundled Network Element Platform, WC Docket No. 03-157 (filed September 2, 2003); and Declaration of R. Carter Hill, Ph.D., on Behalf of Z-Tel Communications, Inc., In the Matter of Petition for Forbearance From the Current Pricing Rules for the Unbundled Network Element Platform, WC Docket No. 03-157 (September 18, 2003).

> instance, these changes *affirm and, in many cases, strengthen* the conclusion that Bell Company investment is positively related to UNE-P competition.[15]

Another study has examined the state-by-state leased element purchases by a major CLEC, AT&T, and compares the level of these purchases with the extent to which AT&T has deployed its own local network facilities in that state.[16] This analysis finds that no matter what measure of AT&T investment deployment is used (*i.e.*, number of local switches, number of switch terminations or route miles of local fiber), there is a significant positive relationship between AT&T's use of leased network elements and its investment in its own local network facilities.

Finally, empirical findings that competitive access to network elements stimulates rather than deters investment are not unique to just the U.S. experience with unbundling. The Organization for Economic Cooperation and Development (OECD) has found that in the thirty developed countries that constitute its membership, "the evidence indicates that opening access networks, and network elements, to competitive forces increases investment and the pace of development."[17] The OECD also notes that, "to date the major criticisms of unbundling or line sharing are that such policies allegedly discourage investment in new infrastructure. No evidence has been forwarded to substantiate this claim."[18]

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[15] Phoenix Center for Advanced Legal and Economic Studies, "UNE-P Drives Bell Investment: A Synthesis Model," Phoenix Center Policy Bulletin, No. 6, September 17, 2003, p. 4.

[16] Declaration of Richard N. Clarke, attached to Reply Comments of AT&T Corp., In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, (filed July 17, 2002).

[17] Organization for Economic Cooperation and Development, *The Development of Broadband Access in OECD Countries,* October 29, 2001, p. 4. ("*OECD Report*").

[18] *OECD Report*, p. 15.

C. Dissenting Analyses

John Haring *et al.* purport to explain the relationship between ILEC investment and UNE pricing by regressing RBOC net plant in a state on the number of RBOC loops, the number of unemployed persons in the state, real gross state product, and the product of the number of RBOC loops and the UNE loop price for zone 1.[19] This relationship has neither any basis nor any meaningful interpretation in economic theory. In fact, Haring, *et al.* have effectively performed the equivalent of a regression tautology. These authors use RBOC net plant in a state as the dependent variable, but then employ an equation where that dependent variable is a function of loops. They then examine whether total net plant is larger when the aggregate value of loops is larger (assuming loops are valued at the zone 1 UNE loop price). Not surprisingly, they find that this is the case. This analysis is flawed because loops constitute a significant portion of net plant, so the result will likely be a positive relationship as a matter of arithmetic rather than as a policy-relevant causal relationship. Further, use of net plant as the dependent variable is flawed because the relevant issue is how the availability of UNEs affects *investment*. Investment is the *change* in net plant rather than the simple level of net plant.

Another flawed study was prepared directly by BellSouth, SBC and Verizon to examine the relationship between total ILEC investment per line and CLEC UNE-P lines

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[19] John Haring, Margaret L. Rettle, Jeffrey H. Rohlfs, and Harry M. Shooshan III of Strategic Policy Research, "UNE Prices and Telecommunications Investment," attached to the Reply Comments of Qwest, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, (July 17, 2002).

per 1000 RBOC access lines.[20] The authors' chief result is their finding that RBOC investment per line does not increase when the number of CLEC UNE-P lines increases. They conclude from this that there is no relationship between UNE unbundling and ILEC investment. This conclusion, however, is not supported by the regressions estimated in the report. First, it appears that the authors make the same mistake as Haring, *et al.*, in that they conflate the *stock* of capital per line with investment (which is the *change* in the stock of capital per line). Second, the RBOC authors fail to control for other significant factors that could reasonably influence the relationship between ILEC capital per line and the proportion of lines served by CLECs using UNE-P. Such factors include demand conditions, the cost of telecommunications infrastructure or the effects of regulation. As a matter of basic econometrics, the omission of such highly relevant variables means that the estimates obtained are likely biased and unreliable. Third, the data relied upon for this analysis are incomplete and severely flawed.[21]

5. Conclusions

The results of the empirical analyses reported here should come as welcome news for regulators and policymakers. Had the *Investment Deterrence Hypothesis* found valid empirical support, policymakers and regulators would face an uncomfortable trade-off between the pro-competitive dictates of the Telecommunications Act and the growth-promoting effects of investment. Fortunately, the empirical evidence we have studied

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[20] "UNE-P and Investment," Prepared for and Submitted by BellSouth, SBC, and Verizon, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, (July 17, 2002).

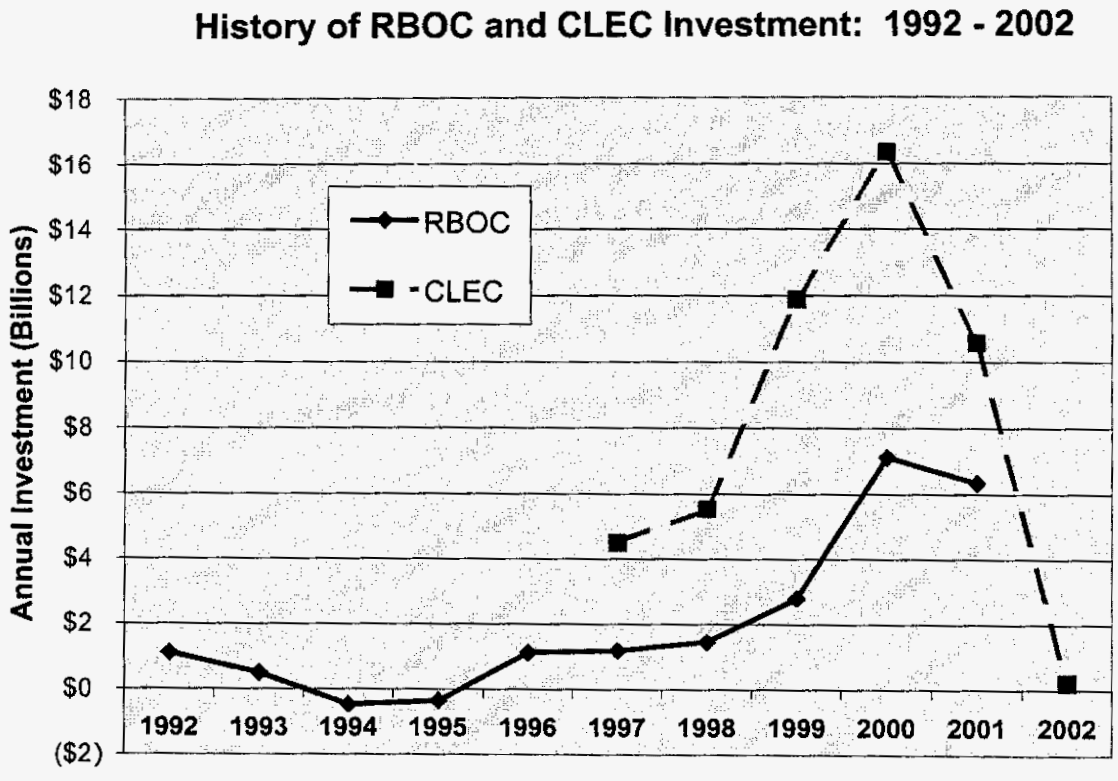
[21] *See*, C. Michael Pfau, "Correcting the RBOCs' Empirical Analyses of the Linkage Between UNE-P and Investment," *ex parte* letter from Joan Marsh, AT&T to Ms. Marlene Dortch, Secretary, FCC in CC Docket No. 01-338, filed October 16, 2002.

supports the *Competitive Stimulus Hypothesis* that the efficiency-enhancing effects of competition also promote investment. Therefore, no such trade-off is necessary. Regulatory policies that support access to unbundled network elements encourage both competition and investment.

Regulators may take further comfort that this empirical conclusion is also consistent with sound economic theory. As a general matter in economics, competitive markets produce greater output, which leads to greater investment, at lower prices than their monopolistic counterparts. So, policy mechanisms like the provision of UNEs at TELRIC-based prices, which encourage competition, should also encourage investment. This mechanism forms the basis for recent work by Kotlikoff and Hassett in which they analyze a dynamic and strategic model of entry and competition in telecommunications-related markets.[22] They find, among other things, that telecommunications competition stimulates investment, a conclusion that is consistent with our finding of empirical support for the *Competitive Stimulus Hypothesis*. The significance they attach to that finding for future economic growth is consistent with our finding that the elasticity of ILEC investment with respect to UNE prices is such that a 1% reduction in UNE prices may be expected to lead to an increase in ILEC investment of between 2.1 and 2.9%.

[22] Kevin A. Hassett and Laurence J. Kotlikoff, "The Economics of Telecom Investment," mimeo (September 2002).

Chart



Data sources:

- RBOC investment data is year over year change in net plant from RBOC ARMIS reports to the FCC.
- CLEC data are cumulative capital expenditures from 2003 Association for Local Telecommunications (ALTS) Report, reduced by 10% annual depreciation.

Technical Appendix

Overview of Our Empirical Analysis

The empirical analysis in my work with Lehr, Bigelow and Levinson proceeded in two stages. First, to distinguish between the competing predictions made by the two hypotheses, we conducted an analysis of the "reduced-form" relationship between ILEC investment and UNE prices. To the extent that this relationship is positive, *i.e.* if higher UNE prices are associated with greater ILEC investment, the *Investment Deterrence Hypothesis* is supported. To the extent that this relationship is negative, *i.e.*, if lower UNE prices are associated with greater ILEC investment, the *Competitive Stimulus Hypothesis* is supported. Second, to examine more rigorously the linkages suggested by the *Competitive Stimulus Hypothesis* among UNE prices, CLEC participation in local telephone markets and ILEC investment, we conducted a further set of "structural form" regressions.

Specification of the Reduced-Form Regression

The first analysis we performed of the relationship between UNE prices and ILEC investment is based on a reduced-form specification of the determinants of ILEC investment. A reduced-form specification is one that is derived from a more complex set of simultaneously interacting relationships. In a reduced-form specification, interactions between variables that exert mutual effects on one another are pushed into the background and the relationship to be estimated is a straightforward one between predetermined independent (or "exogenous") variables and a single dependent (or

"endogenous") variable. By contrast, structural-form relationships embody the interactions between endogenous and exogenous variables explicitly, have meaningful behavioral interpretations, and generally must be viewed as a system of relationships. Their interaction, however, is more complex. Reduced-form relationships are simpler because a variety of behavioral relationships have been subsumed into them.[23]

In the analysis developed in the paper, the reduced-form relationship is between ILEC investment as the dependent variable, and a group of exogenous variables that influence ILEC investment either directly or indirectly through their effects on CLEC activity. The reduced-form relationship takes the form:

$$\begin{pmatrix} ILEC \\ Investment \end{pmatrix} = R\begin{pmatrix} Demand \\ Factors \end{pmatrix}, \begin{pmatrix} Current \\ Revenue \end{pmatrix}, \begin{pmatrix} ILEC\,Cost\,of \\ Investment \end{pmatrix}, \begin{pmatrix} CLEC\,Cost\,of \\ Participation \end{pmatrix}, \begin{pmatrix} Regulatory \\ Regime \end{pmatrix}.$$

The Demand Factors, ILEC Cost of Investment, and Regulatory Regime variables are included to control for the effects of other factors on ILEC investment decisions –

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[23] For example, in the standard economic model of a competitive market, the quantity demanded of a good is determined by its price, the levels and distribution of income of its consumers, the prices of substitute and complementary goods, and parameters that reflect tastes. Likewise, the quantity supplied of a good is determined by its price, the prices of goods and services used to produce the good, and parameters describing the technology for producing the good. In the marketplace, the price of the good is determined by simultaneous operation of the demand relationship, the supply relationship, and the equilibrium condition that the quantity demanded should be equal to the quantity supplied. In this model the demand relationship and the supply relationship interact simultaneously to determine two variables, *i.e.*, the quantity of the good changing hands in the market and the market price. The values of these two "endogenous" variables are simultaneously determined by the demand and supply relationships and the values of the predetermined or exogenous variables such as income, prices of substitutes and complements, taste parameters, prices of factors of production, and technology parameters. If one knew the demand and supply relationships, one could use them to calculate the market equilibrium price as a function of the exogenous variables. The resulting relationship is called a "reduced form," because the simultaneous interaction of multiple relationships and variables has been reduced to a single relationship between the endogenous dependent variable and the exogenous independent variables.

that is, factors not associated with UNE-based unbundling requirements. Demand factors and the level of current revenue (an indication of current market prices) are included because they may be expected to influence ILEC investment directly, inasmuch as increased demand or higher prices should be expected to encourage investment, and indirectly, because they may have the same effect on CLEC activity. The cost to an ILEC of its own investment should certainly influence the level of ILEC investment. Variables relevant to describing the nature of the regulatory regime are also included because the character of regulation may be expected to have an effect on ILEC investment.

The CLEC Cost-of-Participation variable is the variable whose coefficient provides the basis for distinguishing between the two competing hypotheses. According to the *Investment Deterrence Hypothesis*, increases in UNE prices, which increase the cost of CLEC participation via UNEs, should increase ILEC investment. That is, higher UNE prices render UNE-based entry less economically viable for CLECs, thereby alleviating the risk of alleged "free-riding" by CLECs. According to the *Investment Deterrence Hypothesis*, this should increase the ILEC's incentive to invest. In contrast, the *Competitive Stimulus Hypothesis* predicts that higher UNE prices will reduce ILEC investment because less economically-viable network element unbundling reduces CLEC competitive activity and the spur that such activity would otherwise provide for ILEC investment.

Thus, empirically one may distinguish between these two hypotheses by examining the sign and the level of statistical significance of the estimated coefficient on the CLEC Cost-of-Participation variable.

Specification of the Structural-Form Regressions

In order to test directly the *Competitive Stimulus Hypothesis*, we used a structural approach. The *Competitive Stimulus Hypothesis* does not merely predict the negative relationship between UNE pricing and ILEC investment confirmed in the previous section. That prediction is based on further empirically testable predictions that the level of CLEC competition will be negatively related to UNE pricing and that the level of ILEC investment will be positively related to the level of CLEC competitive activity. Thus, according to the full economic structure of the *Competitive Stimulus Hypothesis*, it is the combination of these two effects that gives rise to the overall negative relationship observed between ILEC investment and UNE pricing.

In order to investigate empirically these two effects, we employ a specification that looks beyond the summary relationships embodied in the reduced-form. This specification involves a system of two equations. The first,

$$\begin{pmatrix} ILEC \\ Investment \end{pmatrix} = f\begin{pmatrix} Demand \\ Factors \end{pmatrix}, \begin{matrix} Current \\ Revenue \end{matrix}, \begin{matrix} ILEC\ Cost\ of \\ Investment \end{matrix}, \begin{matrix} Regulatory \\ Regime \end{matrix}, \begin{matrix} CLEC \\ Activity \end{matrix},$$

posits that ILEC investment is a function of demand factors, current revenue, the cost of investment to ILEC firms, the form of the regulatory regime, and the level of competitive activity by CLEC firms. This equation reflects the direct determinants of the ILECs' behavior.

The second equation reflects the determinants of the behavior of CLECs. It takes the form:

$$\begin{pmatrix} CLEC \\ Activity \end{pmatrix} = g\begin{pmatrix} Demand \\ Factors \end{pmatrix}, \begin{matrix} Current \\ Revenue \end{matrix}, \begin{matrix} CLEC\ Cost\ of \\ Participat\ ion \end{matrix}.$$

In this equation the cost of participation to a CLEC is measured by the UNE prices.

Taken together, these two equations form a system that determines two endogenous variables, ILEC investment and CLEC activity, as functions of the exogenous variables. In this system, support for the *Competitive Stimulus Hypothesis* would take the form of a finding that CLEC Cost-of-Participation is negatively related to CLEC activity in the second equation and that the level of ILEC investment is positively related to the level of CLEC activity in the first equation.

Results

We found statistical evidence that the relationship between UNE pricing and ILEC investment is negative and, therefore, that the empirical evidence refutes the *Investment Deterrence Hypothesis* and is consistent with the *Competitive Stimulus Hypothesis*. Our reduced-form regressions are statistically significant and explain a large share of the variation in the dependent variable, ILEC investment. Moreover, the estimated effects of various other independent control variables include statistically significant estimates that are consistent with the underlying economic theory.

Having found confirmation of the *Competitive Stimulus Hypothesis'* prediction in the first stage, we also tested directly the mechanism of *the Competitive Stimulus Hypothesis* using "structural-form" relationships. According to the *Competitive Stimulus*

Hypothesis, lower UNE prices lead to greater CLEC activity, and greater CLEC activity leads to greater ILEC investment. We therefore estimate the effect of UNE prices on CLEC activity and the effect of CLEC activity on ILEC investment. Again, we found a negative relationship between UNE prices and CLEC activity, *i.e.*, that higher UNE prices lead to less CLEC activity, and a positive relationship between CLEC activity and ILEC investment, *i.e.*, that greater CLEC activity leads to greater ILEC investment. Notably, these results are obtained from regressions that are themselves statistically significant, explain a high share of the variation in the dependent variable and produce estimates consistent with economic theory.[24]

[24] An earlier version of the analysis described above (which was based on a less complete data set) was included in a filing to the FCC in the *Declaration of Robert D. Willig on Behalf of AT&T*, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, (April 5, 2002).

The principal challenge made to that earlier analysis was that it relied on UNE-P rates from June 2002 to explain CLEC activity and ILEC investment from earlier periods. The results we report in this analysis were obtained using UNE price data from a variety of sources compiled at various times between 1996 and 2002. Our data include UNE-P rates compiled by AT&T in 2002 as well as Regulatory Research Associates *TeleFOCUS* estimates from August 2000; the National Regulatory Research Institute's estimates from Spring 2001 and July 2002; and the loop proxy rates established by the FCC in its August 1996 *First Report and Order* in CC Docket No. 96-98. We have continued to find empirical support for the *Competitive Stimulus Hypothesis* and support adequate to reject the *Investment Deterrence Hypothesis* using UNE price data from as early as 1996 as well as with data from 2002. Thus, our conclusions are not dependent on the time at which the UNE-P rates were compiled.

CONFIDENTIAL

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 112
COMPANY/ MCI/Bryant
WITNESS: MTB-2,6,7,8,+9
DATE: 02/24 - 27/04

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SUMMARY OF MARK BRYANT
CONFIDENTIAL EXHIBITS

Copies are not being provided in the Public or Redacted version of the testimony

The Confidential exhibits not included in this testimony are:

Docket No. 030851-TP
Mark Bryant Rebuttal Exhibit ____ (MTB-6)
CONFIDENTIAL – CLEC Marketing Information
7 Total Pages, all confidential

Docket No. 030851-TP
Mark Bryant Rebuttal Exhibit ____ (MTB-7)
CONFIDENTIAL – News Article
2 Total Pages, all confidential

Docket No. 030851-TP
Mark Bryant Rebuttal Exhibit ____ (MTB-8)
CONFIDENTIAL – Triggering Companies, BellSouth
2 Total Pages, all confidential

Docket No. 030851-TP
Mark Bryant Rebuttal Exhibit ____ (MTB-9)
CONFIDENTIAL – Triggering Companies, Verizon
1 Page Total, all confidential

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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 113
COMPANY/ MCI/Webber
WITNESS: JDW-1 thru 10 + JDW-12
DATE: 02/24-27/04

James D. Webber

Testimony Profile and Experience

Federal Communications Commission

File No. EB-01-MD-017
In the matter of CoreComm Communications, Inc. and Z-Tel Communications, Inc., Complainants v. SBC Communications Inc., Southwestern Bell Telephone Company, Pacific Bell Telephone Company, Nevada Bell Telephone Company, The Southern New England Telephone Company, Illinois Bell Telephone Company, Indiana Bell Telephone Company, Inc., Michigan Bell Telephone Company, The Ohio Bell Telephone Company, and Wisconsin Bell, Inc.
On behalf of CoreComm Communications, Inc.

Illinois Commerce Commission

ICC Docket No. 00-0700
Illinois Commerce Commission on its own motion -vs- Illinois Bell Telephone Company. Investigation into tariff providing unbundled local switching with shared transport.
On behalf of CoreComm Illinois, Inc.

ICC Docket Nos. 97-0516, 97-0601, and 96-0602
Illinois Commerce Commission on its own motion -vs- Illinois Bell Telephone Company; et al. Investigation into non-cost based access charge rate elements in the intrastate access charges of incumbent local exchange carriers in Illinois. Illinois Commerce Commission on its own motion Investigation into implicit universal service subsidies in intrastate access charges and to investigate how these subsidies should be treated in the future.
On Behalf of AT&T Communications of Illinois, Inc.

ICC Docket Nos. 96-0486 and 96-0596
Illinois Commerce Commission on its own motion Investigation into forward looking cost studies and rates of Ameritech Illinois for interconnection, network elements, transport and termination of traffic. Illinois Bell Telephone Company Proposed rates, terms and conditions for unbundled network elements.
On behalf of AT&T Communications of Illinois, Inc.

ICC Docket Nos. 95-0458 and 95-0531
AT&T Communications of Illinois, Inc. Petition for a total local exchange wholesale service tariff from Illinois Bell Telephone Company d/b/a Ameritech Illinois and Central Telephone Company Pursuant to section 13-505.5 of the Illinois Public Utilities Act. LDDS Communications, Inc. d/b/a LDDS Metromedia Communications. Petition for a total wholesale network service tariff from Illinois Bell Telephone Company d/b/a Ameritech Illinois and Central Telephone Company pursuant to Section 13-505.5 of the Illinois Public Utilities Act.
On behalf of the Staff of the Illinois Commerce Commission

ICC Docket Nos. 95-0201 and 95-0202
Illinois Bell Telephone company proposed establishment of separate rate elements for single line versus multiline business access line customers. Illinois Bell Telephone company proposed establishment of separate rate elements for directory assistance to business sand residence customers.
On behalf of the Staff of the Illinois Commerce Commission

ICC Docket No. 94-0048
IntraLATA Presubscription Rule Making.

James D. Webber

On behalf of the Staff of the Illinois Commerce Commission

ICC Docket Nos. 94-0096, 94-0117, and 94-0146
Proposed Introduction of a Trial of Ameritech's Customers First Plan in Illinois, et al.
On behalf of the Staff of the Illinois Commerce Commission

Indiana Regulatory Utility Commission

IRUC Cause No. 40571-INT-03
AT&T Communications of Indiana, Inc. TCG Indianapolis petition for arbitration of interconnection rates terms and conditions and related arrangements with Indiana Bell Telephone Company, Incorporated d/b/a Ameritech Indiana pursuant to Section 252(b) of the Telecommunications Act of 1996.
On behalf of AT&T Communications of Indiana, Inc and TCG Indianapolis.

IRUC Cause No. 40785
In the matter of the investigation on the Commission's own motion into any and all matters relating to access charge reform and universal service reform including, but not limited to high cost or universal service funding mechanisms relative to telephone and telecommunications services within the state of Indiana pursuant to IC 8-1-2-51, 58, 59, 69; 8-1-2.6 ET. SEC. and other related state statutes, as well as the Federal Telecommunications Act of 1996 (47 U.S.C. Sec. 151, ET. SEC.)
On behalf of AT&T Communications of Indiana, Inc.

IURC Cause No. 40611
In the matter of the Commission investigation and generic proceeding on Ameritech Indiana's rates for interconnection, service, unbundled elements, and transport and termination under the Telecommunications Act of 1996 and related Indiana statutes.
On behalf of AT&T Communications of Indiana, Inc.

Michigan Public Service Commission

MPSC Case No. U-12622
In the Matter of the application of Ameritech Michigan for approval of shared transport cost study and resolution of disputed issues related to shared.
On behalf of CoreComm Michigan, Inc.

MPSC Case No. U-12465
In the matter of the application of AT&T Communications of Michigan, Inc., and TCG Detroit for arbitration of interconnection rates, terms and conditions and related arrangements with Ameritech Michigan Pursuant to 47 USC 252(b).
On Behalf of AT&T Communications of Michigan, Inc., and TCG Detroit.

MPSC Case No. U-11831
In the matter, on the Commission's own motion, to consider the total long run service incremental costs for all access, toll, and local exchange services provided by Ameritech Michigan.
On behalf of AT&T Communications of Michigan, Inc.

MPSC Case No. U-11743

MPSC Case No. U-11757

James D. Webber

MPSC Case No. U-11448
In the matter of the application of the Michigan Exchange Carriers Association, Inc., for approval of a joint total service long run incremental cost study.
On behalf of AT&T Communications of Michigan, Inc. and MCI Telecommunications Corporation.

MPSC Case No. U-11280
In the matter, on the Commission's own motion, to consider the total service long run incremental costs and to determine the prices of unbundled network elements, interconnection services, resold services, and basic local exchange services for Ameritech Michigan.
On behalf of AT&T Communications of Michigan, Inc.

Public Utility Commission of Ohio

PUCO Case No. 02-579-TP-CCS
In the matter of the Complaint of CoreComm Newco, Inc., Complainant, V. Ameritech Ohio, Respondent.
On behalf of CoreComm Newco, Inc.

PUCO Case No. 00-942-TP-COI
In the matter of the further investigation into Ameritech Ohio's entry into in-region interLATA service under section 271 of the Telecommunications Act of 1996.
On Behalf of CoreComm Newco, Inc.

PUCO Case No. 00-1188-TP-ARB
In the matter of the application of AT&T Communications of Ohio Inc. and TCG Ohio for arbitration of interconnection rates, terms and conditions and related arrangements with SBC Ohio.
On Behalf of AT&T Communications of Ohio, Inc.

PUCO Case No. 96-899-TP-ALT
In the matter of the application of Cincinnati Bell Telephone Company for approval of a retail pricing plan which may result in future rate increases and for a new alternative regulation plan.
On Behalf of AT&T Communications of Ohio, Inc.

PUCO Case No. 96-366-TP-ALT
In the matter of the complaint of AT&T Communications of Ohio, Inc., Complainant, V. Ameritech Ohio, Respondent, In the matter of the implementation of substitute Senate Bill 306 or substitute House Bill 734 of the 121st General Assembly.
On Behalf of AT&T Communications of Ohio, Inc.

PUCO Case No. 96-922-TP-UNC
In the matter of the review of Ameritech Ohio's Economic Costs for Interconnection, Unbundled Network Elements, and Reciprocal Compensation for Transport and Terminations of Local Telecommunications Traffic.
On Behalf of AT&T Communications of Ohio, Inc.

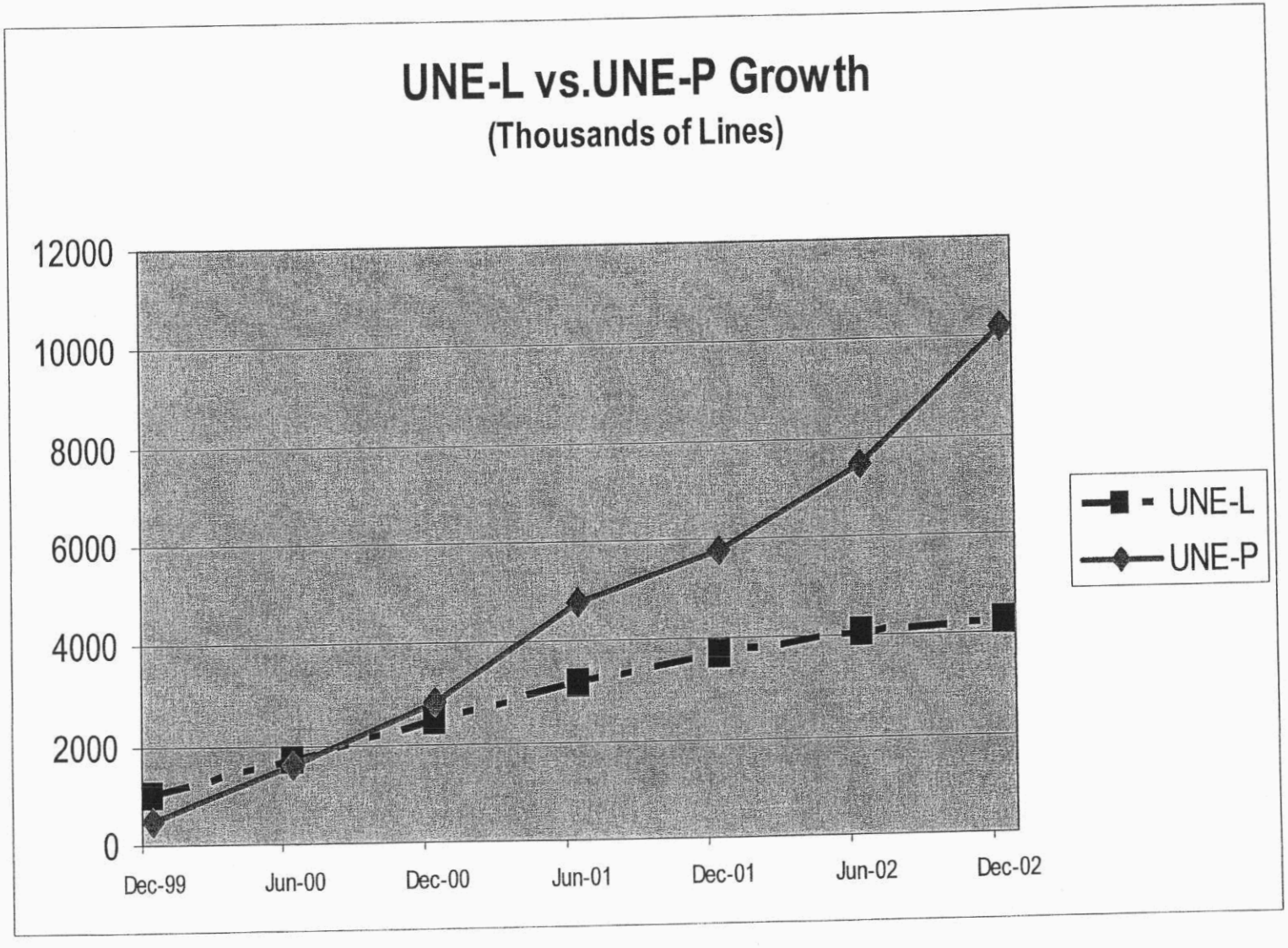
Public Service Commission of Wisconsin

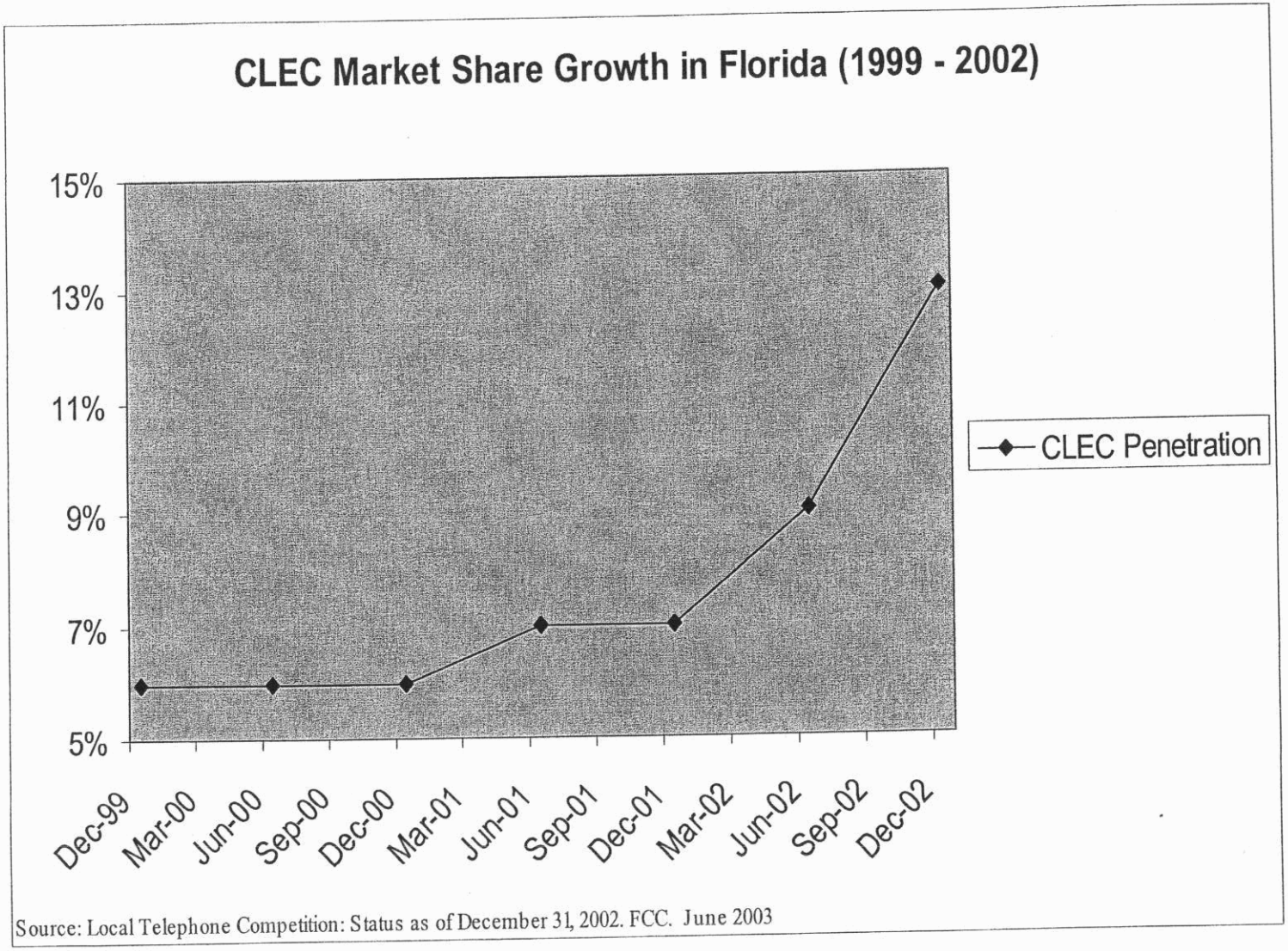
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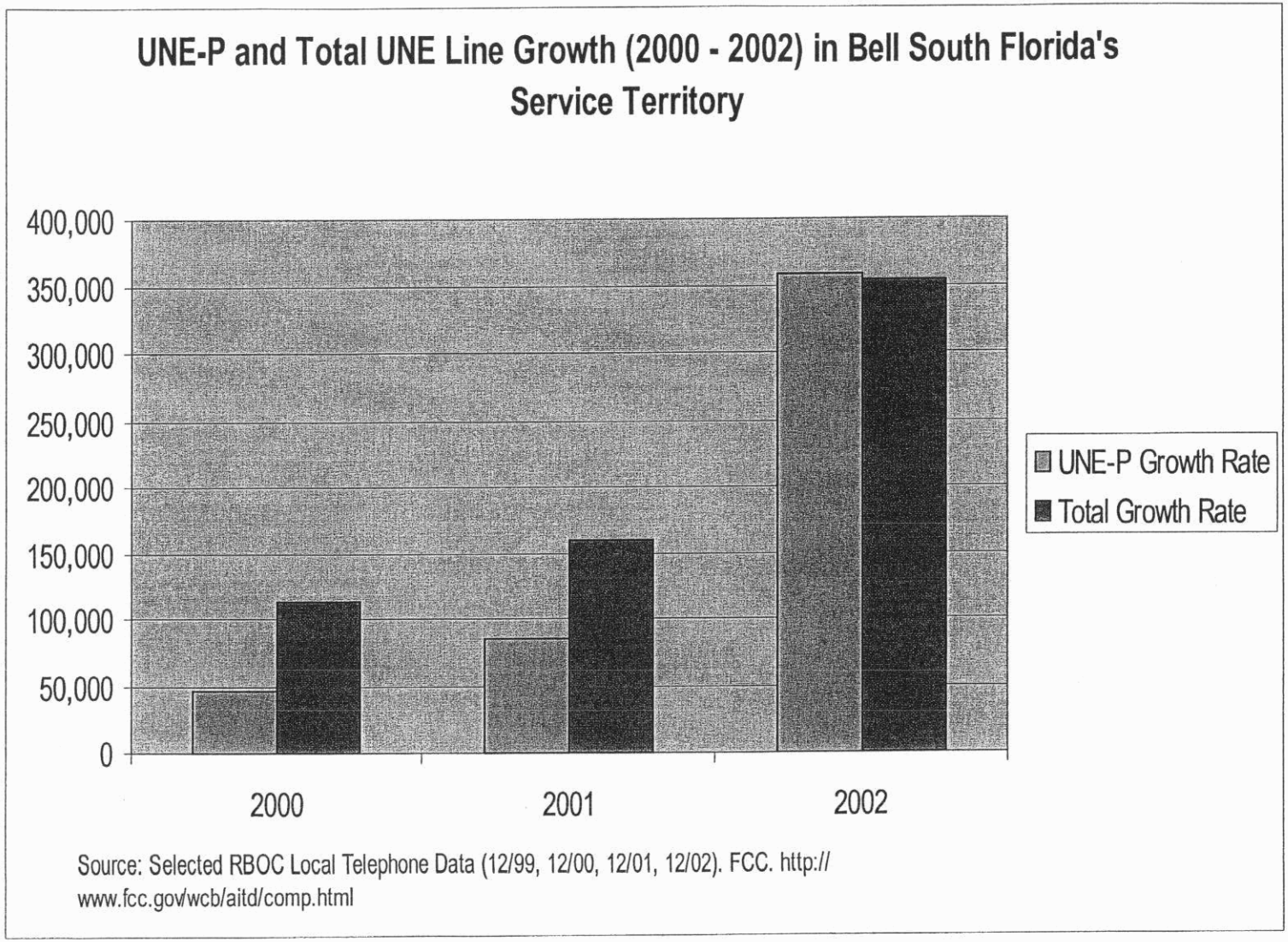
James D. Webber

Application of CenturyTel of the Midwest-Kendall LLC Requesting Public Service Commission to Approve Alternative Regulation Plan.
On behalf of AT&T Communications of Wisconsin, L.P. and TCG Milwaukee.

PSCW Docket No. 05-TI-174
Generic review of carrier performance and consumer benefits under alternative regulation.
On behalf of AT&T Communications of Wisconsin, Inc.

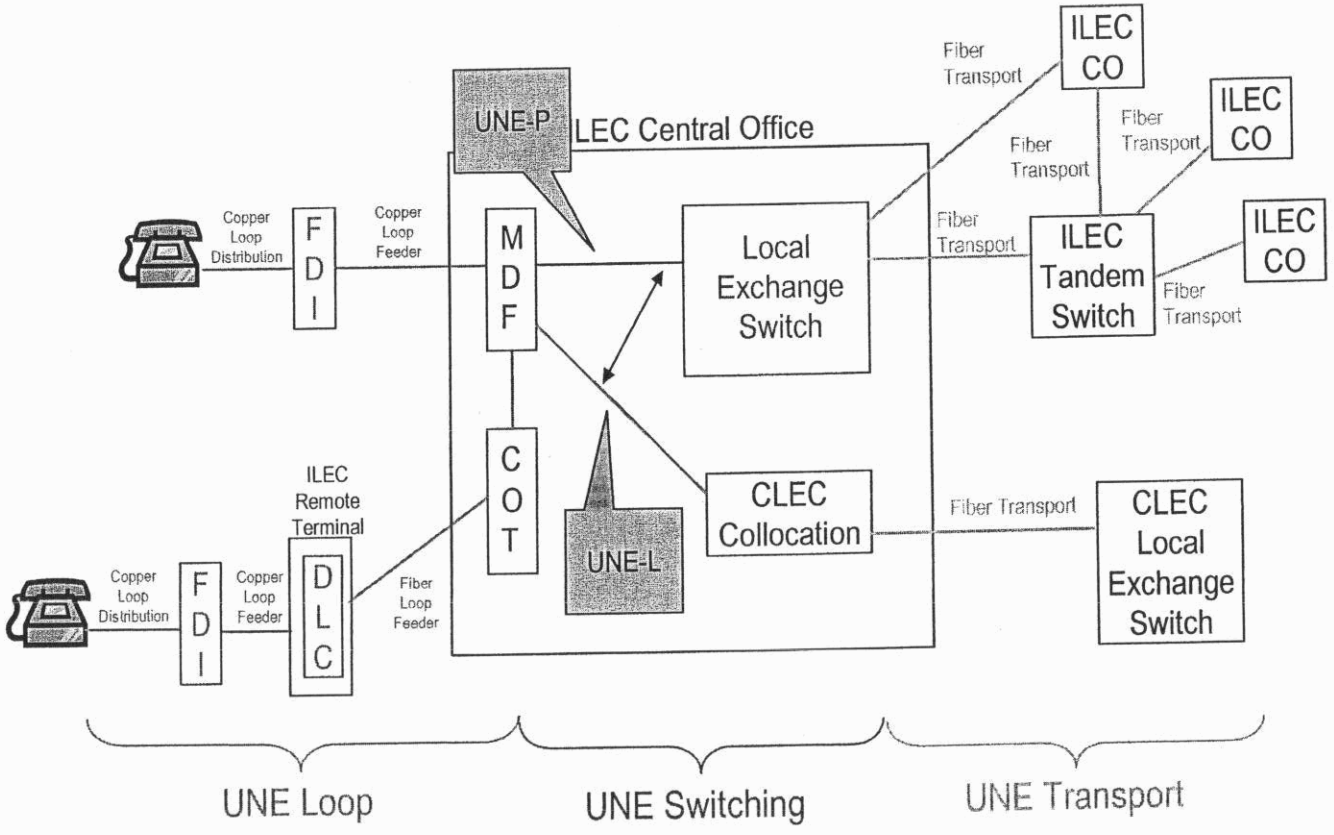

UNE-L vs.UNE-P Growth
(Thousands of Lines)
12000
10000
8000
6000
4000
2000
0
Dec-99
Jun-00
Dec-00
Jun-01
Dec-01
Jun-02
Dec-02
UNE-L
UNE-P


CLEC Market Share Growth in Florida (1999 - 2002)
15%
13%
11%
9%
7%
5%
Dec-99
Mar-00
Jun-00
Sep-00
Dec-00
Mar-01
Jun-01
Sep-01
Dec-01
Mar-02
Jun-02
Sep-02
Dec-02
CLEC Penetration
Source: Local Telephone Competition: Status as of December 31, 2002. FCC. June 2003

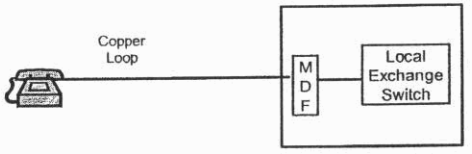


Source: Selected RBOC Local Telephone Data (12/99, 12/00, 12/01, 12/02). FCC. http://www.fcc.gov/wcb/aitd/comp.html

UNE-P to UNE-L HOT CUT

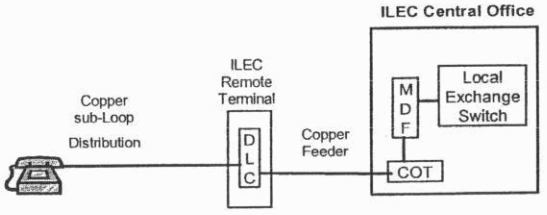


(1) All-copper outside plant; no digital loop carrier (DLC)

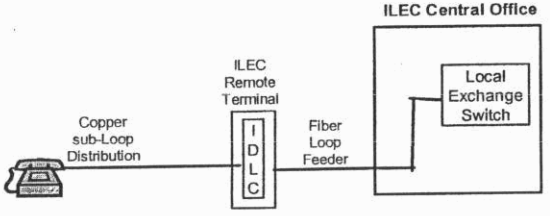


Local Voice Network

(2) Copper loop plant with UDLC



(3) Copper & fiber loop plant with IDLC



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Attaining fast speeds with a 56 Kbps modem

A modem connection must fulfill three requirements to support a 56 kilobits per second (Kbps) (also called V.90) connection.

1. The host server must use a digital connection to the network. Your Internet service provider can tell you if they support 56 Kbps service.
2. Both ends of the connection must support the same protocol, the V.90 standard or either of its predecessors, K56flex, or 3COM/USR X2. For example, if your Internet service provider has a V.90 device, your modem must support the V.90 protocol.
3. There can only be one analog connection between your modem and the host computer. The phone line in most homes is an analog line.

If a connection does not meet these requirements, a modem falls back to the fastest protocol that works for the connection. For example, a 56 Kbps V.90 modem falls back to the 33.6 Kbps V.34 protocol if it cannot make a V.90 connection. Even if your connection fulfills these requirements, other factors may reduce either the transmission speed or the number of times that you successfully obtain the highest speed connection. For example, old lines or lines that are subject to interference may reduce transmission speeds. Maximum throughput speeds of 26 Kbps are not unusual in these cases.

Devices to improve the quality of your telephone service may also hamper 56 Kbps V.90 modem connections. Load coils found on long wire lengths to improve voice quality do not usually prevent V.90 connections, but can reduce the speed. Digital pads, which balance the volume of voice calls, usually do not prevent V.90 connections, but they can reduce the speed. Analog pads prevent V.90 connections, because they convert the digital data to analog to balance the volume and then back to digital. This inserts an additional analog section in the line.

In practice, the 56 Kbps speed supported by the V.90 and other protocols is unattainable. U.S. government regulations to safeguard public phone systems right now limit transmission speeds to 53 Kbps. Phone-line noise and other limitations of phone systems usually keep average transmissions in the 40 to 50 Kbps range.

For more information, see The V.90 modulation protocol, Data transfer speed, Improving modem throughput speeds, Optimizing data transfer speed, and Protocols and standards

Last updated: February 28, 2000

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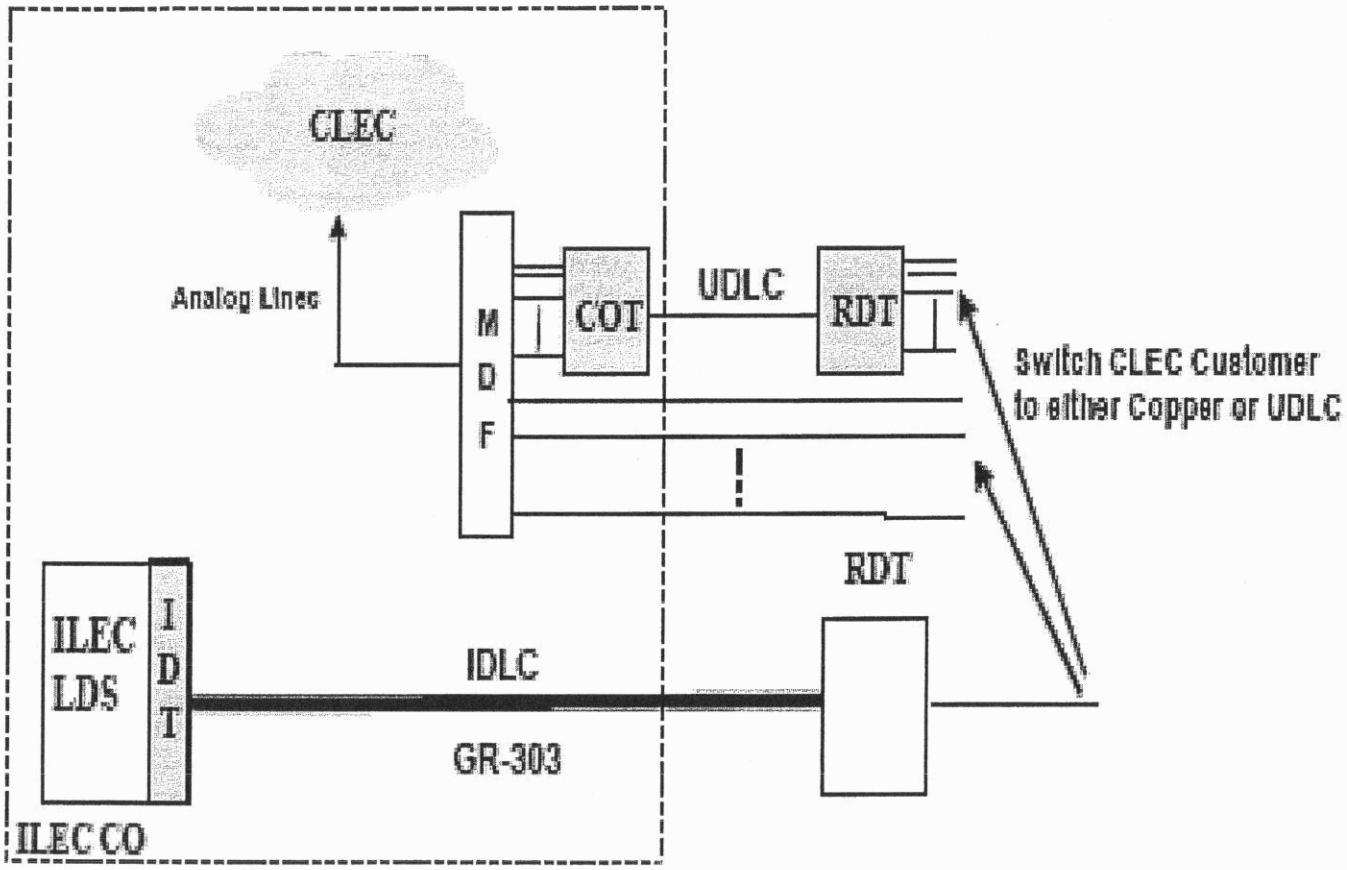
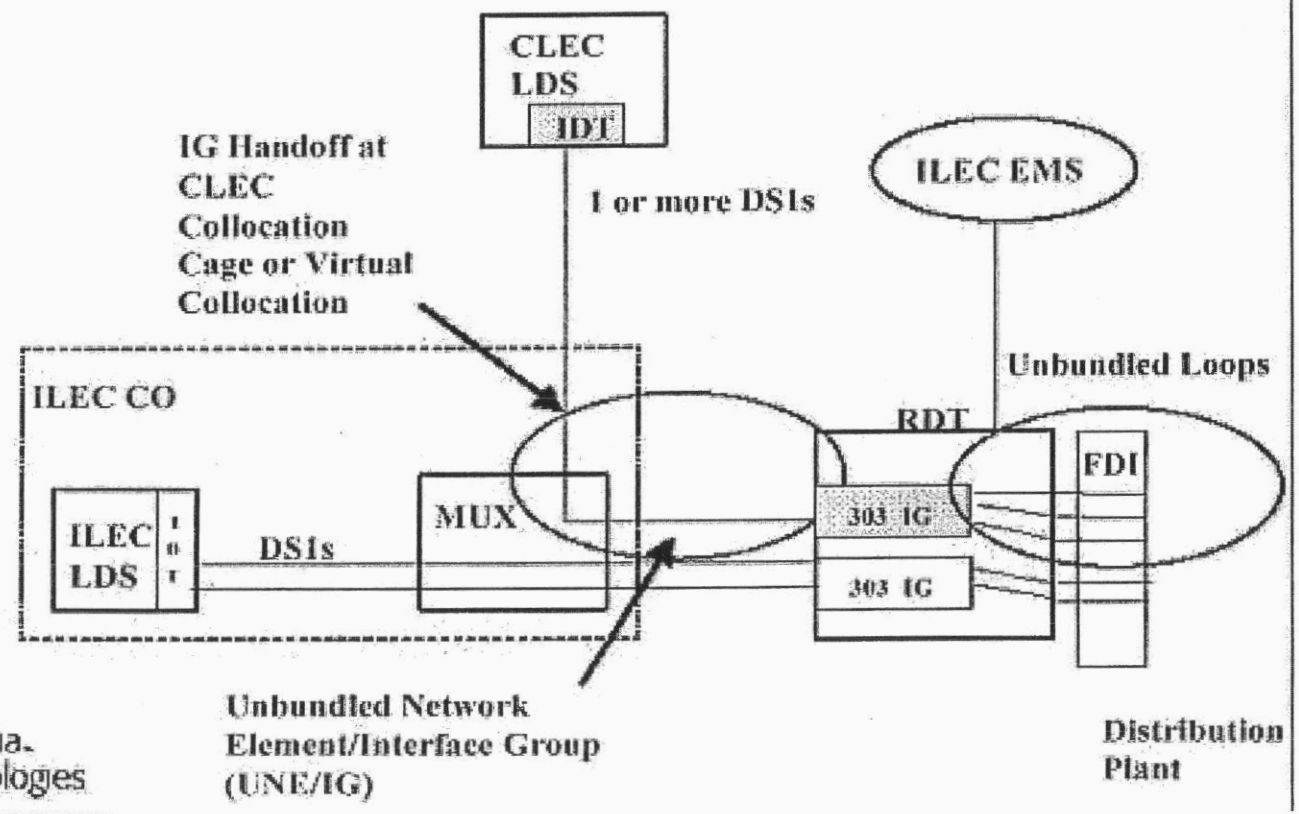


Figure 12-33. IDLC Unbundling - Bypass the IDLC System

Unbundling a GR-303 IG

Architecture



Telcordia Technologies

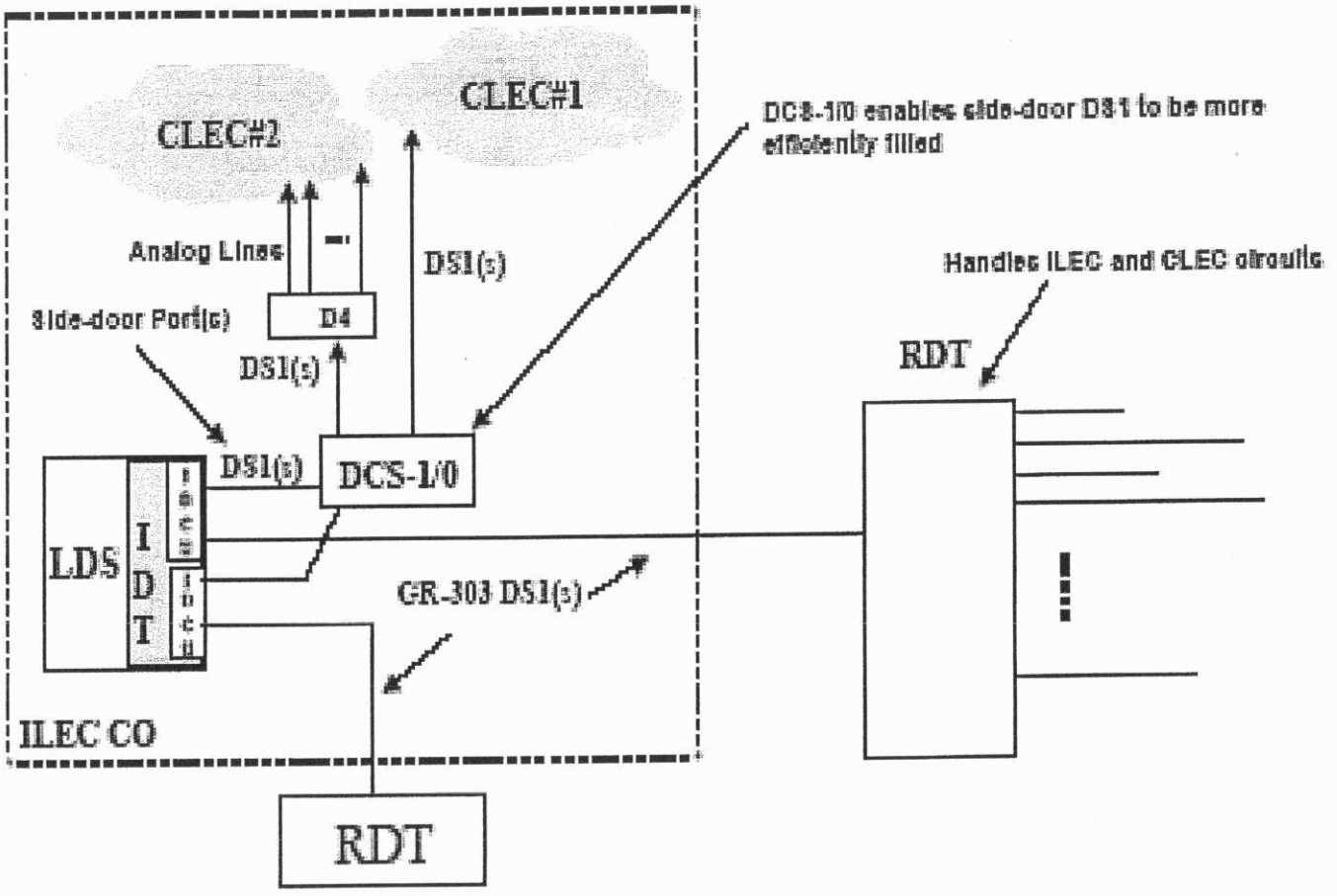
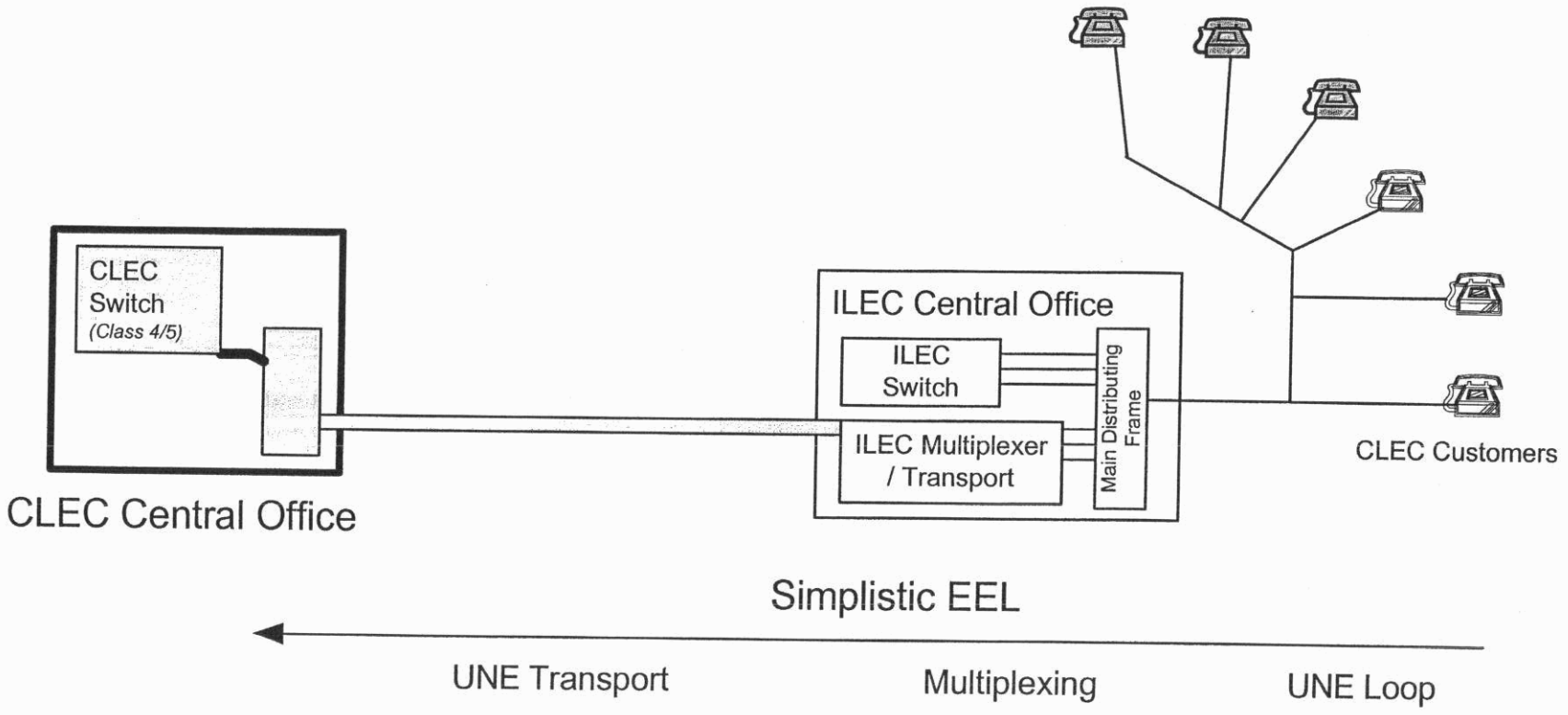


Figure 12-36. IDLC Unbundling Using Sidedoor Port

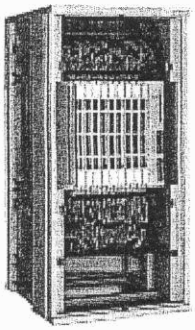

CLEC
Switch
(Class 4/5)
CLEC Central Office
ILEC Central Office
ILEC
Switch
ILEC Multiplexer
/ Transport
Main Distributing
Frame
CLEC Customers
Simplistic EEL
UNE Transport
Multiplexing
UNE Loop

White Paper on MDF Management

ControlPoint™

MDF/IDF Line Management
in an ILEC Central Office or Remote Environment

February 2001



nhc

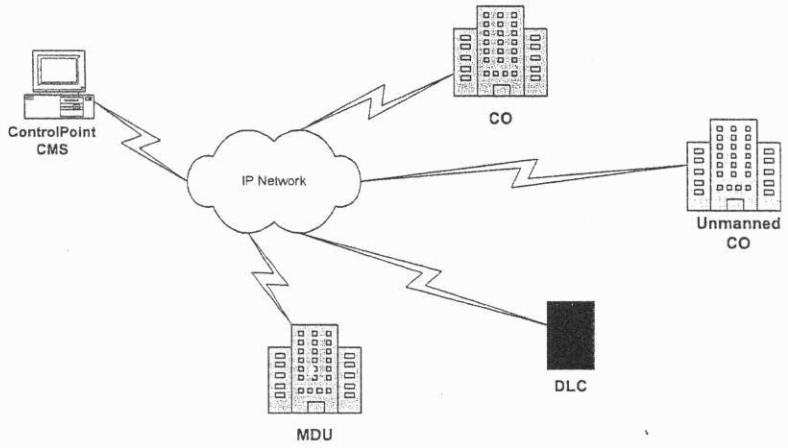
Introduction

The deregulation of telecommunications services and recent FCC rulings has changed the dynamics of the local loop. Collocation is an everyday reality in most central offices and potentially in many remotes. Connection management, as customers migrate between providers, is challenging and presents a "service strain" to the service provider. "Line sharing" rulings are expected to accelerate demand and pose new line-qualification challenges to the ILEC.

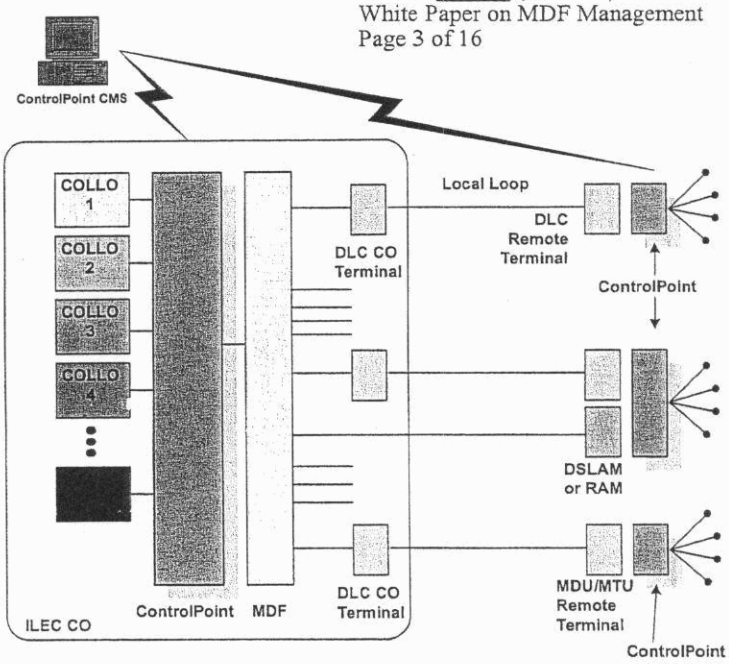
The dramatic increase in competition for the local loop increased the level of activity centering on connection, maintenance, and management of copper wire and wireline services. Given these high levels of activity in the loop, the traditional labor-intensive manual approach to cross-connect management is no longer viable via manual labor and processes. "Truck rolls" are too slow and expensive to be effective in today's competitive industry. The obvious answer: automate the provisioning process and provide intelligent wireline management at the physical layer.

NHC's innovative ControlPoint Cross-Connect System replaces labor intensive wiring, reducing operating costs and maintenance, improving service delivery cycles. ControlPoint dramatically reduces labor, space, and time of service versus conventional MDF/IDF and OSP distribution frames that require on-site wiring by experienced technicians. The NHC solution provides the ILEC with complete control over the entire service deployment cycle, and ensures quality of service (QoS) via fallback switching. ControlPoint works with all copper based services including POTS, ISDN, T1, xDSL and other voice and data protocols. The ControlPoint Cross-Connect Systems is deployable in:

- Manned central offices (CO).
- Small unmanned COs under 5,000 lines.
- Remote Terminal Cabinets housing Digital Loop Carriers (DLC).
- Multi-Dwelling and Multi-Tenant Units (MDU/MTU)
- OSP Feeder/Distribution Cross-Connect Frames



NHC's ControlPoint solution addresses the problem of automating the basic cross-connect function of provisioning, test access, service migration and fallback switching, in each of these locations. The purpose of this document is to show how NHC's ControlPoint Cross-Connect System can help the ILEC manage its MDFs more effectively.



The MDF marks the point at which the local loop meets the Telco's access service equipment. The myriad of connections that need to be made and remade due to new deployment and churn, are putting greater manpower pressures on the ILEC. Compounded by the fact that the ILEC must manage not only its own telecom lines but also the lines feeding to multiple co-locations (COLLOs), the ILEC is forced to look for new ways to automate some of the service provisioning and migration task.

The problem with subscriber churn is prompting ILEC's to seriously look at new technologies to control MDF management costs and improve quality of service (QoS). The following quotation from Telecommunications Magazine provides a idea of the scope of the problem.

"…. the average U.S. churn rate now hovers around 40 percent for most providers, with customer acquisition costs at about $400 per subscriber."….

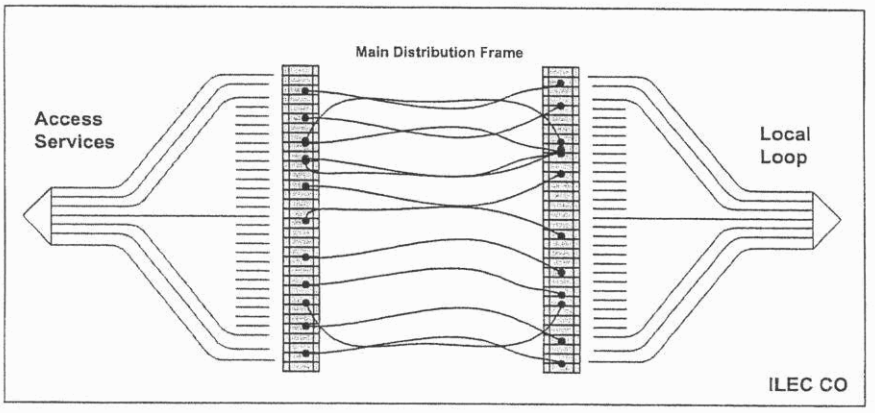
"But Europe also leads its New World counterparts in less positive statistical measurements. Subscriber churn in many markets now exceeds 3 percent a month, rising to near-disastrous rates of 35 percent to 50 percent on an annual basis. The expense of acquiring new European customers, which can cost up to $700 each, makes these high churn rates even more painful."…..

"Churn now costs European and U.S. telcos close to $4 billion each year, and the global cost of customer defection may well approach a staggering $10 billion."

Source: Telecommunications Magazine. February 1999. Jean Schmitt, chief executive officer of SLP InfoWare, a provider of churn-management and customer-retention software applications.

Services To Be Managed at the MDF

The MDF is the point of cross-connection for a wide array of telecom and datacom services. The type of services that require cross-connect management include POTS, ISDN, Centrex, T1, SDSL, ADSL, HDSL, HDSL2, TIE lines and dry copper pairs originating from residential and business users, MTU/MDU, Digital Loop Carrier (DLC) remote terminals and other CPE equipment. These lines terminate on the Main Distribution Frame and are then cross-connected to various equipment such as Class 5 switches, multiplexers, digital access cross-connects (DACs), DLC CO terminals, add/drop multiplexers, routers, POTS splitters and DSLAMs. The MDF provides the facility by which each copper subscriber pair gets connected to the correct carrier and service.



Manual Reconnection Work

Currently each connection requires a frame technician to manually re-terminate a patch cable between the subscriber line and the access equipment. A large taskforce is often reserved only for this task. In some unmanned COs, a technician must be sent on site every time a re-connection is required. As the number of COLLOs grows, the rate of churn increases, putting more pressure on the ILECs to connect and re-connect subscribers to high-speed services. ILECs are being forced to increase their manpower simply to move connections at the MDF. Consequently, they are searching for ways to offset this cost by automating some of the work. The type of connections being performed at the MDF include:

- Connecting the local user to a new access service.
- Migrating a subscriber to a new service.
- Re-connecting a subscriber from a faulty line card to a spare.
- Connecting subscriber lines to COLLO distribution frames.
- Connecting test equipment to the local loop.

Which Lines to Automate First

While the objective is to use ControlPoint to manage the entire MDF, from a logistics point of view it may be necessary to proceed in phases, beginning with the lines that have the highest churn rate.

Therefore the main problem facing the ILEC in deploying an automated MDF is identifying which lines and services to automate first. The main criteria in determining this is the rate of subscriber churn.

T1 or DSL subscriber loops that migrate several times per year present a higher priority to the ILEC in terms of managing them through ControlPoint. POTS lines on the other hand in general have a lower churn rate and therefore may not seem be immediate candidates for ControlPoint. However, the ILEC could elect to terminate large blocks of POTS lines immediately onto to ControlPoint in anticipation that they will migrate to higher speed services.

Therefore, the first task of the ILEC is to rank its local loop segments, services and carriers by "churn rate" and to assess whether any POTS loops should be pre-terminated onto an automated cross-connect for future service migration. Churn is usually measured as the percentage of lines that are moved or disconnected each month. This exercise provides an indication of where to focus efforts in automating the MDF.

As an illustration, the following table shows how this ranking might look for a particular CO. In the example, if the Sector D portion of the local loop is a prime candidate for migration to highspeed service (ie; because of its location, etc), then it could be pre-terminated earlier than other sectors that do not have this expectation for service migration.

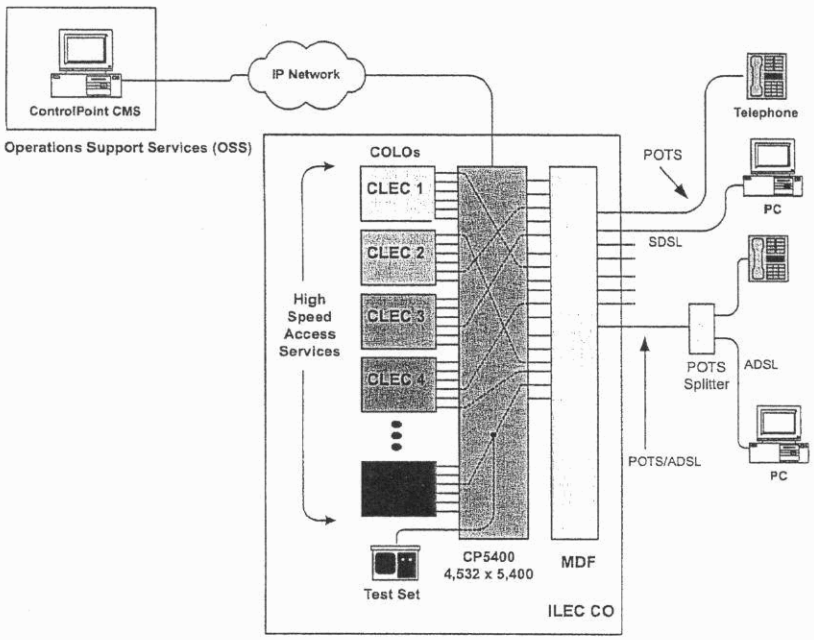
CO A - Monthly Churn Rates					
Carrier	% churn	Service	% churn	Local Loop	% churn
CLEC C	3%	T1	2.5%	Sector B	2.0%
CLEC B	2.5%	ADSL	2.0%	Sector A	1.9%
CLEC D	2%	HDSL	1.5%	Sector C	1.8%
CLEC E	1.3%	Centrex	1.0%	Sector D*	1.3%
ISP A	1.2%	POTS	.6%		
ILEC	1.0%				

*anticipate shift to DSL

From the above table, one approach would be for the ILEC to prioritize lines and services with churn rates of 2% per month or higher. Thus, CLEC C, B, E and services T1, ADSL and local loop sector B would be connected to ControlPoint first.

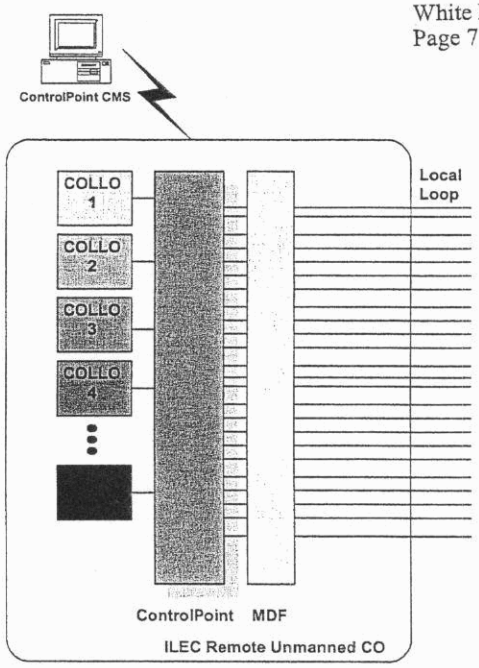
Managing High Speed Data Lines

In determining which part of a CO's MDF operation to automate first, the ILEC may choose to prioritize service connections that exhibit the highest overall churn rate, such as high speed data lines. These services would include T1, SDSL, ADSL, G.Lite, HDSL and HDSL2 among others. These services may be terminated on ILEC equipment or on CLEC distribution frames and may originate from multiple COLLOs or from the ILEC's own equipment. The following diagram shows how NHC's ControlPoint 5400 Crossconnect Switch (CP-5400) could handle the cross-connect function between multiple high-speed services.



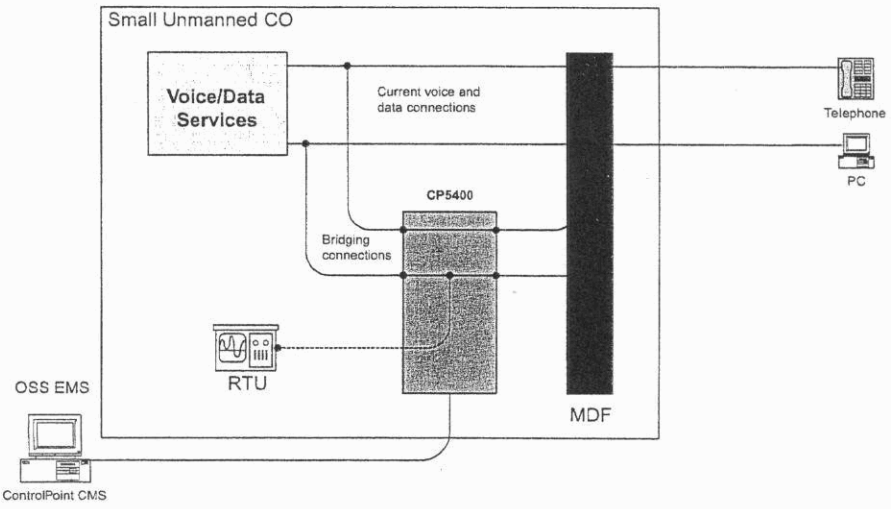
Small Unmanned COs Under 5,000 Lines

One of the ILEC's major problems is how to manage the numerous small unmanned COs in its territory. Large enough to require a facility-based MDF but not large enough to require a full-time on-site frame technician, these unmanned COs are often located far from the main CO and support under 5,000 lines, mainly simple dial tone offices with little or no COLLO. Consequently whenever a re-connection is needed, a technician has to travel significant distances to make a simple re-connection. Using ControlPoint, the ILEC could manage these MDFs remotely without having to send a frame technician on-site.

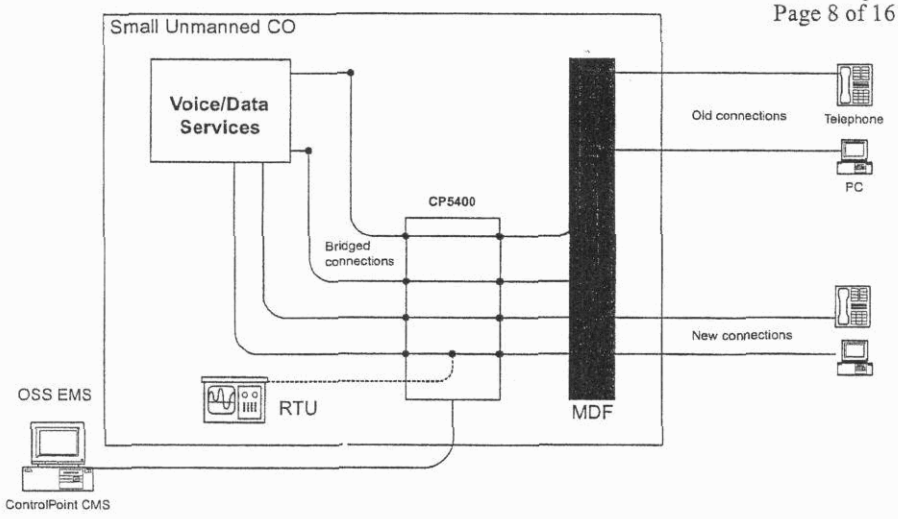


The cut-over would take place by first bridging the ControlPoint 5400 to the existing MDF. Once testing is completed and the CP5400 has been put into service, the MDF would be removed. New lines would be terminated directly onto the CP5400. The following diagrams show the cutover process.

The first stage would be to attach bridging adapters between existing voice/data services and the CP5400. An RTU connected to ControlPoint could be used to verify the lines before final cutover.

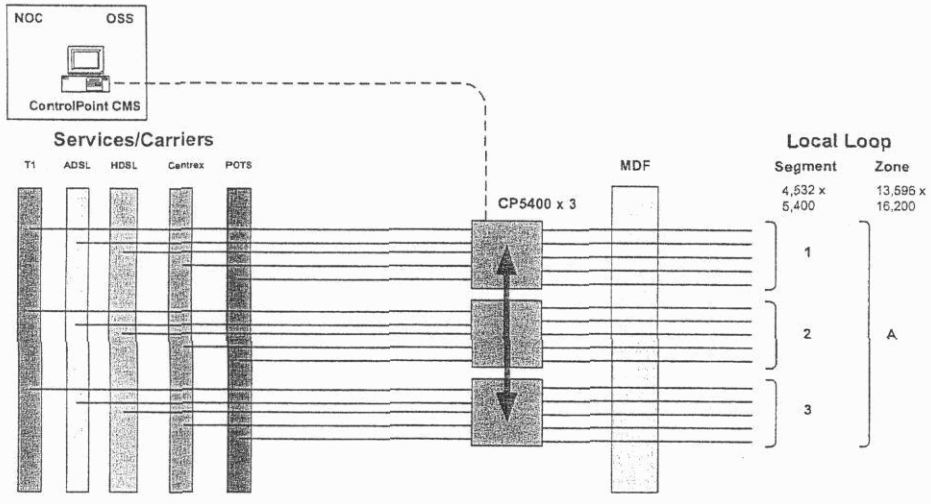


Once testing is complete the connections would be switched over to ControlPoint. The old connections would be removed. Subsequent connections would be managed exclusively via ControlPoint and all new services would be terminated directly onto ControlPoint, bypassing the conventional MDF.

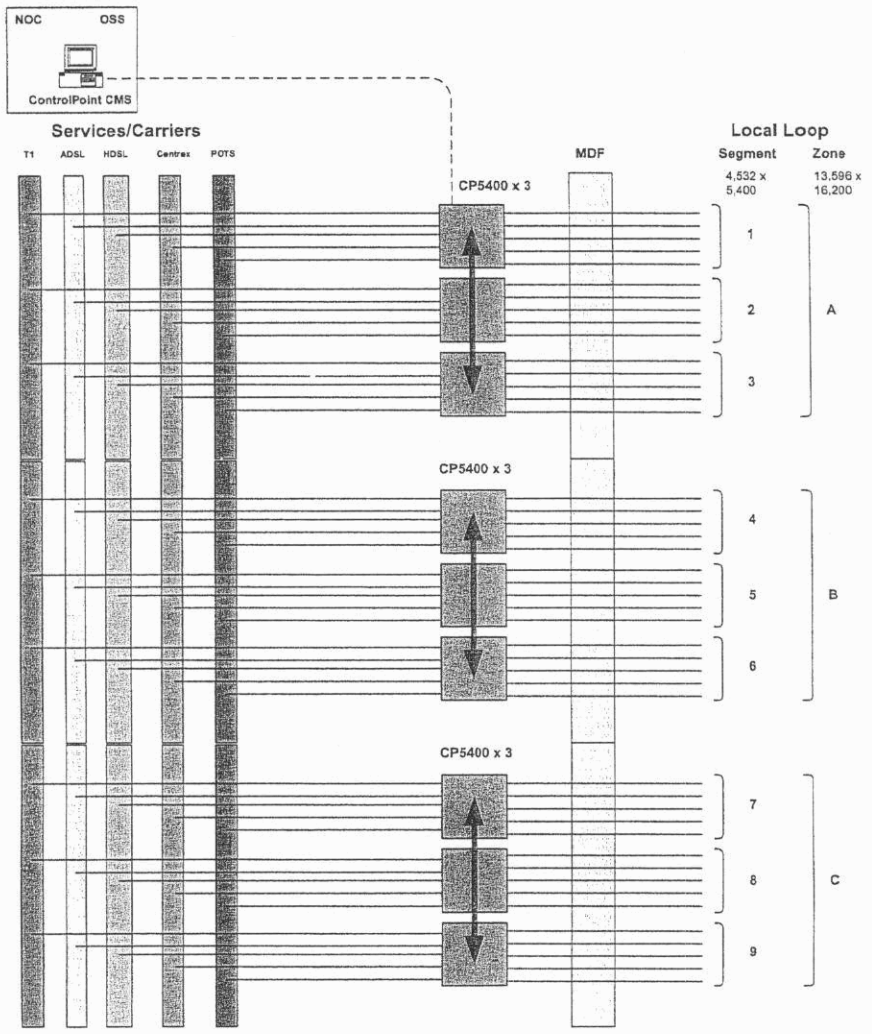


Managing an MDF of 50,000 lines

The management of larger MDFs would follow a process similar to an unmanned CO. The difference would be that in smaller COs, a single CP5400 (4532x5400) would be sufficient to handle all terminated lines and service access ports. On the other hand, in the larger COs where the number of lines exceeds the capacity of the CP5400, it would be necessary to partition the MDF into "zones" so that service access ports are available to any subscriber loop that is terminated onto any ControlPoint switch. Thus subscriber lines could be connected to any service regardless of which cross-connect switch they are connected to. The allocation of access ports to each switch would depend on the local loop subscriber profile of the CO. In the diagram below each ControlPoint is connected to a group of local loop pairs constituting a "segment".



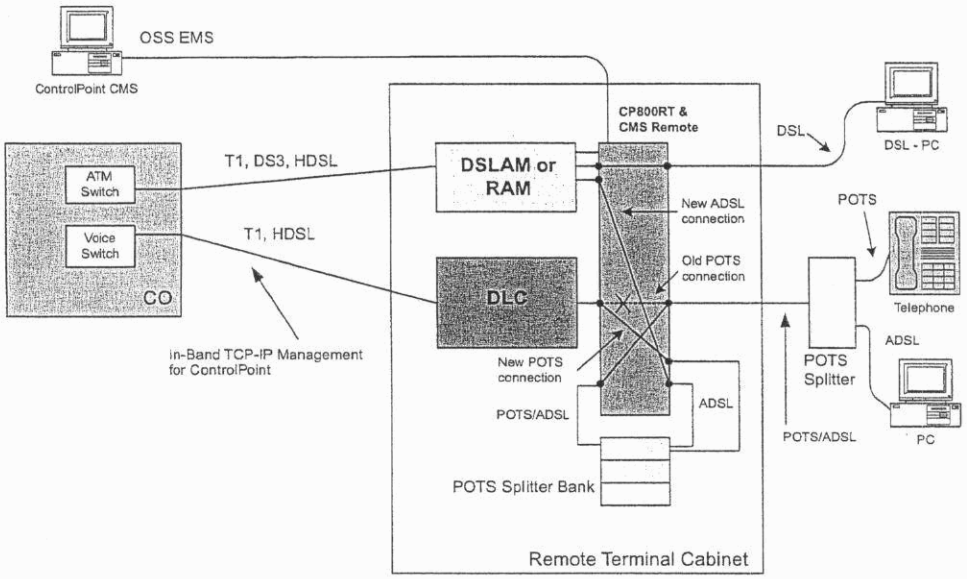
In order to handle matrices larger than 5,000, the CP5400 has the capability of being able to be cascaded to another CP5400 in order to create a larger, "any-to-any" blocking matrix. For example three CP5400s can be cascaded to form a matrix of 13,596 x 16,200, of which 950 lines may be connected anywhere within a zone. These 16,200 lines would constitute an MDF "zone". Once these 950 lines are used up, the matrix is blocked and the cross-connect switch may need to be "reset" to free up some of these 950 cross-connect points. These 950 lines are basically to handle the disproportionate distribution of services versus subscribers. For example, if a subscriber needs access to a T1 line and there are no more allocated to the switch that he is connected to, then it would be possible to connect him to a different switch within the same zone. The following diagram illustrates the zoned approach.



Using a zoned approach, MDFs of even greater size could be managed in a similar way. The main problem is how to allocate subscribers and services to each MDF so that most cross-connections are handled within a given zone. This should be determined by gathering data about what the service profile is for each segment of the MDF. This information helps to determine how many service ports of each service class to allocate to each CP5400.

Remote Outside Plant Application - RT and MDU/MTU

The outside plant is another area in which ControlPoint could be used for local loop management. This includes Remote Terminals and MDU/MTUs. The Outside Plant Serving Area Cross-connects (SAC) contain DLC equipment that is traditionally used only for voice. Today, the RT's are being expanded to support highspeed data service and additional equipment such as DSLAMs, Remote Access Multiplexers (RAMs) RTUs, and POTS splitters are being installed. Tasks such as line qualification, service migration and fallback switching could be handled remotely with ControlPoint, eliminating the need to send a trained field service technician to the RT.



DEDICATED COPPER LINE

The ControlPoint switch would sit between the DLC/DSLAM and the termination frame. All local loops, DSLAM ports, DLC ports and POTS splitter ports would be pre-terminated on the switch. In the case where the CLEC owns the DSLAM, it would issue a request to the ILEC to provision a new copper pair to its DSLAM. The ILEC ControlPoint Operator could connect a remote test unit to the line via ControlPoint to qualify the line for highspeed data. Once the line was qualified, the ILEC could hand off the connection to the collocated DSLAM via ControlPoint. Depending on the number of lines to be managed, the appropriate size ControlPoint switch would be deployed; from the CP800RT (800 lines) up to the CP5400 (5400 lines).

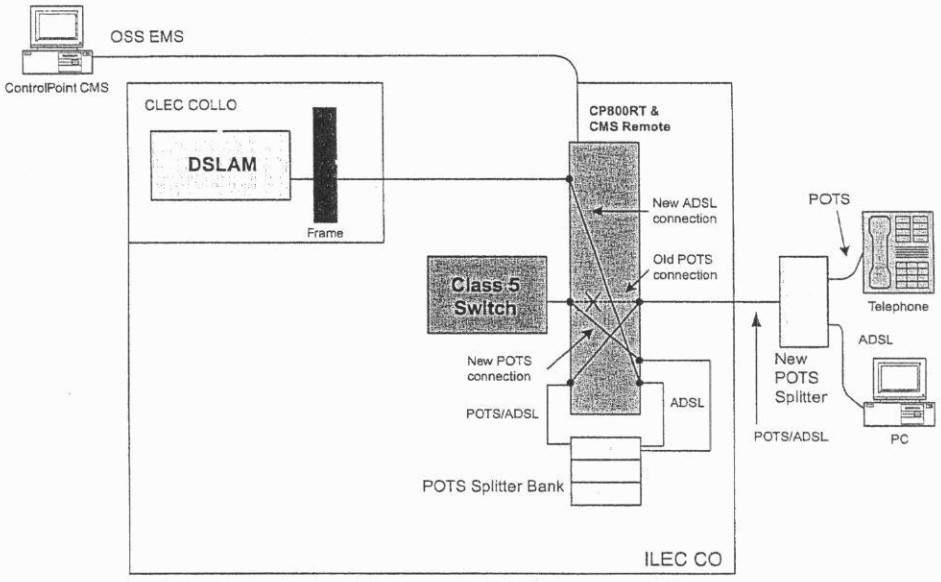
SHARED-LINE

In the case where the line is to be shared, the CLEC would install a POTS/DSL splitter at the CP. The ILEC would switch the CP's POTS service over to a POTS/DSL splitter located in the RT. The CP800RT would remotely make the necessary connection between the splitter, DLC and the local loop. Once the CLEC was ready, the ILEC would cut-over the data portion of the splitter to the CLEC's DSLAM or RAM. Pre-qualification could be handled by the ILEC in the same way as an unshared line, depending on the COLLO agreement.

Shared-Line Environment

In an unshared line environment there are dedicated copper pairs for POTS service and separate dedicated pairs for data. Mass deployment of ADSL has led to further FCC deregulation whereby the ILEC must allow a CLEC to share the ILEC's existing POTS lines in order that the CLEC can provide high-speed data service to the subscriber. This means that the ILEC (or CLEC) must install POTS/ADSL splitters that allow the data portion of the line to be handed off to a CLEC (or to the ILEC's own DSLAM) and the POTS service to be connected to the ILEC's Class 5 voice switch.

If the splitters are installed in the ILEC's wiring area, then connections to and from the splitter would need to be managed by ControlPoint in order to automate the cut-over from POTS-only service to POTS/ADSL service. The following diagram shows how this cut-over would take place.



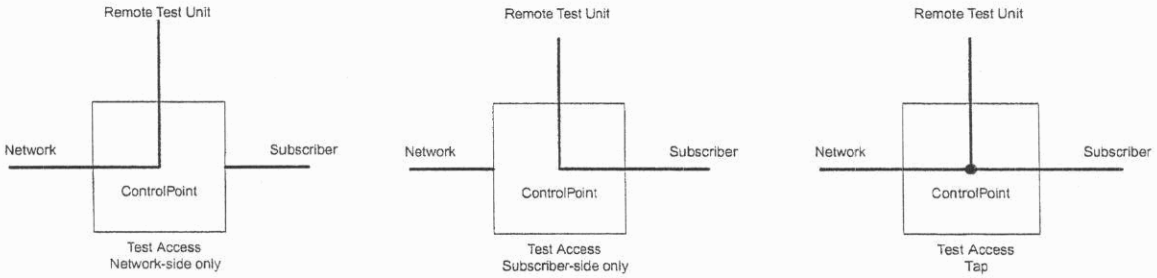
The provisioning process might be handled in the following way:

1. CLEC receives a service request from a subscriber to connect to its ADSL service.
2. CLEC requests ILEC to terminate the data portion of the subscriber's line on the CLEC's frame.
3. ILEC connects the subscriber's copper pair to a spare loop port on ControlPoint.
4. POTS/xDSL splitters pre-terminated on ControlPoint and on the Class 5 switch waiting for cutover.
5. ILEC performs full-spectrum line-testing and reports to CLEC (depending on COLLO agreement).
6. Class 5 Switch re-programmed to allow the subscriber to maintain current POTS service and number.
7. ControlPoint connects the subscriber to the POTS/xDSL port on the splitter.
8. ControlPoint connects the xDSL port on splitter to the CLEC data line terminating on the CLEC frame.
9. CLEC terminates the subscriber line on its DSLAM and commissions service.

Test Access

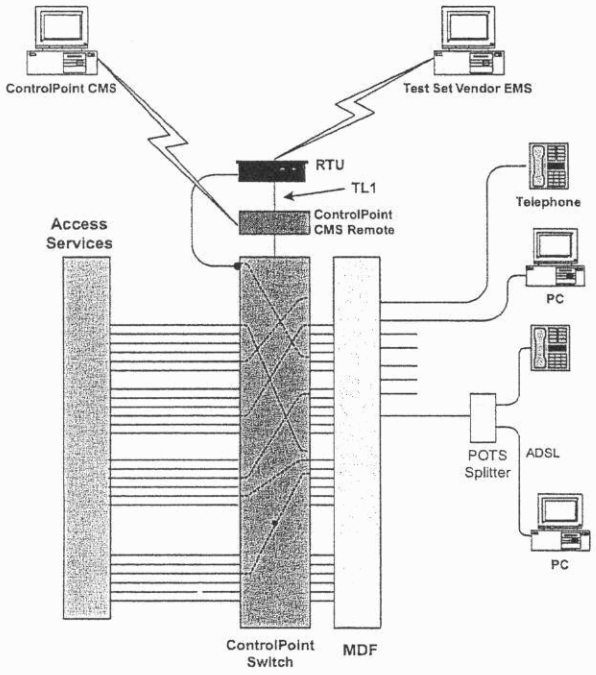
ControlPoint also operates as a metallic test access unit (MTAU) to allow the ILEC to conduct local loop line qualification at the MDF or remote terminal. ControlPoint features subscriber-side loopback and multipoint capability enabling the switch to support a variety of test configurations, including;

a) test access on subscriber-side only
b) test access on network-side only and
c) test access via center tap



ControlPoint will work in conjunction with third part test set vendors such as Hekimian, Tollgrade, Sunrise and Harris to support a variety of single-ended or dual-ended tests, providing a complete test access solution. In the current state, ControlPoint and third party test sets would be controlled via each vendor's respective EMS. Depending on the ILEC's needs custom APIs could be developed to further integrate the ControlPoint with the ILEC's preferred test set vendor.

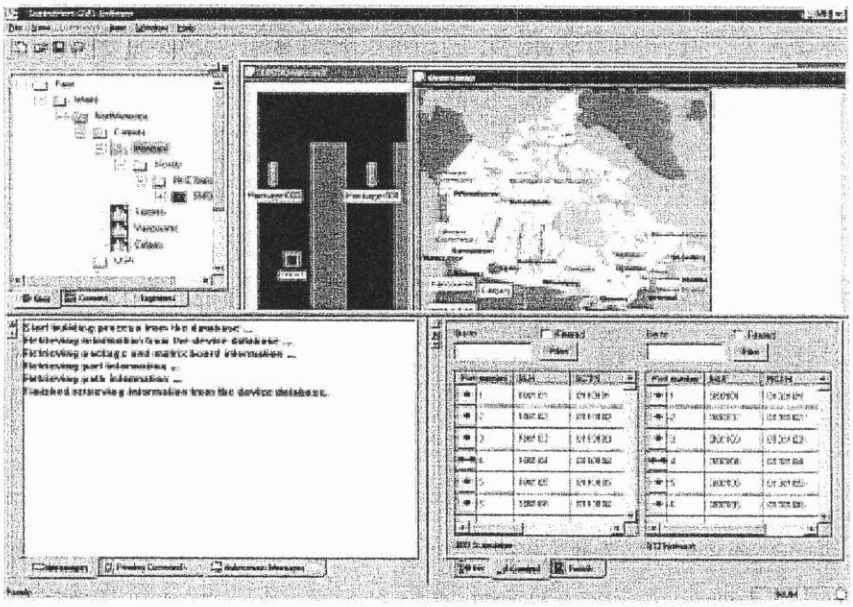
NHC is currently developing a TL1 interface to allow any third party RTU to control the ControlPoint Switch via its own EMS.



Software Capabilities

Initially, ControlPoint would be managed via NHC's ControlPoint Connection Management System (CMS) Software. The CMS Software is a Windows-based GUI interface that communicates with ControlPoint via NHC's ControlPoint CMS Remote SNMP Controller. The OSS would generate a work order that says "Connect subscriber line A to access service point B". A CO-based ControlPoint operator would call up the CMS software and instruct ControlPoint to make the changeover.

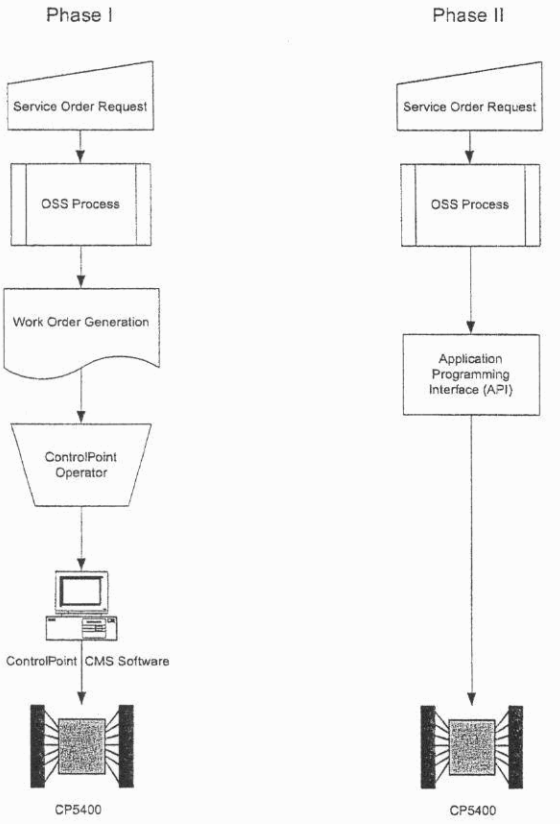
CMS provides real-time cable/connection records and communicates over an Ethernet 10/100 LAN via SNMP. Connecting and disconnecting ports using CMS is a simple drag & drop operation, providing all the controls required to manage the matrix switch. Locating and taking control of any matrix switch in a multi-switch configuration is handled graphically by clicking on switch icons or by clicking on leaves of a tree representing switches. In fact, the CMS software allows an operator to create multi-level geographical views of any installation, detailing countries, cities and buildings and represent them with icons and backdrop bit maps. By clicking on these icons the user can easily drill-down to locate and take control of any matrix switch on the associated network.



During the initial installation phase an operator can totally configure and test the matrix switch before installing the unit in its final location. Connection changes may be pre- programmed and saved for later execution. Once executed, a pre-programmed connectivity file can be left unattended, while the process continues until complete. In addition, the system allows the operator to interrupt this process to accommodate additions, deletions and changes. A backup procedure, allows connectivity and database information to be stored for later recovery should a failure occur.

Flow-Through Provisioning

Initially, ControlPoint would integrate with the ILEC's OSS through its usual service order process. When a service order is received, work orders would be issued and the ControlPoint operator would process the connection order as any other work order. ControlPoint CMS would be treated as a standalone Element Management System (EMS). Once this phase is operational, the second phase would be to streamline the flow-through provisioning process and have the ILEC OSS control the switch directly via a TMN-based Application Program Interface (API). This would allow the paper-based work orders process to be bypassed and connection changes made on-line. This interface may be developed with the ILEC directly or with one of the third party OSS vendors. The following diagrams illustrate the two phases.



Conclusion

With the dramatic increase in competition for the local access market, there is a significant increase in the level of activity focussed on connection, maintenance, and management of the copper wire and the services running over it. Given these high levels of activity in the loop, the traditional management approach is not viable;using manual labor and processes. Rolling trucks with trained technicians, is too slow and expensive to be effective in today's competitive industry. The obvious answer is to automate the provisioning process and provide intelligent wireline management in the physical layer.

The deregulation of services and recent FCC rulings has changed the dynamics of the local loop. Collocation is an everyday reality in most central offices and potentially in many remotes. Conr.ection management, as customers migrate between providers, is challenging and presents a "service strain" to
the service provider. "Line sharing" rulings are expected to fuel demand and pose serious challenges to the ILEC.

NHC's innovative ControlPoint Cross-Connect System replaces labor intensive wiring, reduces operating costs and maintenance, while greatly improving service delivery cycles. ControlPoint dramatically reduces labor, space, and time of service versus conventional MDF/IDF frames and OSP distribution frames, that require on-site wiring by experienced technicians. The NHC solution provides the ILEC with complete
control over the entire service deployment cycle, and ensures quality of service (QoS) via fallback switching. ControlPoint works with all copper based services including POTS, ISDN, T1, xDSL and others voice and data protocols. For more information, please contact NHC at 800-361-1965, 888-831-2077 or visit NHC at www.nhc.com.

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CONFIDENTIAL

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 113B
COMPANY/ MCI/Webber
WITNESS: JDW-11
DATE: 02/24 - 27/04

SUMMARY OF JIM WEBBER
CONFIDENTIAL EXHIBIT

Copies are not being provided in the Public or Redacted version of the testimony

The Confidential exhibit not included in this testimony is:

Docket No. 030851-TP
Jim Webber Rebuttal Exhibit ____ (JDW-11)
CONFIDENTIAL – Florida Collocation Comparision
Page 1 of 1

Retail to UNE-P Migration

- The CLEC issues a single UNE-P local service request ("LSR") to the ILEC following the prescribed Ordering and Billing Forum ("OBF") procedures. This LSR is issued using electronic data interface ("EDI") or the ILEC-provided graphical user interface ("GUI"). The CLEC need only provide the customer's name and telephone number. Directory listings can remain the same, and service address information and E911 information are not required by the ILEC.

- The ILEC EDI translator checks the order to ensure that key fields are correct and, via the same computer system, returns a Firm Order Confirmation (FOC) or an electronic error message (reject or clarification) to the CLEC. The FOC provides the due date for the completion of the programming necessary to complete the order.

- If an error message is issued, the CLEC must resubmit the order, restarting the process.

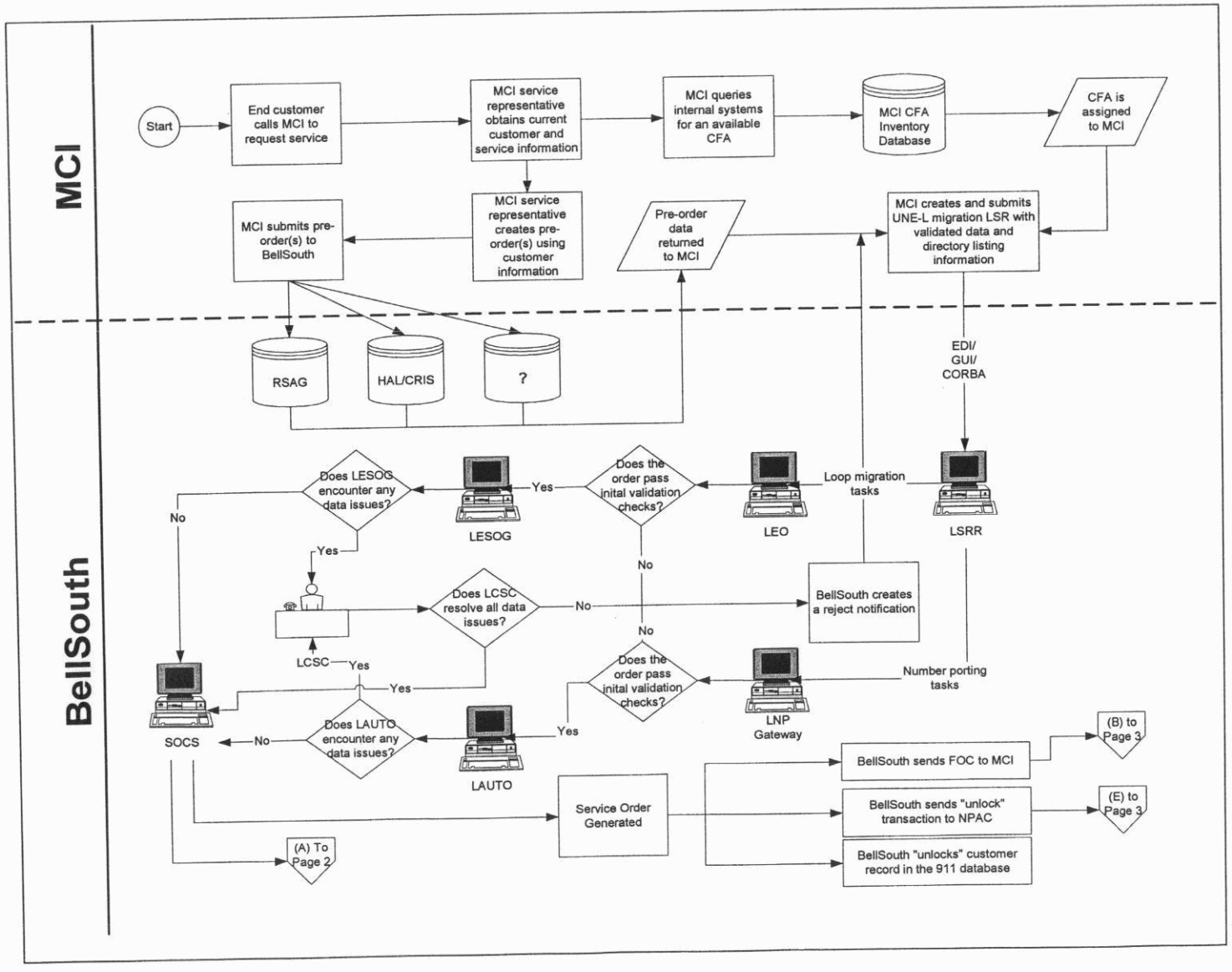
- The order then electronically "flows through" to the ILEC service order processor, where the internal service orders necessary to make the switch programming changes and billing changes necessary for the migration to UNE-P are generated. Flowthrough ensures that errors are minimized by allowing the service orders to be created mechanically, rather than typed by a service representative. Most ILECs are now achieving well more than 90% flowthrough for standard UNE-P POTS service orders.

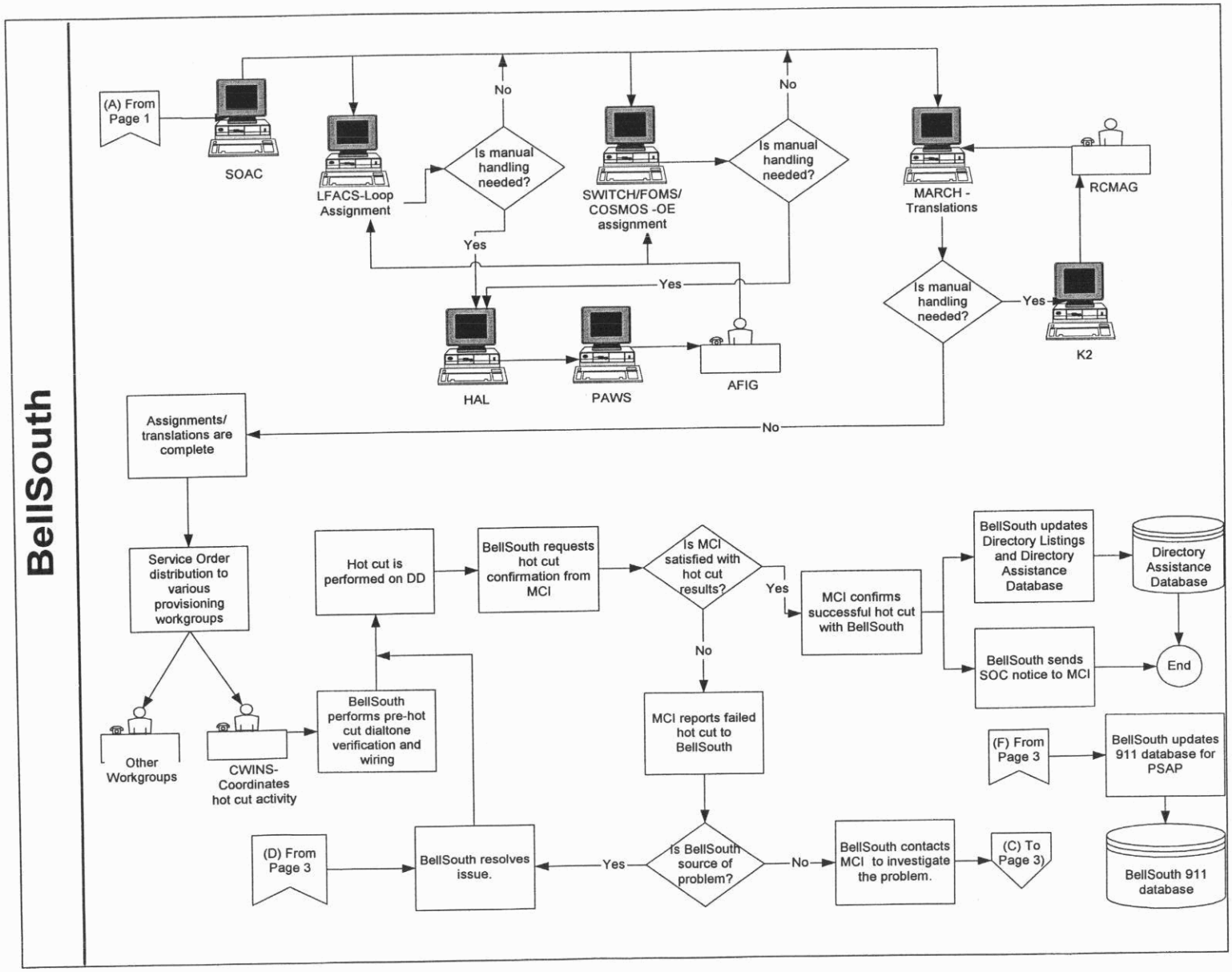
- The ILEC internal service orders initiate the internal service order provisioning process, including the implementation of switch feature changes. Migration orders do not require the dispatch of technicians to the frame because the programming changes are made at the switch and can be completed totally electronically. The physical facilities (loop and cross connect) are not changed in any way.

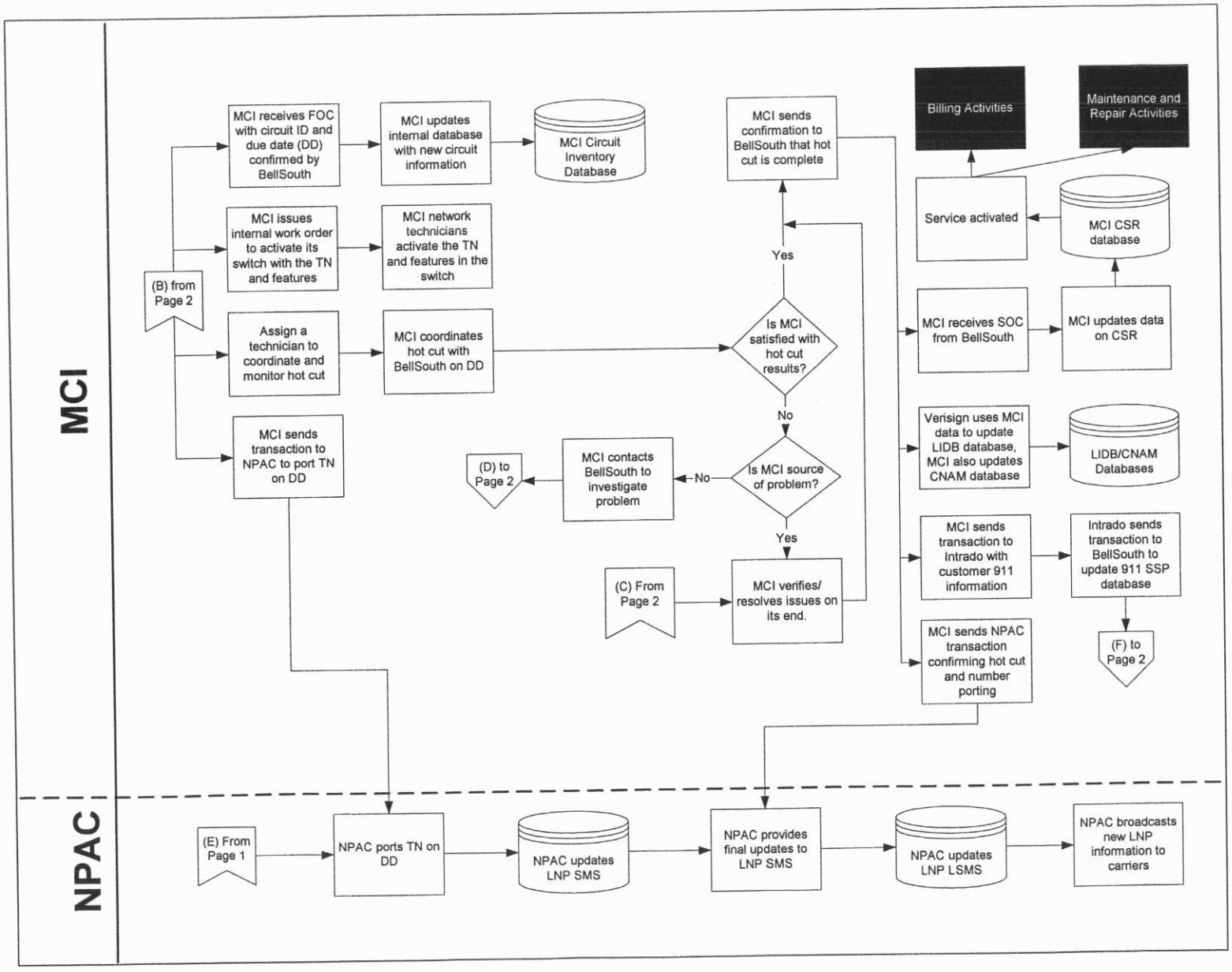
- Once the switch translations work is complete, the internal ILEC systems send the CLEC a Service Order Completion ("SOC") notifier. At this point, the customer has "migrated" to the CLEC.

- The ILEC completes its internal migration process by updating its internal customer service records ("CSR") and billing records to stop billing the customer directly and to begin issuing wholesale bills to the CLEC. Some ILECs also send a second notifier, the Billing Completion Notifier, ("BCN") to the CLEC. This final notifier is generally sent between 1 to 5 days after the internal ILEC billing systems are updated and confirms to the CLEC that the customer has been migrated and billing can begin.

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 114
COMPANY/ MCI/Lichtenberg
WITNESS. SL-1 thru SL-5
DATE: 02/24-27/04


MCI
BellSouth
Start
End customer calls MCI to request service
MCI service representative obtains current customer and service information
MCI queries internal systems for an available CFA
MCI CFA Inventory Database
CFA is assigned to MCI
MCI submits pre-order(s) to BellSouth
MCI service representative creates pre-order(s) using customer information
Pre-order data returned to MCI
MCI creates and submits UNE-L migration LSR with validated data and directory listing information
RSAG
HAL/CRIS
?
EDI/ GUI/ CORBA
Does LESOG encounter any data issues?
LESOG
Yes
No
Does the order pass inital validation checks?
LEO
Loop migration tasks
LSRR
Yes
No
LCSC
Does LCSC resolve all data issues?
No
BellSouth creates a reject notification
Yes
Yes
No
SOCS
Does LAUTO encounter any data issues?
No
LAUTO
Yes
Does the order pass inital validation checks?
LNP Gateway
Number porting tasks
Service Order Generated
BellSouth sends FOC to MCI
BellSouth sends "unlock" transaction to NPAC
BellSouth "unlocks" customer record in the 911 database
(A) To Page 2
(B) to Page 3
(E) to Page 3


BellSouth
(A) From Page 1
SOAC
LFACS-Loop Assignment
Is manual handling needed?
No
Yes
SWITCH/FOMS/ COSMOS -OE assignment
Is manual handling needed?
No
Yes
MARCH - Translations
RCMAG
Is manual handling needed?
Yes
K2
HAL
PAWS
AFIG
No
Assignments/ translations are complete
Service Order distribution to various provisioning workgroups
Other Workgroups
CWINS- Coordinates hot cut activity
BellSouth performs pre-hot cut dialtone verification and wiring
Hot cut is performed on DD
BellSouth requests hot cut confirmation from MCI
Is MCI satisfied with hot cut results?
Yes
No
MCI confirms successful hot cut with BellSouth
BellSouth updates Directory Listings and Directory Assistance Database
Directory Assistance Database
BellSouth sends SOC notice to MCI
End
MCI reports failed hot cut to BellSouth
(F) From Page 3
BellSouth updates 911 database for PSAP
BellSouth 911 database
(D) From Page 3
BellSouth resolves issue.
Yes
Is BellSouth source of problem?
No
BellSouth contacts MCI to investigate the problem.
(C) To Page 3)


MCI
NPAC
MCI receives FOC with circuit ID and due date (DD) confirmed by BellSouth
MCI updates internal database with new circuit information
MCI Circuit Inventory Database
MCI issues internal work order to activate its switch with the TN and features
MCI network technicians activate the TN and features in the switch
(B) from Page 2
Assign a technician to coordinate and monitor hot cut
MCI coordinates hot cut with BellSouth on DD
MCI sends transaction to NPAC to port TN on DD
MCI sends confirmation to BellSouth that hot cut is complete
Yes
Is MCI satisfied with hot cut results?
No
Is MCI source of problem?
No
MCI contacts BellSouth to investigate problem
(D) to Page 2
Yes
(C) From Page 2
MCI verifies/ resolves issues on its end.
Billing Activities
Maintenance and Repair Activities
Service activated
MCI CSR database
MCI receives SOC from BellSouth
MCI updates data on CSR
Verisign uses MCI data to update LIDB database, MCI also updates CNAM database
LIDB/CNAM Databases
MCI sends transaction to Intrado with customer 911 information
Intrado sends transaction to BellSouth to update 911 SSP database
(F) to Page 2
MCI sends NPAC transaction confirming hot cut and number porting
(E) From Page 1
NPAC ports TN on DD
NPAC updates LNP SMS
NPAC provides final updates to LNP SMS
NPAC updates LNP LSMS
NPAC broadcasts new LNP information to carriers

Retail to UNE-L Migration

- The CLEC issues an electronic order to the ILEC requesting that the customer be moved from the ILEC switch to the CLEC switch. Unlike a UNE-P order which requires only the customer's name and telephone number and the features that the customer will be purchasing, the UNE-L order must include the customer's name and telephone number (some companies may require more), and information on the collocation cage to which the loop will be transferred and the channel facility assignment (pair) to which the loop will be terminated.

- The CLEC also will create internal orders to send to the National Number Portability Assignment Center, the LIDB provider, and the E911 center serving the customer to establish ownership of the customer's number at the appropriate time. These orders must be timed to coordinate with the orders issued by the ILEC. For example, the ILEC order to unlock the E911 database should be complete prior to the CLEC order to accept responsibility for the record and lock the database. These orders may fall out at any time causing additional customer problems.

- The ILEC EDI translation software will accept or reject the order and return a FOC or clarification/reject to the CLEC. The ILEC service order processor may now be able to create the internal orders necessary to migrate the customer to UNE-L. If it cannot, the orders will need to be entered manually by service center personnel. Fallout rates for UNE-L orders are higher than those for UNE-P. If the order does not flow through the system, the ILEC service order personnel will need to type the orders. Unlike a UNE-P migration, multiple related service orders must be created for a UNE-L transition – generally, the local service center personnel must create a Disconnect (D) order to remove the customer from the ILEC switch; a New (N) order to move the loop from the MDF to the CLEC collocation equipment; and a Change (C) order to change the billing to the CLEC from UNE-P to UNE-L. Directory listing orders may also have to be created, as well as a request to unlock the E911 data base to allow the CLEC to "claim" the customer and a "trigger" order to route calls to the customer via the local number portability data base rather than the ILEC switch.

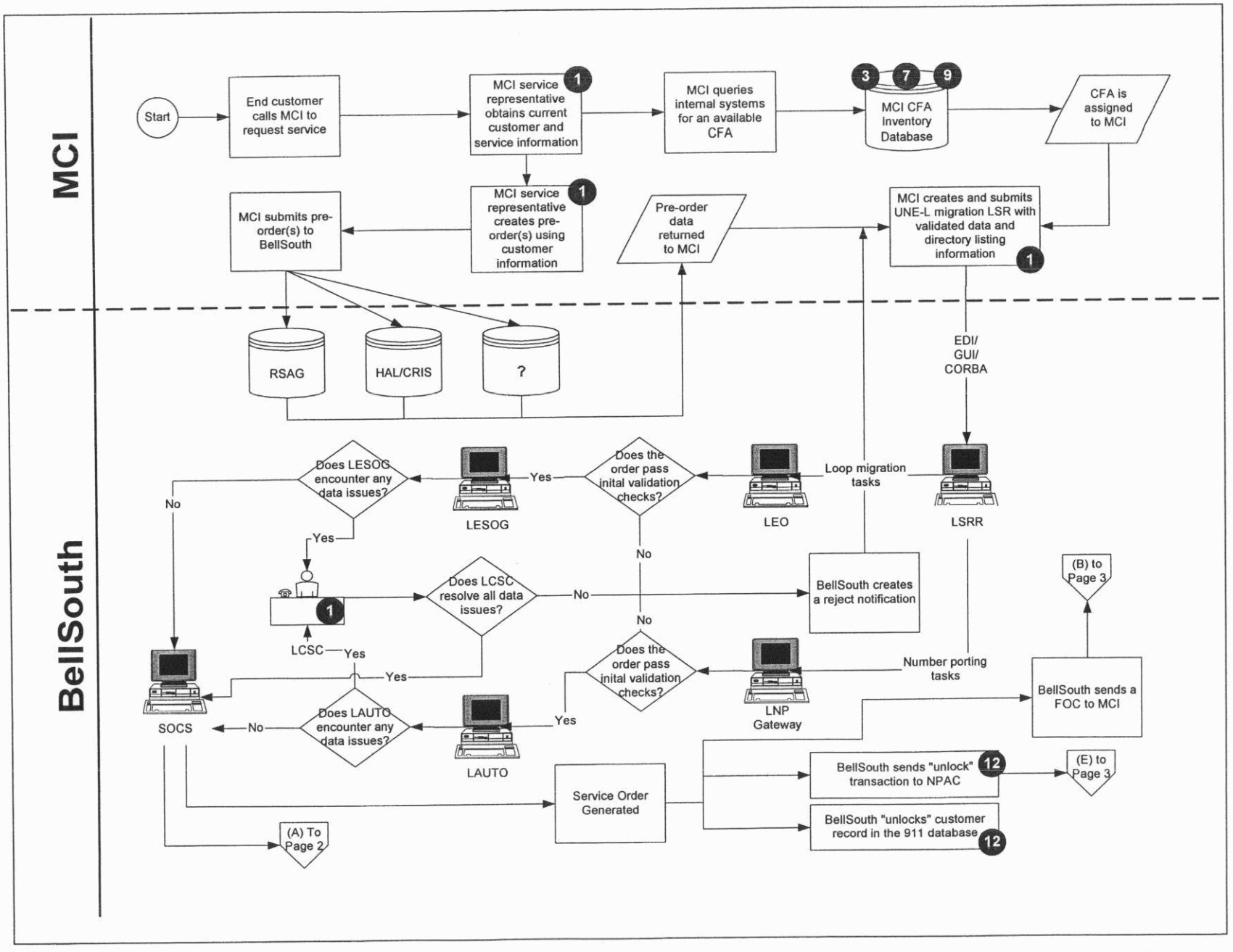
- The internal ILEC service orders are routed to the technicians responsible for the UNE-L cutover. These technicians must "find" the customer's circuit at the main distribution frame by manually clipping onto the loop and "listening" for dial tone, wire in a jumper cable which will allow the loop to be extended to the CLEC's collocation equipment, and prepare for the cutover. The frame personnel should also check for dial tone at the CLEC end of the collocation, ensuring that the CLEC switch will have dial tone for the customer when he/she migrates.

- "claiming" order to the NPAC. The customer will have dial tone during this process but will be unable to receive calls until the NPAC transaction is completed.

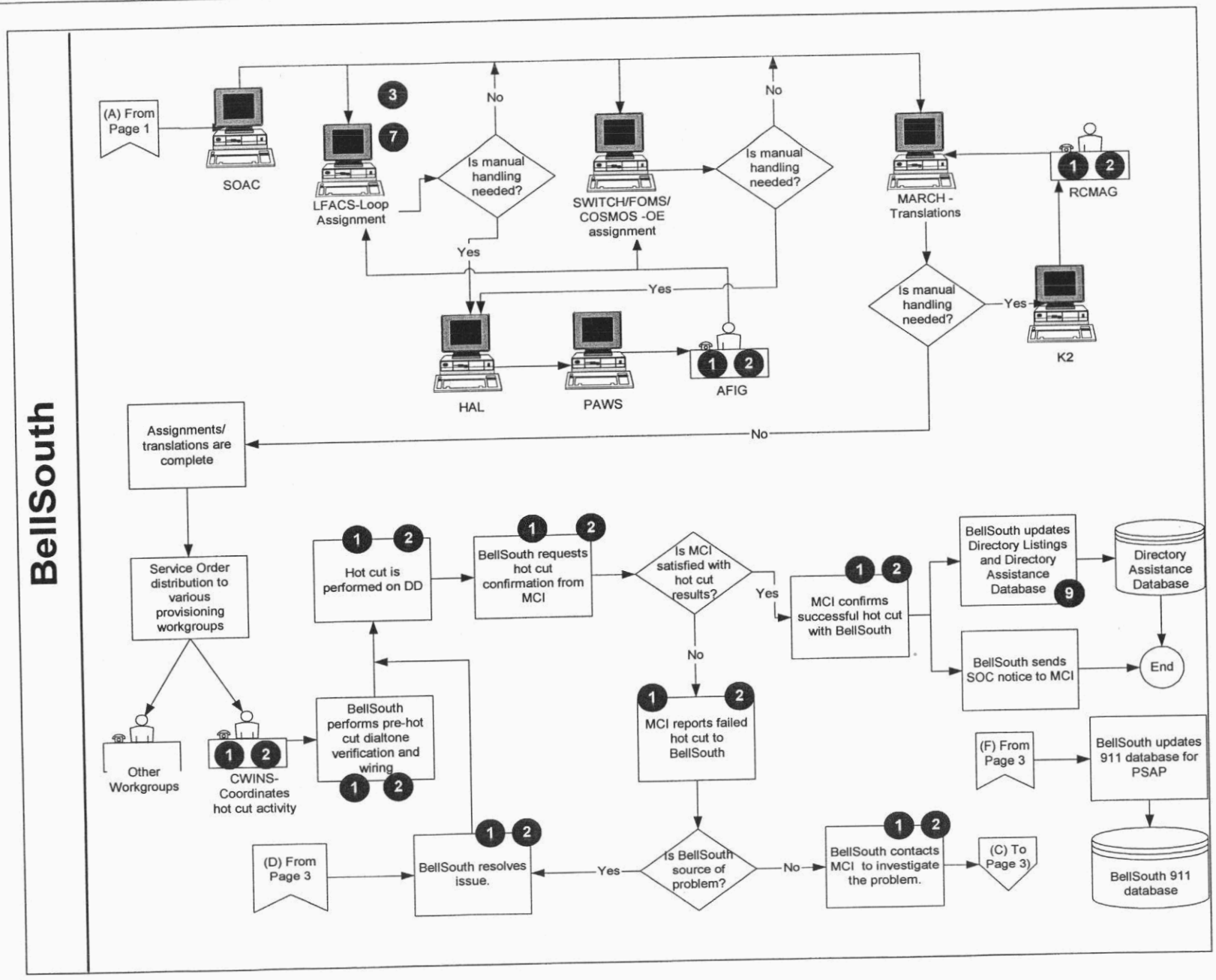
- The ILEC will issue a service order completion notification to the CLEC.

- The ILEC will complete the internal work required to change the billing to the CLEC from UNE-P to UNE-L. The customer's CSR will be removed from the ILEC systems.

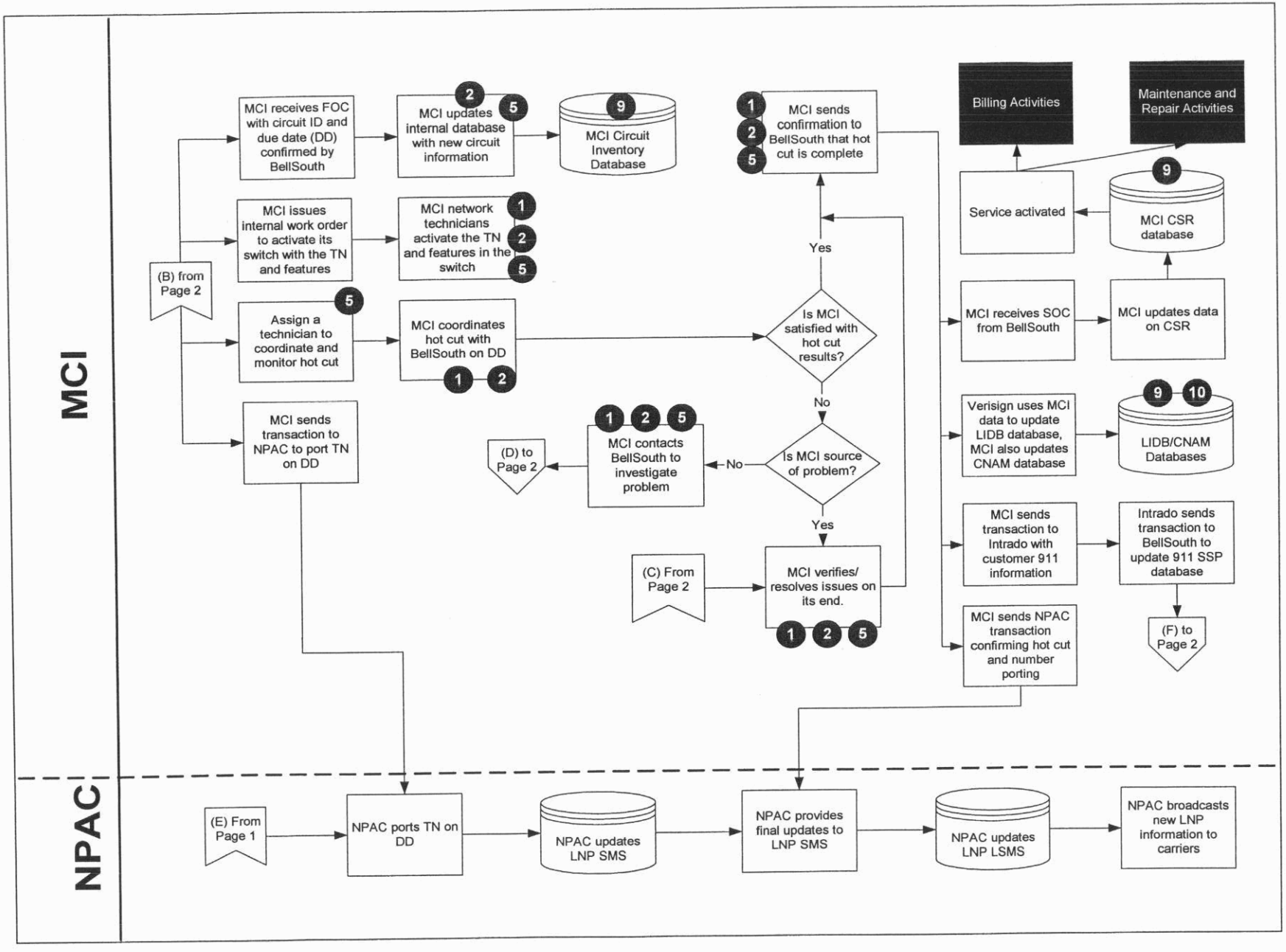
BellSouth Retail to MCI UNE-L Migration



BellSouth Retail to MCI UNE-L Migration



BellSouth Retail to MCI UNE-L Migration



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Challenges:

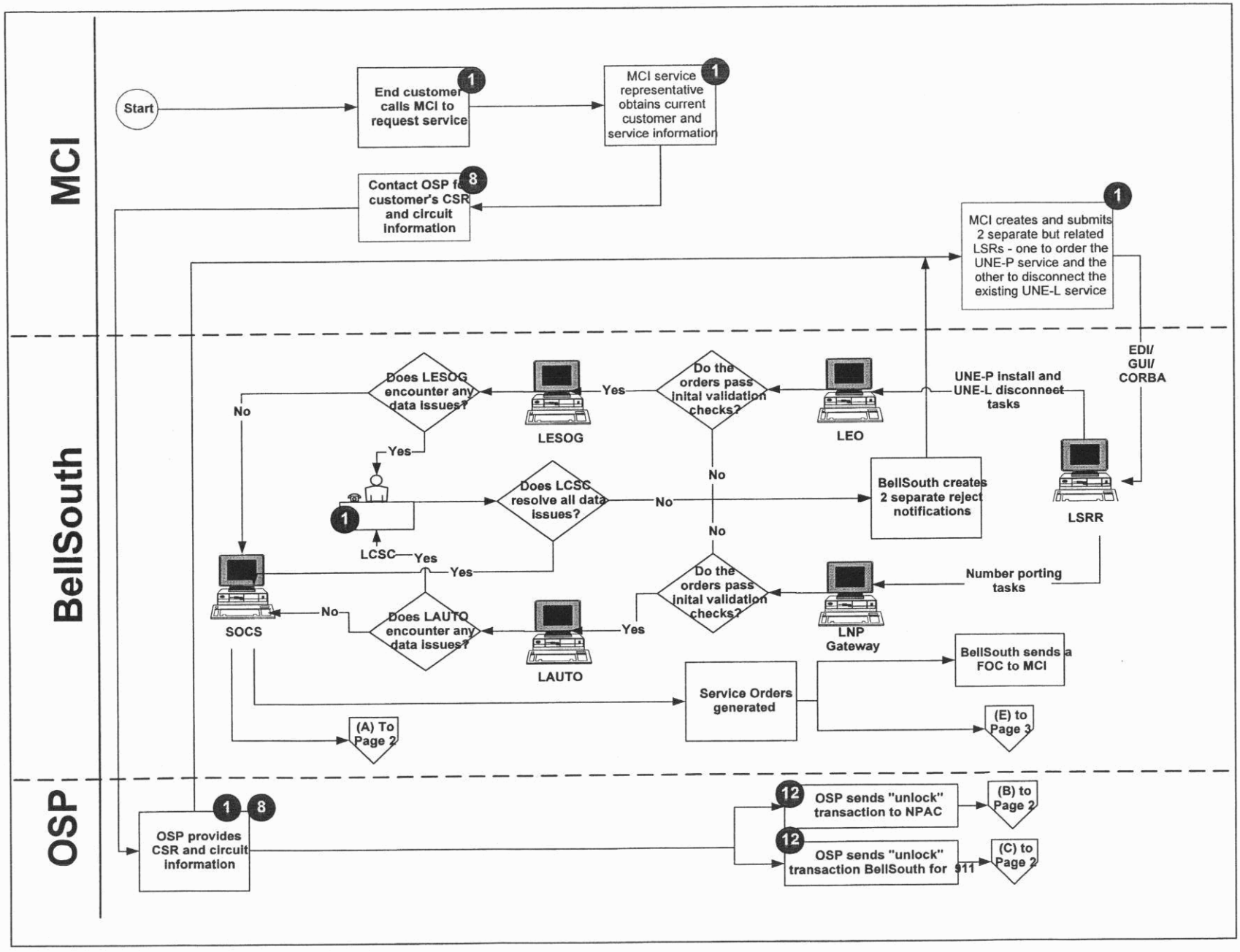
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4) Challenges associated with facility re-use.
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9) Challenges associated with data integrity.
10) Challenges associated with MCI LIDB/CNAM data management responsibilities.
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12) Challenges associated with number unlocking procedures for 911 and LNP.

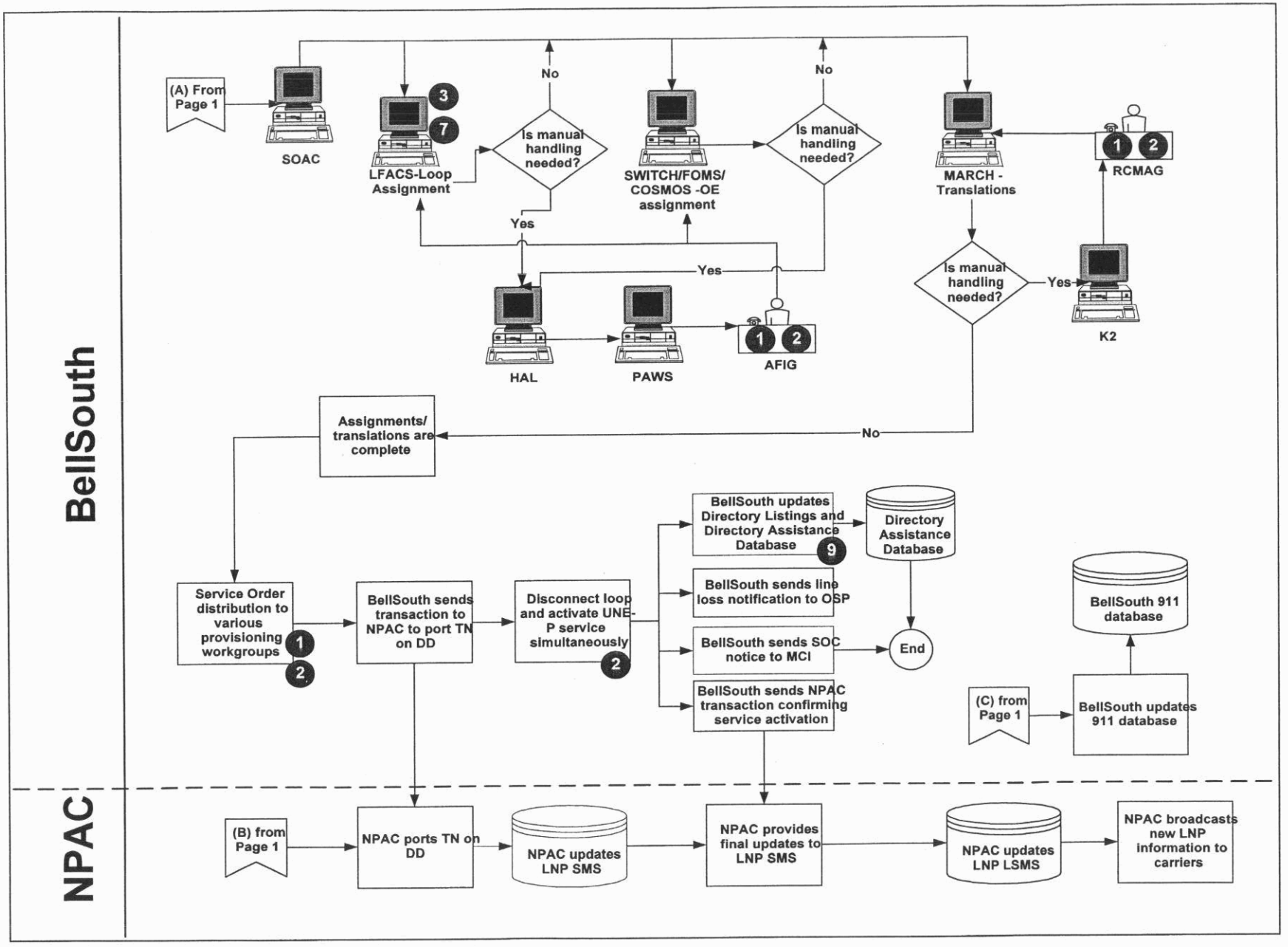
Glossary:

CAFE: Carrier Access Front End
CFA: Connecting Facility Assignment
CNAM: Customer Name Database
CORBA: Common Object Request Broker Architecture ordering interface
CPSS: Circuit Provisioning Status System
CPSS-TA: Circuit Provisioning Status System-Trouble Administration
CSOTS: CLEC Service Order Tracking System
DD: Due date
DSAP: Direct Order Entry (DOE) Support Application
ECTA: Electronic Communications Trouble Administration
FOC: Firm Order Confirmation
GUI: Graphical User Interface
HAL/CRIS: Hands-off Assignment Logic/Customer Record Information System
LAUTO: LNP Automation System
LCSC: Local Carrier Service Center
LFACS: Loop Facility Assignment and Control System
LENS: Local Exchange Navigation System (GUI ordering system)
LEO: Local Exchange Ordering System
LESOG: Local Exchange Service Order Generator
LIDB: Line Information Database
LNP: Line Number Portability
LSMS: BellSouth's LNP database, containing downloads from NPAC's LSMS
LSR: Local Service Request
LSRR: Local Service Request Router
MARCH: Memory Administration Recent Change History
NPAC: Number Portability Administration Center: Manages the LPN process
OE: Office Equipment
OSP: Old Service Provider, also known as the "Losing CLEC"
PAWS: Provisioning Analyst Workstation System provisioning system
PO: Pre-order
PSAP: Public Service Answering Point that receives and dispatches 911 calls
"Reverse" Hot Cut: Hot cut performed when ILEC "wins back" customer from CLEC, and reinstates retail service.
RSAG: Regional Street Address Guide
SMS: Service Management System: NPAC's system containing routing and LNP information
SOAC: Service Order Analysis and Control System
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SSP: 911 Service Provider
SWITCH/FOMS: Frame Operations Management System
TAFI: Trouble Analysis Facilitation Interface
TAG/RoboTag: Telecommunications Access Gateway/Robust TAG

CLEC UNE-L to MCI UNE-P Migration (BellSouth)



CLEC UNE-L to MCI UNE-P Migration (BellSouth)



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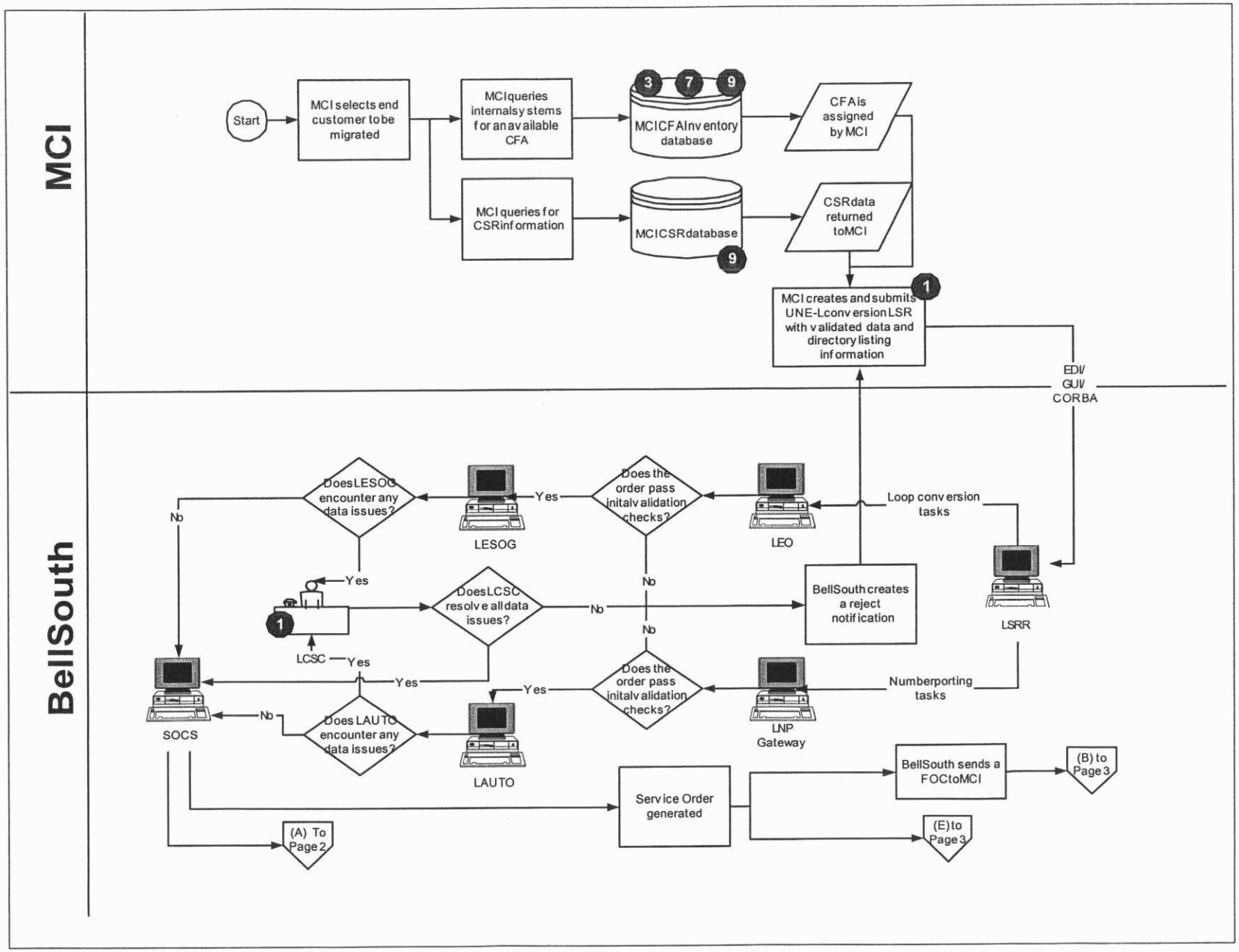
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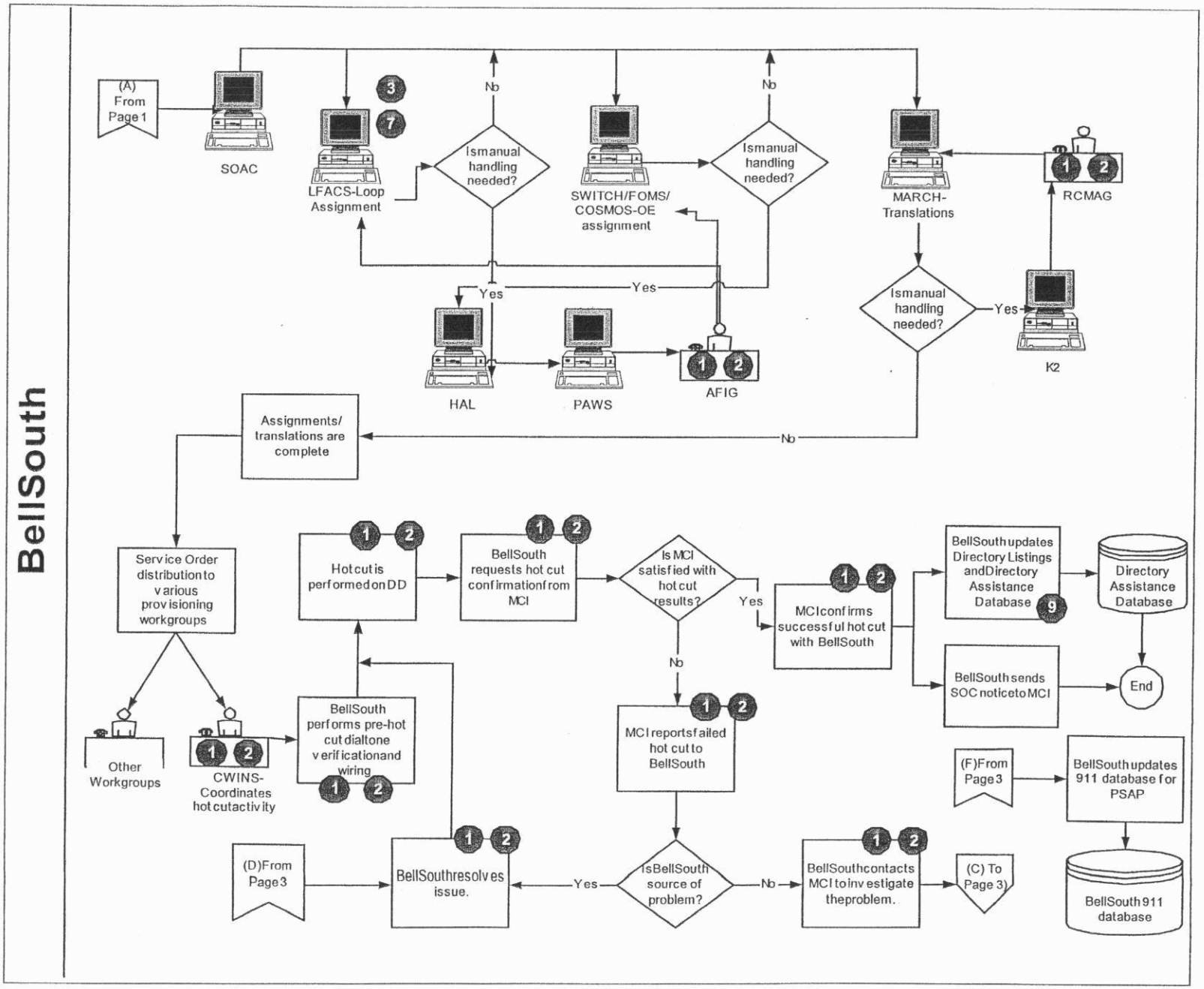
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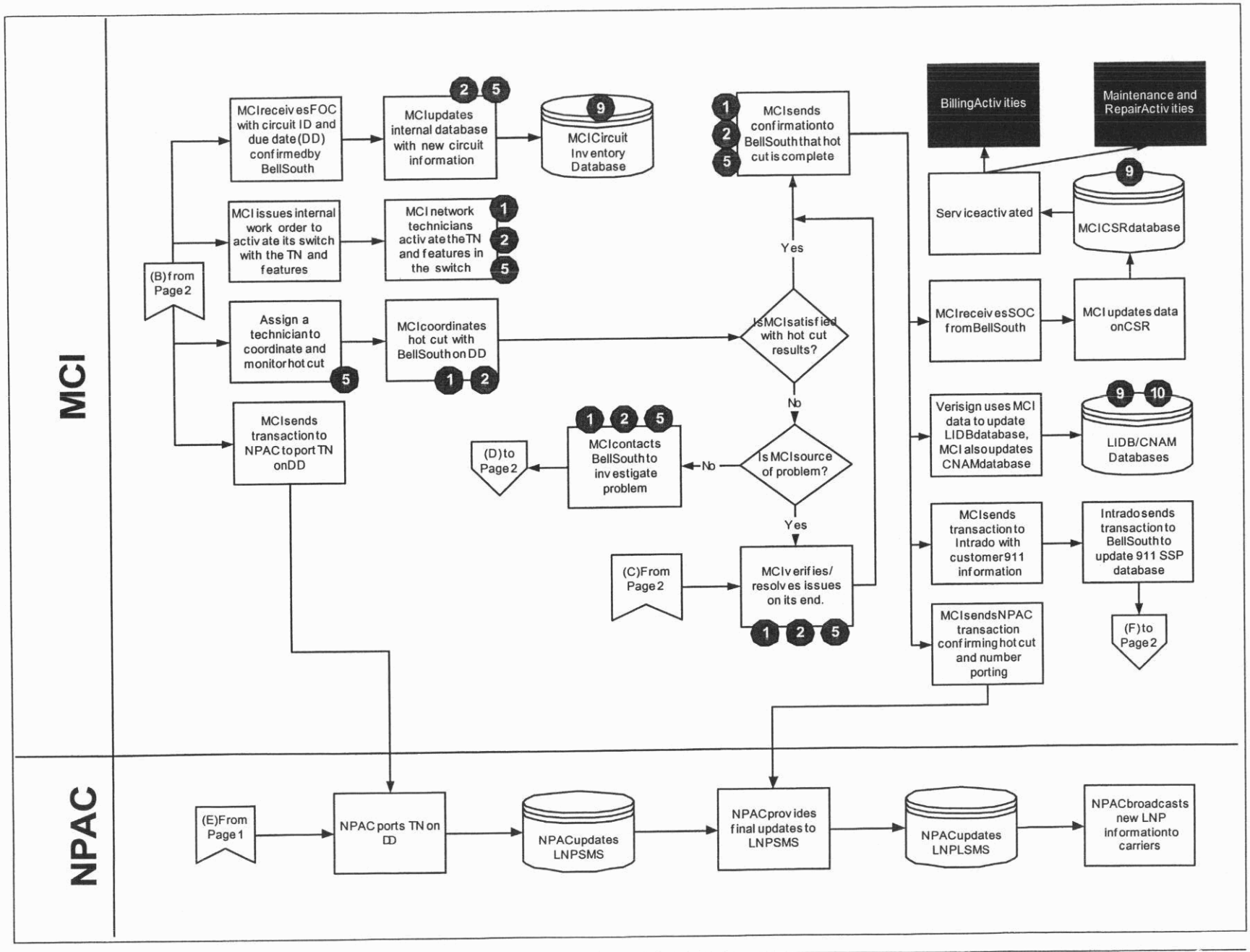
MCI UNE-P to MCI UNE-L Conversion (Individual Customer) (BellSouth)



MCI UNE-P to MCI UNE-L Conversion (Individual Customer) (BellSouth)



MCI UNE-P to MCI UNE-L Conversion (Individual Customer) (BellSouth)



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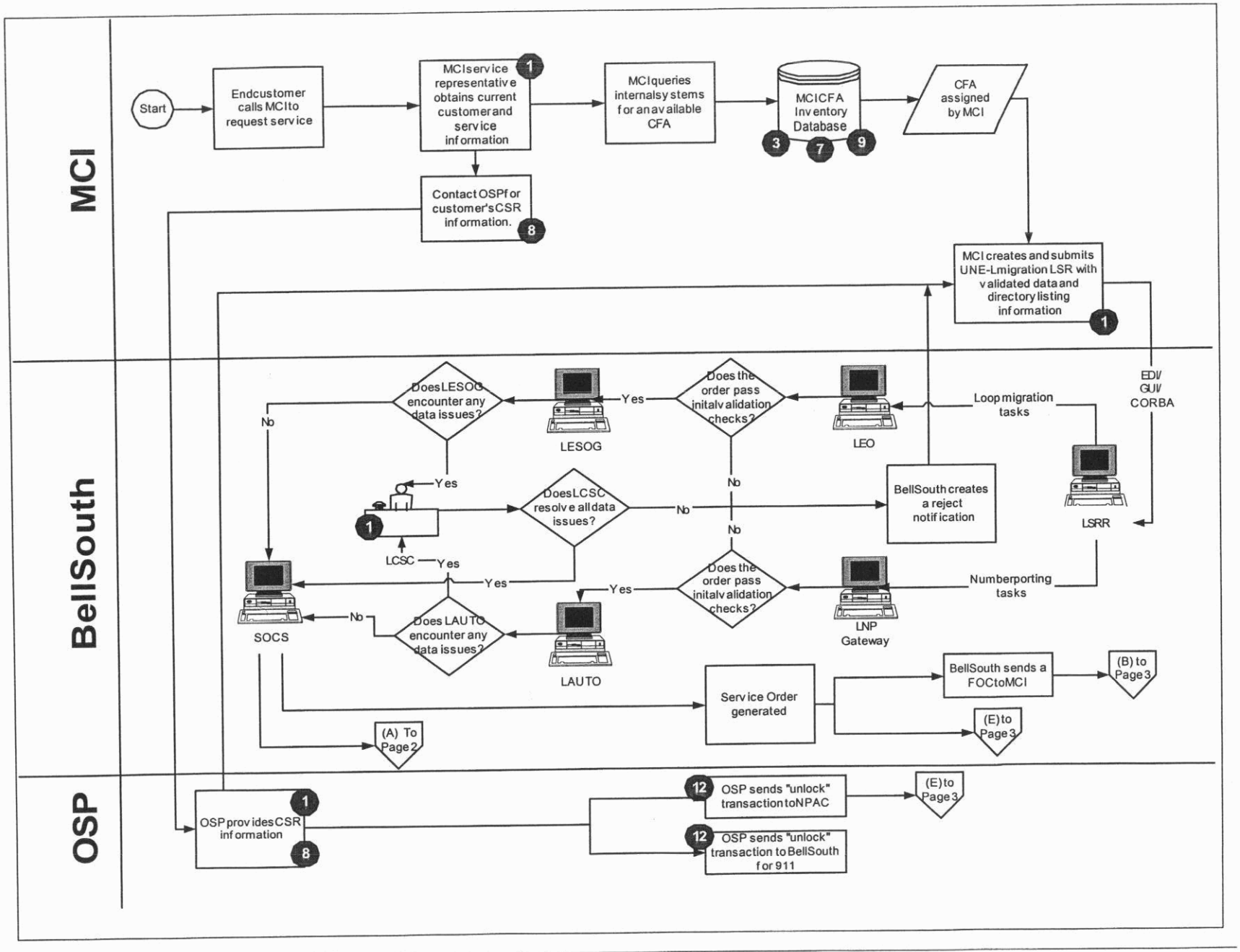
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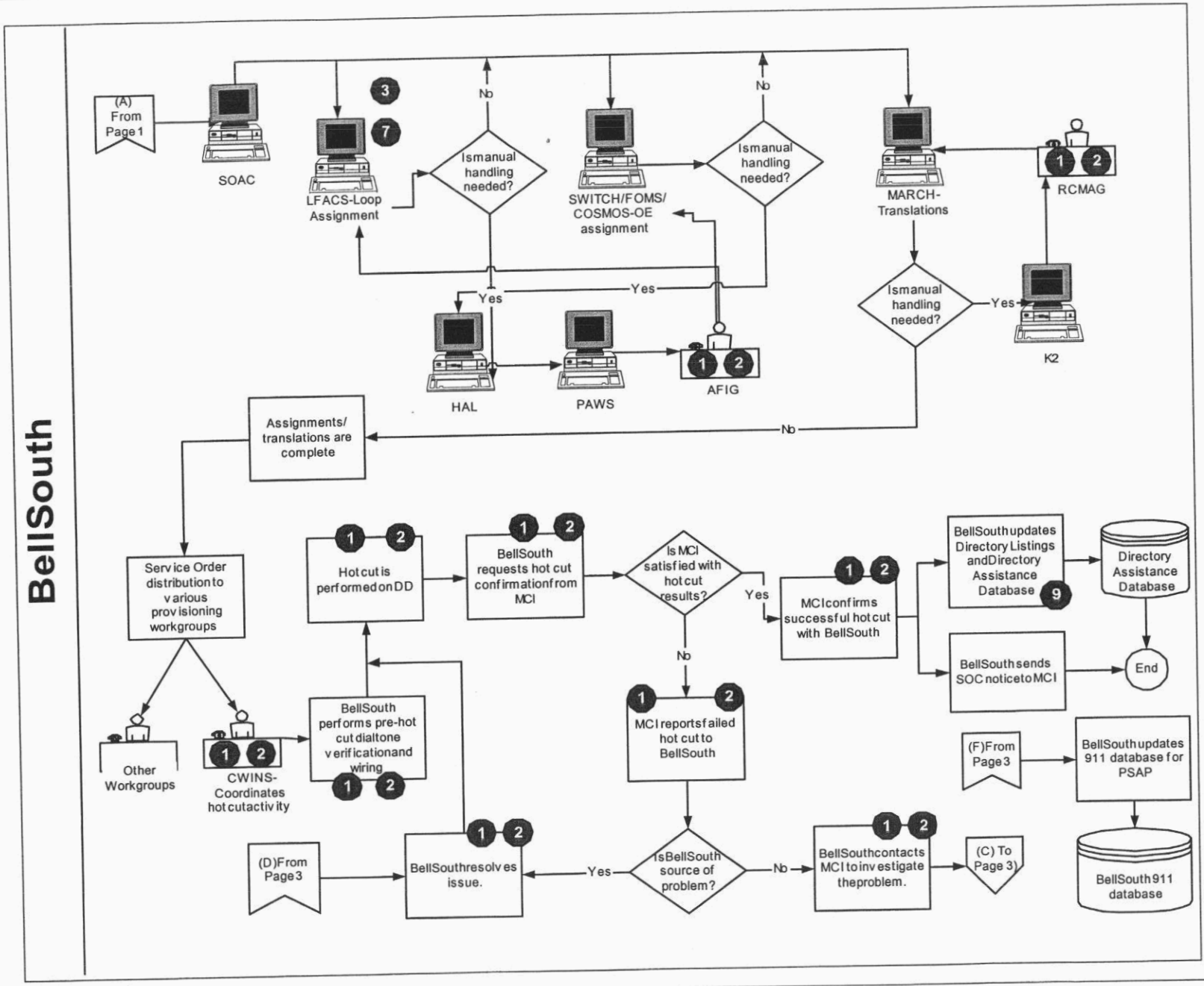
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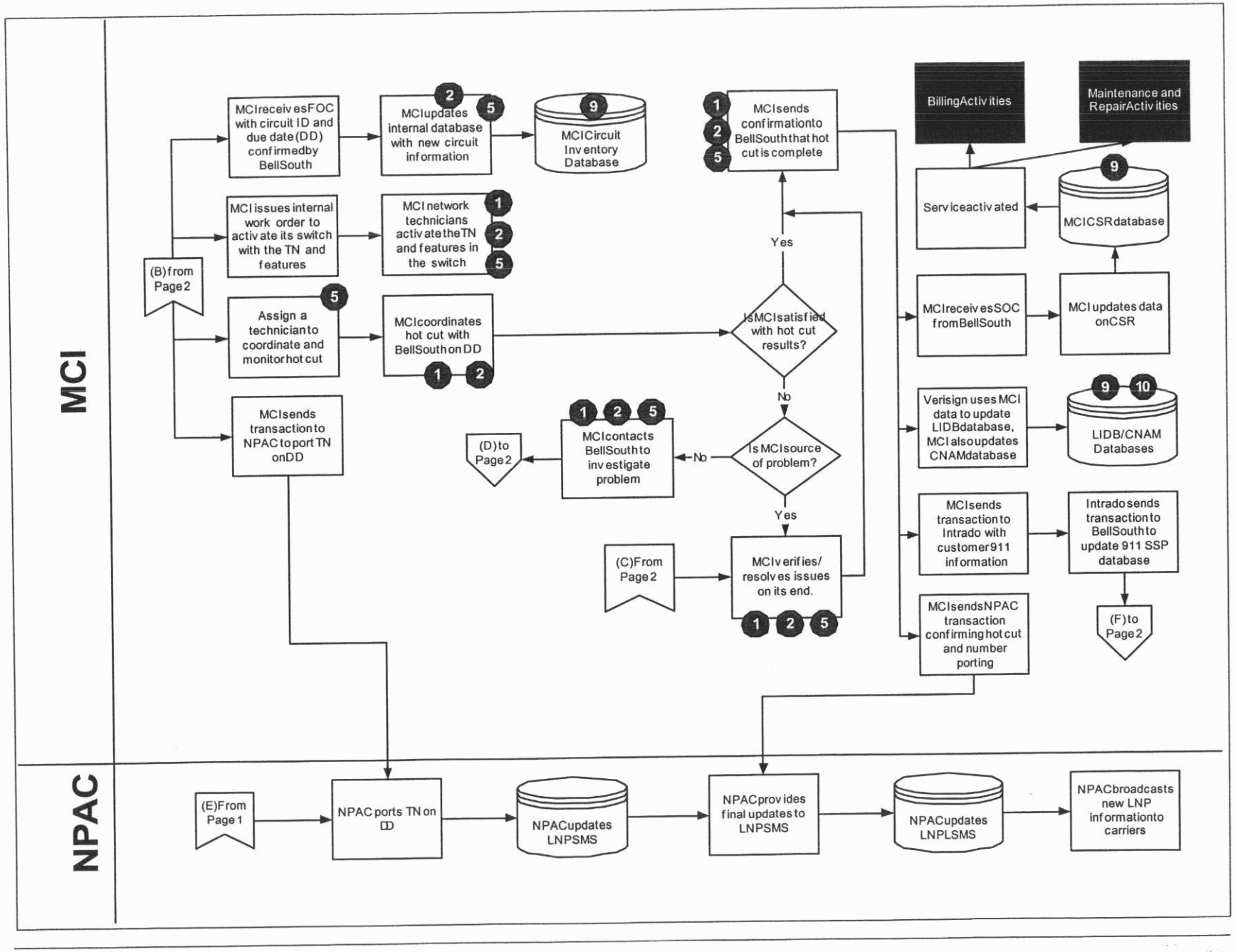
CLEC UNE-P to MCI UNE-L Migration (BellSouth)



CLEC UNE-P to MCI UNE-L Migration (BellSouth)



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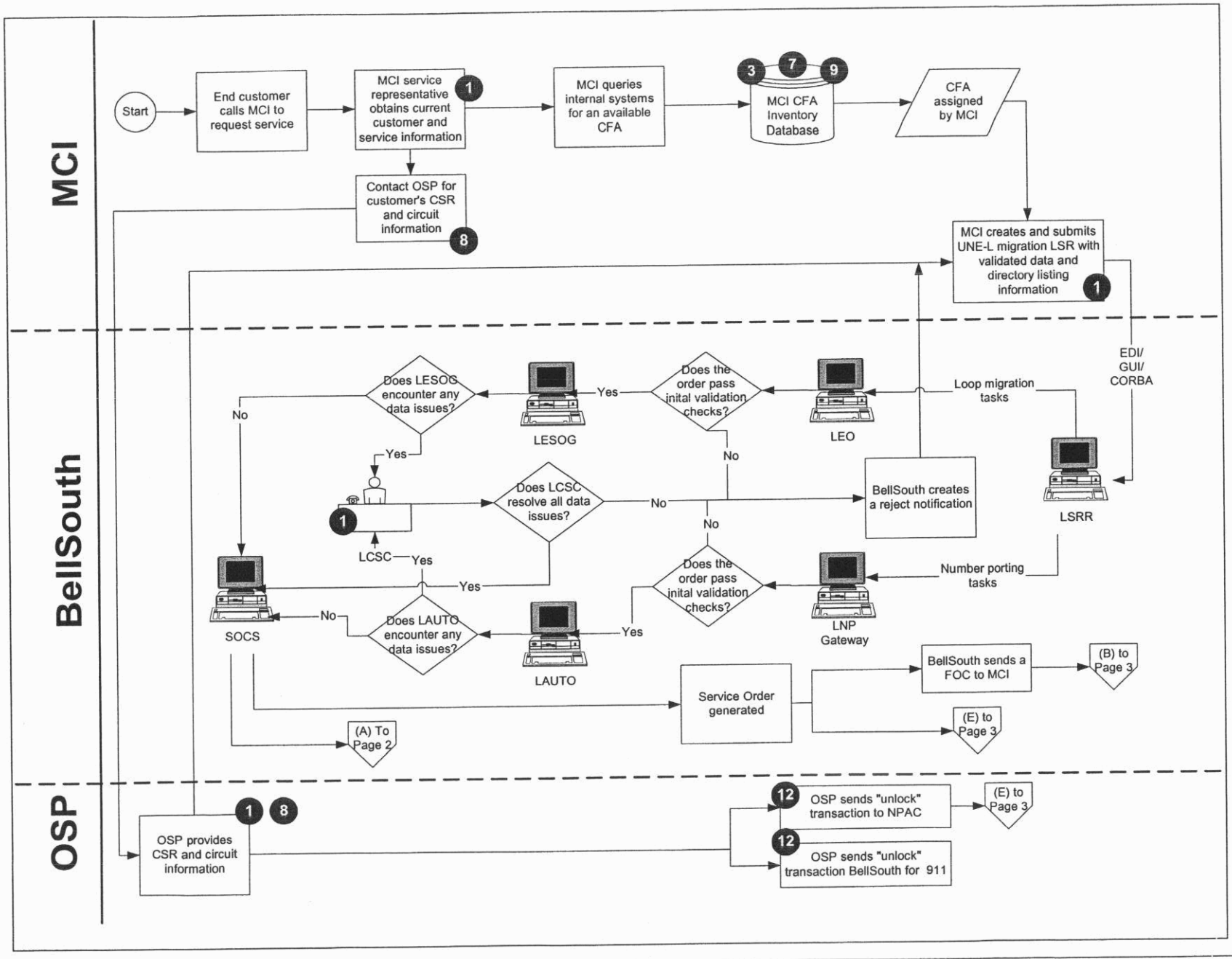
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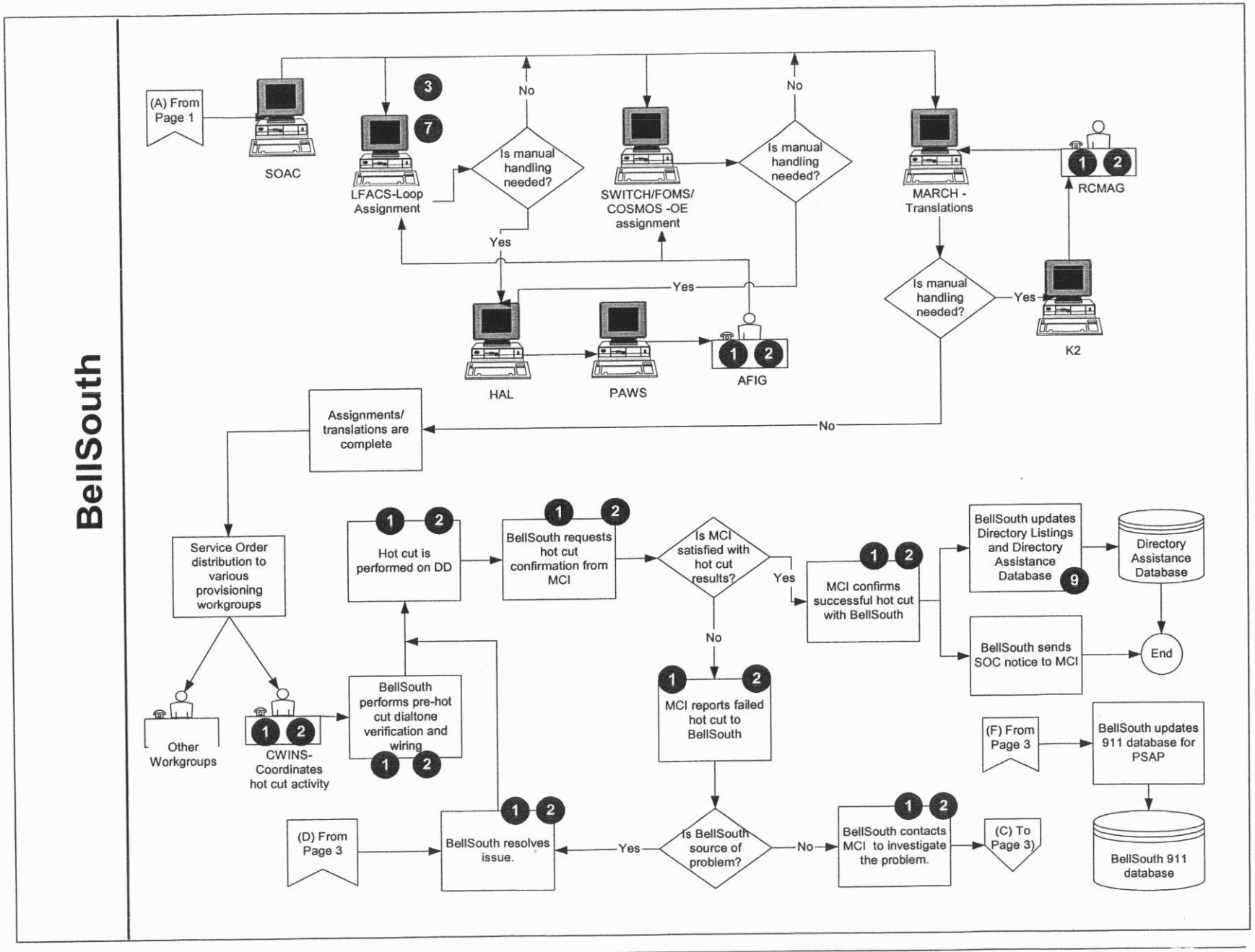
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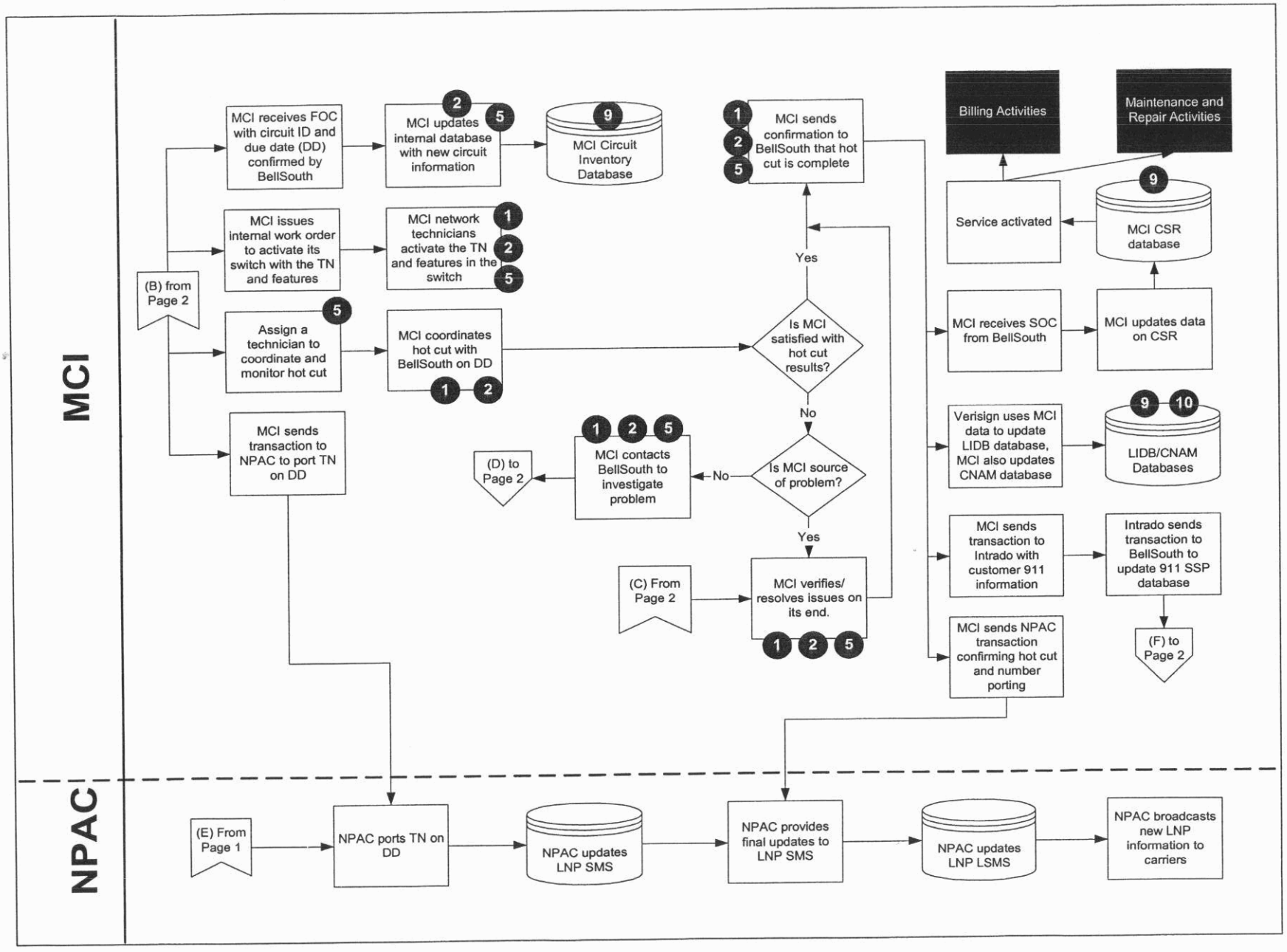
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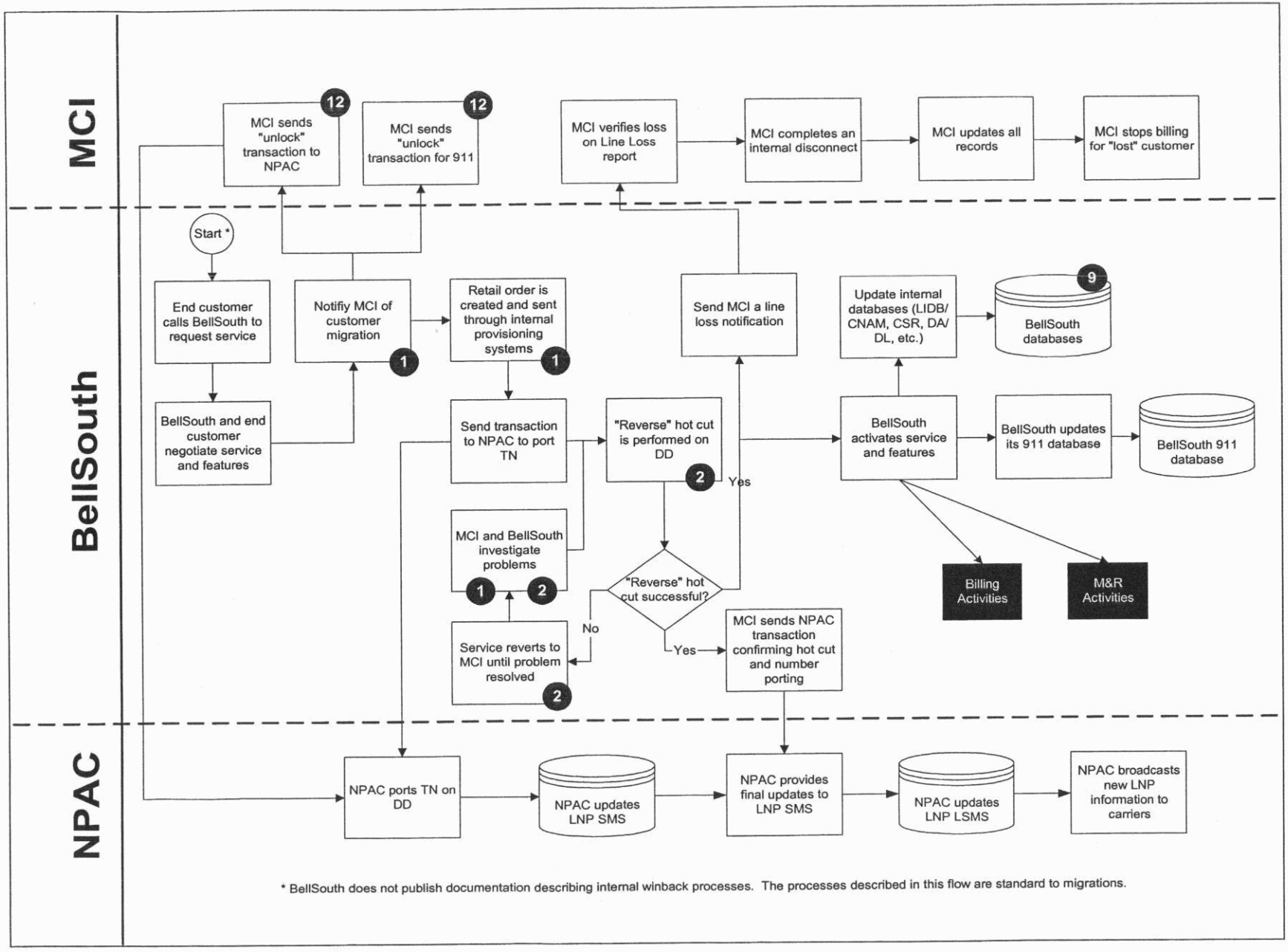
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Winback - MCI UNE-L to BellSouth Retail Migration



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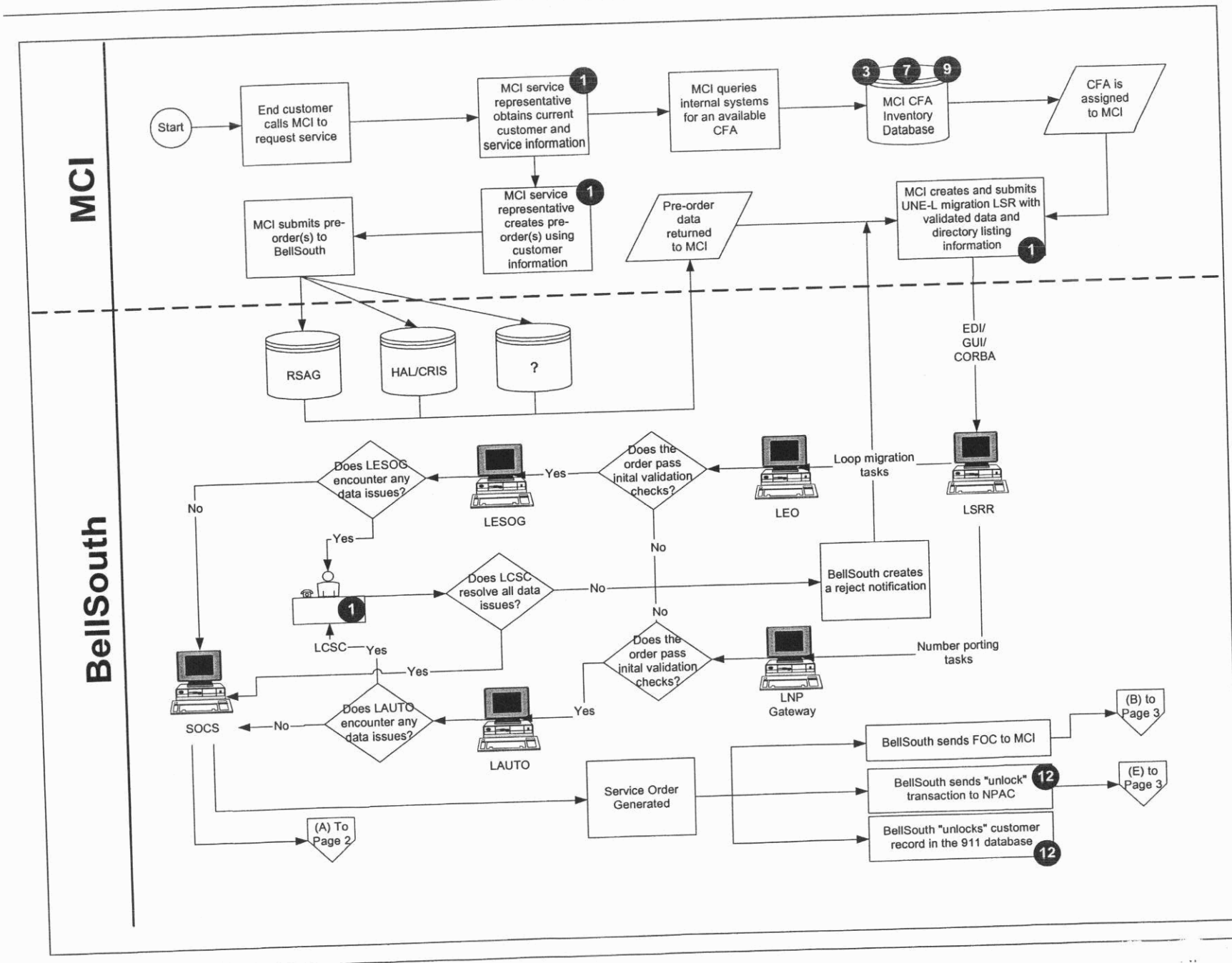
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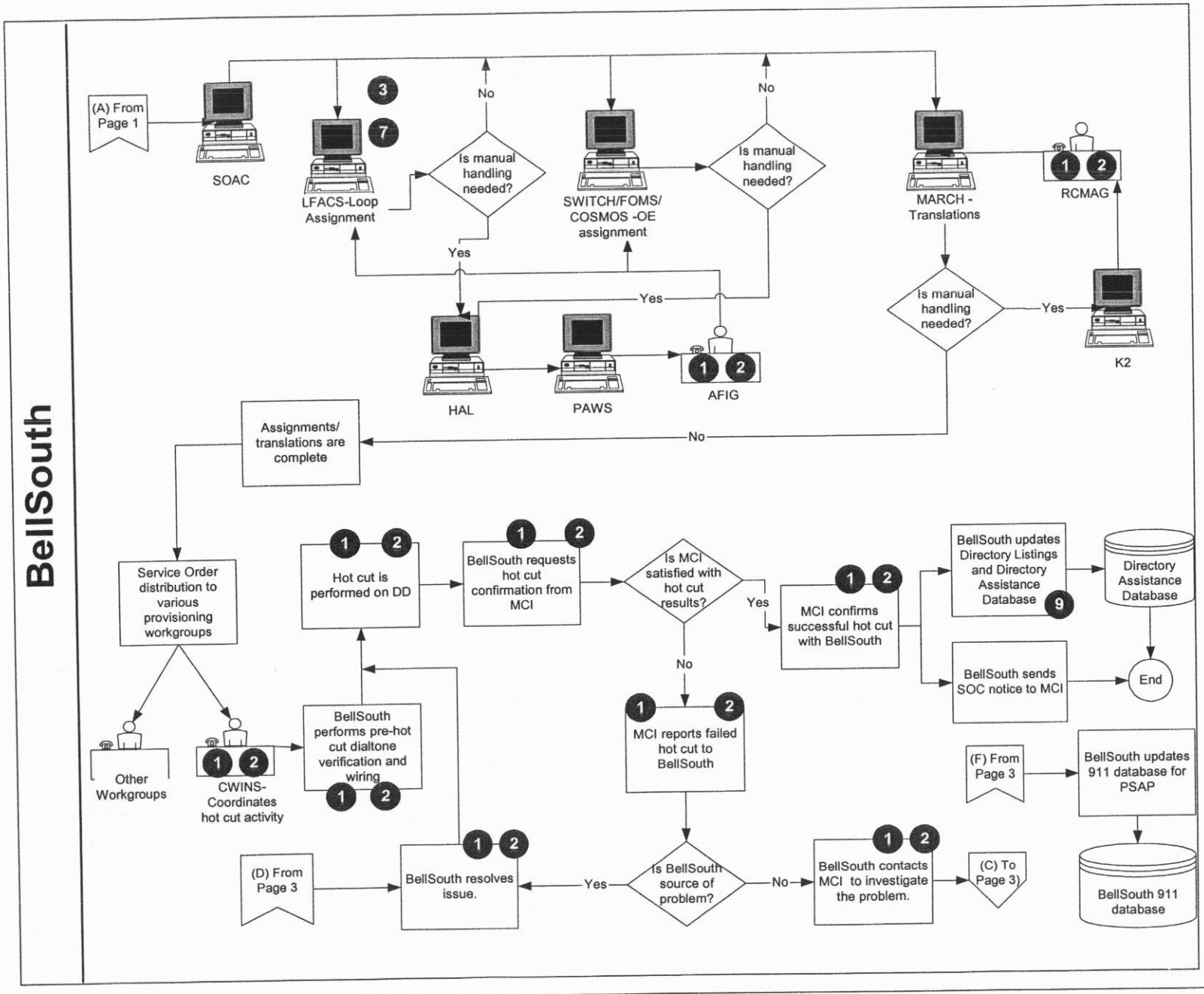
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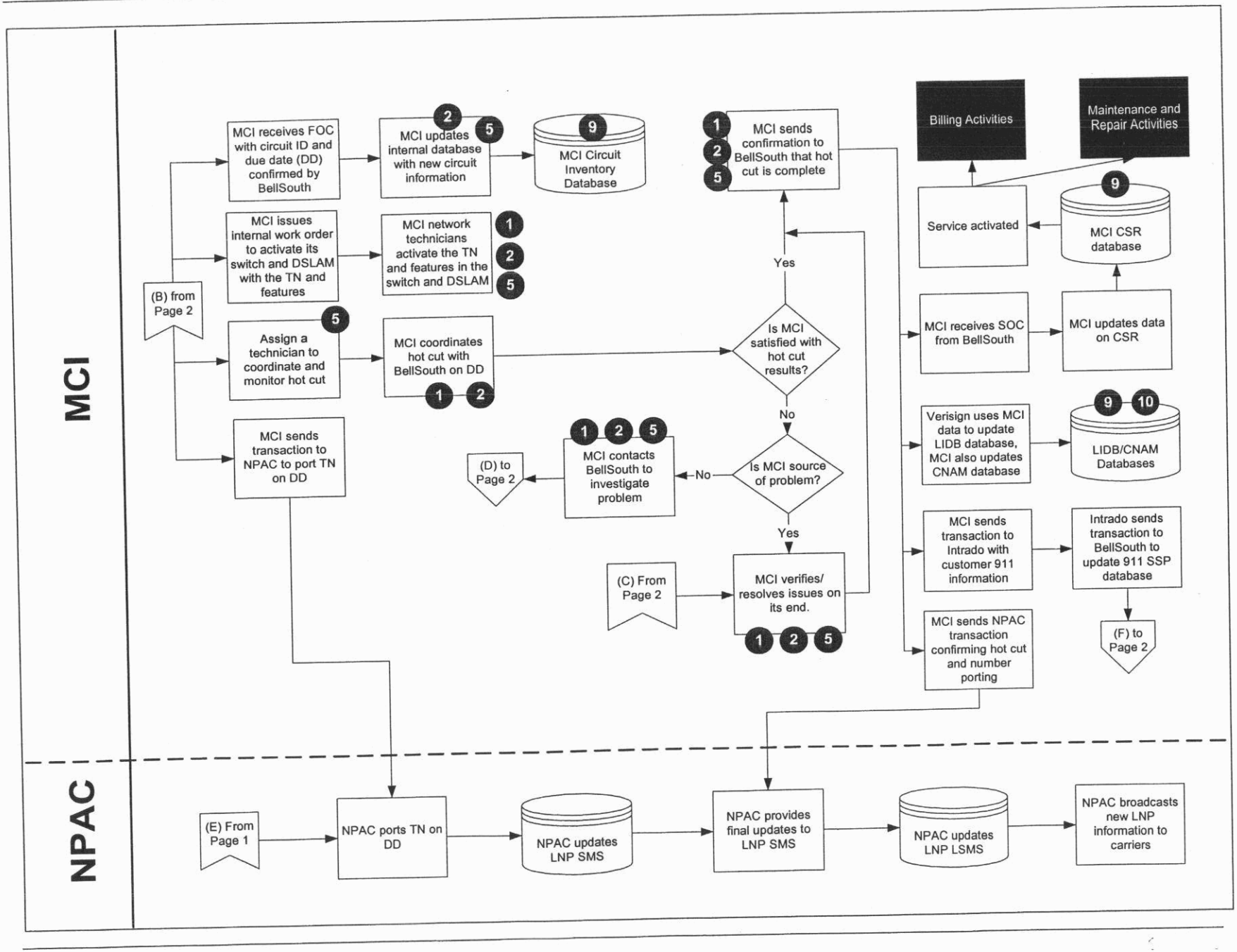
BellSouth Retail DSL-Capable Loop to MCI DSL-Capable Loop Migration



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-----Original Message-----
From: Change Control [mailto:Change.Control@BELLSOUTH.COM]
Sent: Thursday, November 20, 2003 2:21 PM
To: 80ta; a lee; a vincent; adsl technician; Alan Flanigan; alejandro; Amanda Hill; Annette Cook; Annette Hardy; asanjuan; B Murdo; B Shafer; B Stewart; B Swager; Becky Gorman; Bette Smith; Beverly Posey; Bill Czolba; Bill Gaboriski; Bill Grant; Bill York; Bob Buerrosse; Brenda Gant; Brian Feller; BSNotes; BSTCarrier; C & M; C Ashford; C Cassel; C Chiavatti; C Flanigan; C Larson; C Miller; C Smallwood; C Soptic; Caren Schaffner; Carol Asenjo; Catherine Gray; Cedric Cox; Change Control; Cheryl Acosta; Cheryl Haynes; Chris Iacovelli; Christy Markley; Cindy Schneider; Colette Davis; Colleen Sponseller; Connie Nathan; Craig Davis; D Burt; D Feinberg; D Kane; D Mitchell; D Nathanson; D Parobeck; D Petry; Daddy Max; Dale Donaldson; Darrin McClary; Dave Townsend; David Burley; David Lee; DDL; Denise Berger; Desiree; Don; Donna Poe; E Goldberg; E Singleton; Ed; Elliott Wrann; Erick Melgarejo; Eyu; Gary; Ggotimer; H Carlton; Hawn Nguyen; Heather Thompson; J Britton; J David; J Johnson; J Mclau; J Nugent; J Oliver; J Perry; J T Wilson; J Wilwerding; Jake Hayes; James Childress; Janice Johnson; Jason Bahr; Jason Lee; Jay Bradbury; jean Cherubin; Jeff Walker; Jennifer S; Jerry; Jerry Hill; JG6837; Joanne Baxter; John Boshier; John Duffey; John Fury; Jordana Jureidini; K Branch; K Pollard; K Turner; Karen Grim; Kraig Nielsen; Kyle Kopytchak; L Hopkins; L Looney; L Mitchell; L Ortega; Lacy Hamlin; Launch Now; Leon Bowles; Linda Minasola; Louis Toyama; Lorna Richards; Lorraine Watson; Louise Wilds; M Boner; M Connolly; M Dossey; M Mathews; Margaret Ring; Maria Aquino; Mark; Mark Ozanick; Mary Conquest; Maya Mistry; Mel Wagner; Mer; Michael Britt; Michael Dekorte; Micki Jones; Midge Houghtaling; Mike Young; Mnoshay; Morgan Halliday; N Dreier; Nancy Thompson; Natalie Franklin; Neustar; Nicole Crauwels; Notifications (Ernest Group); One Point; OSS; P Barker; P Kinghorn; P McKay; P Pinick; Patricia D; Peggy Rehm; Peggy Rubino; Phil Nixon; Pmcole; R Bennett; R Breckin; R Cairnes; R Harsila; R Maimon; R Munn; R Wilson; Rae Couvillion; Rebecca Baldwin; Regina McDay; Rick Williams; Robert; Robert Scordato; Ron Johnson; Ross Martin; Rubye; S Cogburn; S Sarem; Sandra Hendricks; Sandra Kahl; Schula Hobbs; Scott Emener; Scott Harper; Scottme; Sharon Eleazer; Sherry Lichtenberg; Steve Brown; Steve Moore; Steve Taff; Susan Sherfey; T Aziz; T Barton; T Carter; T Fry; T Norvell; T Wimmerstedt; TagTeam; Tim; Todd; Todd Sorice; Tom Hyde; Toni; Tonyam; TS1336; Tyra Hush; W Fletcher; Walter Carnes; Wendy Hernandez

Subject: BellSouth Response to Question re: Bulk Migration Collaborative

CLECs,

In response to the question from Benni Almas (Neustar) regarding BellSouth's plans to establish a Bulk Migration collaborative with the CLEC community:

BellSouth has an effective, seamless Bulk Migration process in place. Consequently, BellSouth has no plans to establish a Bulk Migration collaborative at this time.

If this changes in the future, CCP will forward the invitation to the CLEC community.

Thanks,

Change Management Team

*****

"The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential, proprietary, and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the material from all computers.60"

CONFIDENTIAL

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 1146
COMPANY/WITNESS: MCI/Lichtenberg SJ-1 thru SL-7
DATE: 02/24 - 27/04

THIS EXHIBIT IS PROPRIETARY

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UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF FLORIDA
Judge Robert A. Mark

In the Matter of: CASE NO.: 02-41250-BKC-RAM

SUPRA TELECOMMUNICATIONS,

Debtor.
_____/

SUPRA TELECOMMUNICATIONS AND INFORMATION SYSTEMS, INC., ADV. NO.: 02-1530-BKC-RAM-A

Plaintiff,
vs.

BELLSOUTH TELECOMMUNICATIONS, INC.,

Defendant.
_____/

SUPRA TELECOMMUNICATIONS AND INFORMATION SYSTEMS, INC., ADV. NO.: 02-1122-BKC-RAM-A

Plaintiff,
vs.

BELLSOUTH TELECOMMUNICATIONS, INC.,

Defendant.
_____/

CONTINUED FIRST TRUE-UP HEARING
AND ALL MOTIONS ON THE CALENDAR

June 18, 2003

The above-entitled cause came on for hearing before the HONORABLE ROBERT A. MARK, Chief Judge of the UNITED STATES BANKRUPTCY COURT, in and for the SOUTHERN DISTRICT OF FLORIDA, at 51 Southwest 1st Avenue, Miami, Dade County Florida, on Wednesday, June 18, 2003, commencing at or about 10:30 a.m., and the following proceedings were had:

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 115 COMP
COMPANY/ Supra/ NUSO
WITNESS: DAN-1 & DAN-RT-4
DATE: 02/24-27/04

REPORTED BY: Margaret Franzen
Karen Patlak
Robin Gonzalez, RPR

628

Q. Now, has BellSouth made improvements to LENS in its OSS since that date?

A. Yes.

Q. Can you briefly describe those changes and when they occurred?

629

MR. MEZA: From June 2001, forward, there were multiple -- Mr. Follensbee testified there were multiple changes and improvements to LENS

630

BY MR. MEZA:

Q. Mr. Follensbee, do you know when BellSouth made those changes and what those changes were?

A. Several changes were made. Let me explain a little why changes are made. There is a process called the change control process that is part of what we put in place that allows CLECs to, as a

group, bring forward changes they want made to our interfaces to enhance their capabilities, to improve what's occurring with the use of the interfaces, and so we will schedule releases with the CLEC industry and they will prioritize what particular changes they

631

would like to see and then we will work through them when those changes will occur.

There are probably -- there have been three or four major releases since June of 2001, each release enhancing further from the previous release the capabilities that the interfaces provide.

633

Q. Okay. Has the Florida Public Service Commission found that BellSouth provides nondiscriminatory access through LENS to its OSS?

A. It has.

Q. And when did it make that decision and in what proceeding?

A. The written decision was rendered in September of 2002, and it was based on a record that started in March of 1999.

Supra Telecom

1311 Executive Center Drive, Suite 220
Tallahassee, FL 32301-5027

Telephone: (850) 402-0510
Fax: (850) 402-0522
www.supratelecom.com

February 9, 2004

Mrs. Blanca Bayo, Director
Division of Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

RE: Docket No. 030851-TP -
SUPRA'S SURREBUTTAL EXHIBITS OF DAVID A. NILSON

Dear Mrs. Bayo:

Enclosed is the original and fifteen (15) copies of Supra Telecommunications and Information Systems, Inc.'s (Supra) Surrebuttal Exhibits of David A. Nilson to be filed in the captioned docket. These exhibits were inadvertently not filed along with Mr. Nilson's Surrebuttal Testimony of January 28, 2004. Also, these exhibits were served on both BellSouth and Staff late Friday afternoon.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return it to me.

Sincerely,

Jorge Cruz-Bustillo/JWA

Jorge Cruz-Bustillo
Assistant General Counsel

Original for transcript

DOCUMENT NUMBER-DATE
01843 FEB-9 04
FPSC-COMMISSION CLERK

CERTIFICATE OF SERVICE
Docket No. 030851-TP

I HEREBY CERTIFY that a true and correct copy of the following was served via e-mail, Hand Delivery, and/or U.S. Mail this 9th day of February 2004 to the following:

Jeremy Susac
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

*AARP **
200 West College Street
Tallahassee, FL 32301

AT&T
Tracy Hatch*
101 North Monroe Street, Suite 700
Tallahassee, FL 32301-1549
Phone: (850) 425-6364
Fax: 425-6361

AT&T Communications of the Southern States, LLC
Ms. Lisa A. Sapper*
1200 Peachtree Street, N.E., Ste. 8100
Atlanta, GA 30309-3579
Phone: (404) 810-7812
Fax: (832) 213-0268
Email: lisariley@att.com

Access Integrated Networks, Inc.
Mr. Mark A. Ozanick*
4885 Riverside Drive, Suite 107
Macon, GA 31210-1148
Phone: (478) 475-9800
Fax: (478) 475-9988
Email: mark.ozanick@accesscomm.com

Allegiance Telecom, Inc.(IL)
Theresa P. Larkin *
700 East Butterfield Road, Suite 400
Lombard, IL 60148-5671
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Charles Gerkin, Jr., Esq.*
9201 North Central Expressway
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BellSouth BSE, Inc.
Mr. Mario L. Soto*
North Terraces Building
400 Perimeter Center Terrace, #400
Atlanta, GA 30346-1231
Phone: (678) 443-3937
Fax: (678) 443-3470
Email: mario.soto@bellsouth.com

BellSouth Telecommunications, Inc.
R.Lackey/M.Mays/N.White/J.Meza/A.Shore*
c/o Ms. Nancy H. Sims
150 South Monroe Street, Suite 400
Tallahassee, FL 32301-1556
Phone: (850) 224-7798
Fax: 222-8640
Email: nancy.sims@bellsouth.com

Ben Johnson Associates, Inc.
John Nesmith*
2252 Killearn Center Blvd.
Tallahassee, FL 32309
Phone: 850-893-8600
Fax: 668-2731
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Casey & Gentz, L.L.P.
Bill Magness*
919 Congress Avenue, Suite 1060
Austin, TX 78701
Phone: 512-225-0019
Fax: 512-480-9200

Comm South Companies, Inc.
Sheri Pringle*
P.O. Box 570159
Dallas, TX 75357-9900
Phone: (214) 355-7005
Fax: (214) 355-7259
Email: springle@commsouth.net

Covad Communications Company
Mr. Charles E. Watkins*
1230 Peachtree Street, NE, 19th Floor
Altanta, GA 30309-3574
Phone: (404) 942-3492
Fax: (404) 942-3495
Email: gwatkins@covad.com

FDN Communications
Matthew Feil/Scott Kassman*
390 North Orange Ave., Suite 2000
Orlando, FL 32801
Phone: (407) 835-0460
Fax: (407) 835-0309
Email: mfeil@mail.fdn.com/skassman@mail.fdn.com

Firstmile Technologies, LLC
Michael Farmer*
750 Liberty Drive
Westfield, IN 46074-8844
Phone: (317) 569-2808
Fax: (317) 569-2805
Email: mfarmer@gotown.net

Florida Cable Telecommunications Assoc., Inc.
Michael A. Gross*
246 E. 6th Avenue, Suite 100
Tallahassee, FL 32303
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Fax: 681-9676
Email: mgross@fcta.com

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c/o McWhirter Law Firm
Joseph McGlothlin/Vicki Kaufman*
117 S. Gadsden St.
Tallahassee, FL 32301
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Fax: 222-5606
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Rand Currier/Geoff Cookman*
234 Copeland Street
Quincy, MA 02169-4005
Phone: (617) 847-1500
Fax: (617) 847-0931
Email: rcurrier@granitenet.com

ITC^DeltaCom
Nanette Edwards*
4092 South Memorial Parkway
Huntsville, AL 35802
Phone: (256) 382-3856

KMC Telecom III, LLC
Marva Brown Johnson, Esq.*
1755 North Brown Road
Lawrenceville, GA 30043-8119
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MCI WorldCom Communications, Inc.
Ms. Donna C. McNulty*
1203 Governors Square Blvd., Suite 201
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MCI WorldCom Communications, Inc.(GA)
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117 S. Gadsden St.
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Tallahassee, FL 32302-1876
Phone: 850-222-0720
Fax: 224-4359

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Fax: 421-8543
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7901 Skansie Avenue, St. 240
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Fax: (253) 851-6474
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Moyle Law Firm (Tall)
Jon Moyle, Jr.*
The Perkins House
118 North Gadsden Street
Tallahassee, FL 32301
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Fax: 681-8788
Email: jmoylejr@/moylelaw.com

NOW Communications, Inc.
Mr. R. Scott Seab*
711 South Tejon Street, Suite 201
Colorado Springs, CO 80903-4054
Phone: (719) 633-3059
Fax: (719) 623-0287
Email: rss@nowcommunications.com

Office of Public Counsel
Charles Beck*
c/o The Floirda Legislature
111 W. Madison St., #812
Tallahassee, FL 32399-1400
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NewSouth Communications Corp.
Jake E. Jennings*
Two North Main Center
Greenville, SC 29601-2719
Phone: (864) 672-5877
Fax: (864) 672-5313
Email: jejennings@newsouth.com

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Carlos Jordan*
168 S.E. 1st Street, Suite 705
Miami, FL 33131-1423
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Fax: (786) 777-0810
Email: phoneclubcorp@aol.com

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Susan Masterton*
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Tallahassee, FL 32316-2214
Phone: (850) 599-1560
Fax: 878-0777
Email: susan.masterton@mail.sprint.com

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Jorge Cruz-Bustillo, Esq.*
2620 S.W. 27th Avenue
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Ft. Myers, FL 33901-2981
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Fax: (239) 689-0001
Email: steve@tier3communications.net

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Jennifer Hart*
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Verizon Florida Inc.
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Tampa, FL 33601-0110
Phone: (813) 483-1256
Fax: (813) 273-9825
Email: richard.chapkis@verizon.com

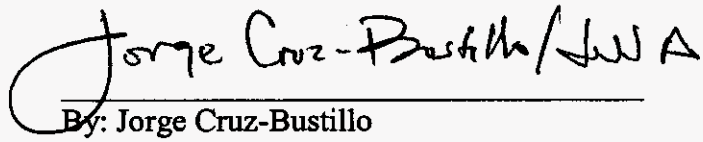
Womble Carlyle Law Firm
Ms. Lori Reese Patton*
3300 One Wachovia Center
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Charlotte, NC 28202
Phone: (704) 331-4926
Fax: (704) 338-7839

Xspedius Communications
Ms. Rabinai E. Carson*
5555 Winghaven Blvd., Suite 300
O'Fallon, MO 63366-3868
Phone: (301) 361-4220
Fax: (301) 361-4277
Email: rabinai.carson@xspedius.com

Z-Tel Communications, Inc.
Thomas Koutsky*
1200 19th Street, N.W. Suite 500
Washington, DC 20036
Phone: 202-955-9653
Email: tkoutsky@z-tel.com

* *-- Electronically served by E-mail.*

SUPRA TELECOMMUNICATIONS
& INFORMATION SYSTEMS, INC.
2620 S. W. 27th Avenue
Miami, FL 33133
Telephone: 305/ 476-4252
Facsimile: 305/ 443-1078



By: Jorge Cruz-Bustillo

Supra Exhibit – DAN-RT-1
Docket No. 030851-TP

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Thursday, February 05, 2004 6:23 AM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQFJTB58
Due Date: 20040205
Wire Center: 305651

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR18367
Billing Account Number: 305 W90-0649

Local Serving Office: 305651
BellSouth Circuit Identification: 70.TYNU.585015..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 7:01 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQC0MD55
Due Date: 20040107
Wire Center: 305651

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR10544
Billing Account Number: 305 W17-7318

Local Serving Office: 305651
BellSouth Circuit Identification: 70.TYNU.580810..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:27 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR5F5KF4
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR07985
Billing Account Number: 954 V14-7720

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664843..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Monday, January 19, 2004 3:54 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQBTB864
Due Date: 20040119
Wire Center: 305252

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR14161
Billing Account Number: 305 W90-6139

Local Serving Office: 305252
BellSouth Circuit Identification: 70.TYNU.582136..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 7:02 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQG2N4G2
Due Date: 20040107
Wire Center: 305651

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR09987
Billing Account Number: 305 W58-8763

Local Serving Office: 305651
BellSouth Circuit Identification: 70.TYNU.580569..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:28 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR8H84N8
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR07986
Billing Account Number: 561 V78-1043

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664850..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 21, 2004 7:57 AM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR0HB772
Due Date: 20040121
Wire Center: 954761

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR12527
Billing Account Number: 954 V14-1655

Local Serving Office: 954761
BellSouth Circuit Identification: 80.TYNU.667244..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 7:39 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQ4118N4
Due Date: 20040107
Wire Center: 305591

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR10995
Billing Account Number: 305 W20-9933

Local Serving Office: 305591
BellSouth Circuit Identification: 70.TYNU.581206..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:28 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR8X27C4
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR07982
Billing Account Number: 561 V78-0643

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664847..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 21, 2004 7:59 AM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NRB11LV0
Due Date: 20040121
Wire Center: 954761

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR12537
Billing Account Number: 954 V14-1850

Local Serving Office: 954761
BellSouth Circuit Identification: 80.TYNU.667269..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:16 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR92G5C0
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR08037
Billing Account Number: 954 V02-9135

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664863..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:29 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR8Y3K29
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR08022
Billing Account Number: 954 V02-8234

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664744..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 21, 2004 7:59 AM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NRB11LV0
Due Date: 20040121
Wire Center: 954761

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR12537
Billing Account Number: 954 V14-1850

Local Serving Office: 954761
BellSouth Circuit Identification: 80.TYNU.667269..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:16 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR92G5C0
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR08037
Billing Account Number: 954 V02-9135

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664863..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:29 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR8Y3K29
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR08022
Billing Account Number: 954 V02-8234

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664744..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Monday, January 05, 2004 12:12 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQBWKP48
Due Date: 20040105
Wire Center: 305252

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR04370
Billing Account Number: 305 W80-6453

Local Serving Office: 305252
BellSouth Circuit Identification: 70.TYNU.579935..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:18 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR68YBK6
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR08005
Billing Account Number: 954 V02-7534

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664727..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 6:53 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQ6D2DQ4
Due Date: 20040107
Wire Center: 305651

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR09996
Billing Account Number: 305 W68-1750

Local Serving Office: 305651
BellSouth Circuit Identification: 70.TYNU.580613..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:26 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR41KCR7
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR07989
Billing Account Number: 561 V78-1042

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664849..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 6:57 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQDKQL81
Due Date: 20040107
Wire Center: 305591

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR10851
Billing Account Number: 305 W80-7302

Local Serving Office: 305591
BellSouth Circuit Identification: 70.TYNU.580945..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:26 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR46L458
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR08042
Billing Account Number: 954 V02-9140

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664865..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 7:01 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NQDWF4L9
Due Date: 20040107
Wire Center: 305651

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR10534
Billing Account Number: 305 W22-1651

Local Serving Office: 305651
BellSouth Circuit Identification: 70.TYNU.580794..SB
Your Circuit Identification (if provided):

Shelfer, Ann

From: Tech.Talk@BellSouth.com
Sent: Wednesday, January 07, 2004 9:27 PM
To: Smith, Bette
Subject: BellSouth

BELLSOUTH --- Go-Ahead Notification

BellSouth has completed The transfer of the following circuit(s) to your facilities:

Order Type and Number: NR5VP6M5
Due Date: 20040107
Wire Center: 561964

Exchange Carrier ID: 206A
Purchase Order Number: STIPLR07971
Billing Account Number: 954 V14-7721

Local Serving Office: 561964
BellSouth Circuit Identification: 80.TYNU.664844..SB
Your Circuit Identification (if provided):

Supra Exhibit – DAN-RT-2
Docket No. 030851-TP

Nilson, Dave

From: Neptune, Mark
Sent: Tuesday, January 27, 2004 12:59 PM
To: Nilson, Dave
Subject: FW: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones
Importance: High

Here is the biggy where they were found at fault

Mark T. Neptune
VP Engineering & Operations
SUPRA Telecom
305-476-4224
-----Original Message-----
From: Lekanides , Gregory
Sent: Tuesday, January 27, 2004 12:27 PM
To: Neptune, Mark
Subject: FW: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

Here is the main one.

-----Original Message-----
From: Shoemaker, Janet
Sent: Tuesday, January 27, 2004 12:22 PM
To: Lekanides , Gregory
Subject: FW: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

-----Original Message-----
From: Shoemaker, Janet
Sent: Thursday, October 30, 2003 7:58 PM
To: Shoemaker, Janet; Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino; Neptune, Mark
Subject: RE: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

This was finally resolved about 15:00. What the issue was: Bell South was routing NPA/Nxx 786-476 (our Red Road LRN NPA/Nxx) to Golden Glades instead of Red Road. Cingular and other CLECs who were routing our calls to Bell South were failing because of this mis-routing by Bell South. I worked with Jerry at Bell South who had his translations people on and they corrected the routing. We made a number of test calls of the ones that were failing that we knew of and they are all now completing.

If, from today on, anyone has any issues of this type, please let me know.

Janet

> -----Original Message-----
> **From:** Shoemaker, Janet
> **Sent:** Thursday, October 30, 2003 2:11 PM
> **To:** Shoemaker, Janet; Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino; Neptune, Mark

Subject: RE: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

I got a call from Janet at Tier III at Cingular. She said they did a reset in their LNP group for our LNR (7864769999) and asked me to re-try call. I got hold of George (TT#104). He made a call from his Cingular Cell phone (305-283-7830) to our customer 305-661-6391 and still got recording, "call cannot be completed as dialed". He got same thing trying to call my number here at the NOC (786-260-6397) which has the same LRN (7864769999).
Janet at Cingular Tier III got her engineering person on the line who set up traps. After George made the call, she saw the call fail to Bell South Tandem NDADFLGG01T, DPC 252-047-028.
I have also been working a similar issue with Bell South. There are Bell South customers who also cannot call to this same LRN. One is on TT 114. Dialing number is Bell South number 305-861-5544 (MIAMFLICDS0) cannot call to our customer at 305-663-0793 or to our NOC numbers. I opened a TT with Bell South (800-482-1675, op 1). TT # HL057802. Last night I worked with Jerry at Bell South and he did traces and found that they are incorrectly routing to their tandem NDADFLGG01T, DPC 252-047-028. It should be routing to MIAMFLGRT05T, DPC 252-047-012. It appears that Cingular trouble is actually a Bell trouble. I am waiting for a call back from Bell on TT.

-----Original Message-----
From: Shoemaker, Janet
Sent: Thursday, October 30, 2003 10:29 AM
To: Shoemaker, Janet; Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino; Neptune, Mark
Subject: RE: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

I got a call this morning from Karen Casper. I told her I was expecting a call from Brenda Boatner and she said she would follow up. I am waiting to hear from Brenda.

-----Original Message-----
From: Shoemaker, Janet
Sent: Wednesday, October 29, 2003 5:44 PM
To: Shoemaker, Janet; Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino; Neptune, Mark
Subject: RE: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

I called Cingular again and got the same run-around. I asked to talk to another manger and got Philip Stires who was in Ashland, KY. He gave me the name and number of Brenda Boatner's boss who is Karen Casper, Phone: 770-749-5926, Cell: 404-444-5667. Her voice mail referred me to Regina at 770-749-5983. He gave me the name of Karen and Regina's boss who is Thomas Creadmore, VP with a number of 770-749-5905. Apparently that number is incorrect as it goes to a woman's voice mail.

I called Brenda, Karen & Regina and left VM messages. At approximately 17:00 I received a call from Tammy in the President's office. I called her back at 866-349-9611. She wanted to check and see if I was being helped. While I was on the phone with Tammy, I got a call from Brenda Boatner. Tammy said if I did not get any satisfaction from Brenda to call her back. Brenda assured me that this will be taken care of tomorrow. She is to call me shortly after I get in at 10:00 AM, Thursday. If I get no resolution, I will go back to the office of the President.

Janet

-----Original Message-----
From: Shoemaker, Janet
Sent: Tuesday, October 28, 2003 7:32 PM
To: Shoemaker, Janet; Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino
Subject: RE: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones

I got no further call back. I called Cingular back. After much ado, Tammy called me back and said she was told by Janet, their Tier III, that their fix had to be done out of hours and would be fixed by morning. She is to call me when she gets in.

Janet

> -----Original Message-----
> **From:** Shoemaker, Janet
> **Sent:** Tuesday, October 28, 2003 12:59 PM
> **To:** Shoemaker, Janet; Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino
> **Subject:** RE: Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones
>
> Just got a call back from Janet, Cingular Tier III support, that she is working this issue.
>
> Janet
>
> > -----Original Message-----
> > **From:** Shoemaker, Janet
> > **Sent:** Tuesday, October 28, 2003 12:27 PM
> > **To:** Lekanides , Gregory; Kienzle, Gary; Mikulec, Joseph; Lisandrillo, Daniel; Cuadrado, Catalino
> > **Subject:** Trouble calling our numbers in Red Road with LRN 7864769999 from Cingular phones
> >
> > I started working this issues last Tuesday, Oct 21. I called Cingular at 800-331-0500. I have spoken with many, many people there with no results. The latest have been Jason, John Burbunk Tier II techs, and Carol Hatch, Supervisor. All of whom assured me this issue was being worked. Firiday I got a Fast Track Trouble ticket #4061060, which Tammy in Tier II tells me has been closed for no trouble found. Of course no one has called me back on any of this. I called again today and spoke with Aaron who transferred me to Tammy in Tier II who opened a new generic (not TT #) ticket which she handed to Manager, Brenda Boatner who is to walk it to their engineering department to be worked. Tammy would not give me Brenda's phone number without her permission and she could not find her. Tammy gave me her personal cell phone number which is 706-346-9737. She said as soon as she got hold of Brenda, she would get her reach number and call me with it. I said I would call back in a half hour if I heard nothing. I just got a call back from Tammy who gave me Brenda's number which is 770-749-5953. Janet at Tier III is working this issue. Tammy said she will get back to me within the hour.

The following are the numbers and TTs that we have so far that are impacted by by this issue:

TT# 100 Customer number: 305-666-2822
Cingular number 305-302-8343 Office:
FTLDFLAMDC8

TT# 104 Customer number 305-661-6391
Cingular numbers 305-431-7014
FTLDFLAMDC8
305-283-7830

TT# 107 Customer number 305-666-1798
Cingular number 305-815-6826
FTLDFLAMDC8

TT# 95 Customer number 305-661-3264
Cingular number 786-202-9183
FTLDFLAMCM2

TT# 110 Customer number 305-661-7279
Cingular number 305-281-0677
PRRNFLAECM1

TT# 106 Customer number 305-740-0484
Cingular number 786-473-1242
BCRTFLSNCM1 (Priority Communications)

As I get more information, I will keep everyone updated.

Janet

Supra Exhibit – DAN-RT-3
Docket No. 030851-TP

Nilson, Dave

From: Lekanides , Gregory
Sent: Wednesday, January 28, 2004 10:38 AM
To: Nilson, Dave
Subject: FW: letter

I've been told that you would be willing to pay a lot of money for this document, so my sources tell me. Mark asked me to forward this to you.

-----Original Message-----
From: Lekanides , Gregory
Sent: Wednesday, January 28, 2004 9:32 AM
To: Neptune, Mark
Subject: letter

Mark I found the letter.

DRAFT MEMO

Mark, we have done some head scratching here, and talked with a number of our SME's, about the question you asked on Monday regarding routing of calls from cellular carriers to ported numbers. From what we recall from the meeting, we think the issue is with the cellular carriers. But to make certain, I want to restate what I think the problem is, and then ask for a number or two that we can chase down just to be sure.

The problem: After a number ports from a BellSouth switch to a Supra switch, calls from cellular carriers (multiple carriers, not just one) do not complete properly. But calls from landline phones do complete properly. The results from at least one cellular carrier (AT&T) include both "dead air", i.e, does not route to a proper termination or recording treatment, and recordings of number being disconnected or no longer in service. I don't recall any reports of Ring No Answer, but it would seem to me a possibility that these could occur also if the source of the problem is as described below.

Before going into why we believe it is a cellular issue, I would like to lay some groundwork on how LNP works, at least in BellSouth's network. If a call is placed from within our network to a number in a switch that offers number portability, that call is queried at the originating office. (One exception is an intra switch call, which generally does not query, but I'll address that later). The call is then routed either on dialed digits if the called number is not in the LNP database, or on the LRN that the database returns if the called number has been ported and the broadcast from NPAC has been received and deployed.

If a call enters our network from another carrier, and that call has <u>not</u> been queried (a bit in the SS7 message indicates whether or not the call has already been queried), we will query it and then route the call in the same manner as above.

If a call arrives at an end office which offers LNP, and the call has <u>not</u> been queried, then we will also do a query (called a "donor office query") just to be sure the number has not been ported. If, however, the call arrives and has already been queried, we do not do a second query. The switch attempts to

complete the call. If the number is still working in the switch, it will ring the number. If the call is no longer working in that switch, it will play the disconnected recording.

Intra-switch calls are not normally queried, as it is assumed the switch knows the status of its own numbers. An exception is if a number is in the process of being ported. When the create message is received, a special, LNP trigger is placed on the number in the donor switch so that even intra-switch calls are queried. That allows intra-switch calls to complete to the proper place as soon as the broadcast message from NPAC is received, prior to the number actually being disconnected in the switch software.

Let's first take the case of the recording saying number is disconnected. About the only way that can happen is if the call is queried somewhere, and still routes to the donor office, arriving after the number has in fact been disconnected. That would happen if someone's LNP database is not updated. However, you said calls from landline phones went through ok. BellSouth uses the same LNP database for queries from landline phones as for calls arriving from other carriers. So, if BellSouth did the query, the results would be the same no matter where the call originated. This makes us believe that the problem is that the cellular carrier had not updated their LNP database.

There is one specific instance in which I think this could have occurred as a result of the LNP process you had in place at the start of the porting. Last Monday, 9/22, I was called late in the day and told that you could not port because NPAC had not received the concurrences from BellSouth. We determined that your create messages had only been sent that afternoon, rather than when the FOC's were sent the previous Wednesday. We verified that all of our concurrences had been sent and I related that information to Supra around 9:30 or 10 pm. From what I understand, the activate messages on these 39 tns were not sent to NPAC by Supra until the following morning. Our orders disconnecting the service in our switch completed Monday evening. Therefore, any calls to these numbers the next morning, until the activates were sent and the broadcasts were distributed, would have resulted in a query to LNP databases showing the number not ported. The call would then have arrived at our switch and been met with the disconnected recording. But, this would have been true for all calls, not just from wireless, so it doesn't really explain the trouble as described.

Now for the dead air. If a carrier, wireless, IXC, or ILEC, makes a query to the LNP database and the number is found, the database returns a LRN. This routing number is a specific tn within the NPA/NXX of the receiving switch (i.e., Supra's NPA/NXX). That tn is used to route the call within all networks to get to the switch in which the end user now resides. If a wireless carrier failed to build routing tables for the Supra NPA/NXX based on information which Supra placed in the LERG, then they might send it to "dead air". They should provide some kind of treatment for the call, but they might not.

The lack of routing information could be in the wireless network, or in any network lying between that carrier and Supra's switch. That would of course include BellSouth's network. However, if the problem was at the Equal Access Tandem, then problems should be seen from not only wireless carriers, but from any other carriers who use the EAT, such as Interexchange carriers. As I recall, you said that the only calls you were having trouble with were wireless, so that would seem to eliminate a common point such as the EAT.

So, based on the problem description and the LNP process, we have conclude that the problems are within the wireless provider's network. Either lack of updating their LNP database when a number ports, and lack of routing the NPA/NXX for Supra's LRN.

If in fact this is the case, you might also find that calls from certain hotels and motels and other places where PBX's are in place could have troubles for the same reasons. Some PBX's have routing tables in them which have to be updated by the vendor when new NPA/NXX's go in service, and over the years,

there have been problems with some of them keeping updated.

On Wednesday, you provided me with one of the ported numbers which had been unreachable from AT&T. (305-593-0404). You also provided me with the NPA/NXX's in your two switches. Red Road is 786/476,260,232 and Golden Glades is 786/456,455,207. You gave me a time frame in which the troubles with the specific number occurred (8/25 through 9/15).

We verified the routing for cellular trunk groups in our NDADFLGG01T Equal Access Tandem and confirmed that if the call had come in there without being queried, we would have queried it in our LNP database. The query would have returned an LRN of 7864769999, the LRN for your Red Road office. The call would have routed to your switch properly.

So for this one number ported to this one switch at this time, the specifics match the analytical description above. Namely, if it had reached us unqueried, we would have queried it and sent it on to its proper termination.

One thought that comes to mind is that occasionally, when NPAC broadcasts a port activation, some providers fail to receive it. That is called a partial failure, and your LNP provider should be able to detect that and alert you, if you so desire. That gives you a heads up that some service providers may have trouble completing calls to your ported numbers. I don't know if you are using this information or not, so thought I would mention it.

This is a lengthy note, I know, but I hope it makes sense to you. If you experiences in getting these problems resolved provides any further insights, please provide.

Thanks,

Don Smith

Thanking You In Advance
NOC Manager
Gregory A. Lekanides
Gregory.Lekanides@stis.com
glek@stis.net
305 476 4267 office
775 703 1389 fax

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
4/24/1998	Supra	**Files Collocation application**		YES			
5/19/1998	BST	Begins processing applications					
5/25/1998	Supra	**Application response due - According to Supra**					
6/4/1998	Joint	Planning meeting for interconnection		YES			
		Supra was informed of FCC exemption for NDADFLGG and WPBHFLGR at this meeting					
6/8 vs. 6/9/98	Joint	Birmingham meeting - statements alleged regarding Internet equipment					
6/13/1998	Supra	Applied to Belcore for point codes		YES			
6/25/1998	Joint	2nd Planning meeting for interconnection		YES			
6/30/1998	BST	**Application response due - Per BellSouth**			6/30/98 - 7/7/98		
6/30/1998	BST	Application response - ORDLFLMA - BSTE1PIN.doc included		YES	26-Aug	YES	
7/2/1998	BST	Application response - HLWDFLWH, HLWDFLPE, BCRTFLMA		YES	26-Aug	YES	
7/6/1998	BST	Application response - FTLDFLCY, FTLDFLMR, MIAMFLAE, FTLDFLPL, MIAMFLBC		YES	26-Aug	YES	
7/6/1998	BST	email Rick LaGrange to dnilson, Minutes of 6/4/1998 meeting on interconnection			26-Aug	YES	
7/7/1998	BST	Application response - MIAMFLGR, MAIMFLHL, MLBRFLMA, PRRNFLMA,WPBHFLGA		YES	26-Aug	YES	
7/13/1998	BST	Application Response for MIAMFLPL, + ???????????		YES	26-Aug	YES	
7/14/1998	BST	Marcus Cathey response to O.A. Ramos 7/1/98 letter. BST REQUIRES physical for switch colo and further warnings against enhanced equipment.		YES	26-Aug	YES	
8/24/1998	Supra	Informed BST via telecon to N. Nelson Supra would execute FOC on all 15 offices			8/25/1998	YES	
8/25/1998	BST	Email N. Nelson to D. Nilson documenting Supras intention ot go FOC on 15 offices and correcting the prices on 2 offices. WPBHFLGA, and HLWDFLPE Revised Application Responses attached. Also BellSouth requesting "PRIORITY" on implementing collocation against Supra wish for all 15 to be simultaneously worked. Provided BANs for these projects, and agreed that dnilson comments regarding incorrect pricing on WPBHFLGA hand HLWDFLPE were miscalculated and correct info submitted.		YES	---		
	Supra	**Files FOC on 15 offices**					
		ORDLFLMA, HLWDFLWH, HLWDFLPE, BCRTFLMA, FTLDFLCY, FTLDFLMR, MIAMFLAE, FTLDFLPL, MIAMFLBC, MIAMFLGR, MAIMFLHL, MLBRFLMA, PRRNFLMA,WPBHFLGA, MIAMFLPL					
8/27/1998	Supra	email dnilson to N. Nelson documenting transmission of 15 FOC's, and requesting participation in permitting process. Request meeting in Miami the following week (BellSouth refused) to plan and prioritize tasks. Request instructions to "quickly achieve collocation".		YES			
9/1/1998	Supra	IC letter d.Nilson to P.Wanner response to her 8/28(??) letter regarding her misconception of Supra wanting to "wait" for new IC for requested prices, her delay in provising, etc		YES			
9/9/1998	Supra	**Letter D. Nilson to N. Nelson filing Phase 3 Collo applications**		YES			
		ORLDFLCL, GSVLFLMA, PNSCFLWA, JCVLFLSM, DBYHFLPO, PNCYFLMA					
9/10/1998	Joint	Testimony filed 98-0800		YES			
9/21/1998	BST	email N. Nelson to D. Nilson answering question regarding Supra becoming a certified Vendor, by referring us to the program administrator, Lawrence Lyles.		YES			
9/22/1998	BST	email N. Nelson to D. Nilson answering question of providing a list of already certified vendors.		YES			
9/22/1998	Joint	Telephone conference regarding walkthru of Miami offices Grande and Palmetto.		YES			

Supra Exhibit – DAN-RT-4
Docket No. 030851-TP 1 of 11 Pages

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
9/22/1998	Supra	email D. Nilson to N. Nelson regarding clarification of whether Supra of BellSouth makes frame positioning discussion , Jay Quarrles, Miami Engineer stated that Supra would be making that decision which nearly gagged Nancy Nelson who previously told us th□□□□□□□□□□□□we had no say.		YES			
9/30/1998	Supra	**Files FOC on 15 offices - Second submission.**		YES			
		Include check for $2250 for Palmetto (MIAMFLPL) offered on a "I have 100 sq. feet take it or leave it basis."		YES			
		Written statement of space < 2 year forecast.		YES			
		Power changes caused by Nortel Engineering Change		YES			
		Put BST on notice that based upon Grande walkthru, insufficient space has been allocated to Supra due to BST engineers using formula for enclosed space, not un-enclosed space.		YES			
10/1/1998	BST	Letter N. Nelson to D. Nilson stating that BellSouth concludes Supra did not ask for enough space.		YES			
10/3/1998	Supra	email D. Nilson to W. Mayes regarding BST supplying Supra with permit numbers for our FOC's on 15 offices. Never happened.		YES			
10/5/1998	Supra	Letter D. Nilson to N. Nelson detailed walkthru analysis of the space problem and why BellSouth made the mistake, based upon their own documentation		YES			
10/8/1998	Supra	Letter D. Nilson to N. Nelson was sent to P. McKay because N. Nelson was "In Training" (I.e. BellSouth Regulatory class for 98-0800 depositions) and couldn't be reached, and couldn't respond to my letter		YES			
10/9/1998	Supra	**Application Response due for Phase 3 - per Supra**		YES			
########	Supra	**Files Corrected pages after Nortel Engineering Change on DC power**		YES			
########	BST	Email from P. Solin requesting Conference Call 'Next *Week wed or Thursd'* to discuss applications being processed.					
########	BST	Second Email from Pat Solin Documenting Offices under discussion.					
		BCRTFLMA, FTLDFLCY, FTLDFLMR, FTLDFLPL,GSVLFLMA,HLWDFLPE,HLWDFLWH,JCVLFLSM,MIAMFLAE,MIAMFLBC,MIAMFLGR,MIAMFLHL,MLBRFLMA,WPBHFLGA,ORLDFLMA,PNSCFLWA,PNCYFLMA,PRRNFLMA					
########	BST	Rejects application for DBYHFLPO due to space.		YES			
10/3/1998	Supra	**FOC - Second submission Response back from BST per Supra**					
		98-0800 hearings - Tallahassee Florida.					
########	Supra	email D. Nilson to N. Nelson regarding status of 15 FOC's "under review". Supra states that we have heard that a finalized list is in the Possession of K. Milner, that there are "errors", and that he plans to spring this on Supra during the space availability docket 98-0800. Request a resumption of normal communications interrupted by BellSouth's response to 98-0800, and a request to see the errors "today"		YES			
########	Joint	Telephone conference d. Nilson, N. Nelson, P. Solin, J. Bloomer.					

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
		Supra was "the first" to request unenclosed. BST had "problems" processing our FOC as a result. We have not changed our request. They ar just now understanding it. INAC, Pat Soling told us Supra "cannot have unenclosed space because you are collocating switching equipment." Claimed reason was "security". No explanation of the basis for this policy was available when asked.					
		Supra was requested to file non-standard layout drawings *that conformed to neither set of rules in BSTEIP1.* D. Nilson requested this in writing. Never got it.					
		All of this was to be handled as an amendment to the FOC after all BST made the mistake.					
########	BST	**Letter denying FOC on 15 offices, and requiring "corrected and revised " forms. BellSouth has not admitted space issues are its fault and is trying to get Supra to re-apply to make the space calculation errors moot, or Supras fault. Return of the $344,526.50 check.**		YES			
		ORDLFLMA, HLWDFLWH, HLWDFLPE, BCRTFLMA, FTLDFLCY, *FTLDFLMR, MIAMFLAE, FTLDFLPL,* MIAMFLBC, MIAMFLGR, MAIMFLHL, MLBRFLMA, PRRNFLMA,WPBHFLGA, MIAMFLPL					
########	BST	**Letter denying collocation in the Daytona Port Orange DYBHFLPO office**					
########	Supra	**Letter detailing the 10/28 phone call, our receipt that morning of the returned check and our outrage at BellSouth's tactics. Returned the $344,526.50 check.**					
		1. Detailing in writing the fact Supra had filed apps according to BSTEI and BellSouth had incorrectly processed them according to virtual space rules.		YES			
		2. BST (Pat Solin, INAC) refusing Supra in line (cageless) collocation method. Stated reason - "Security"		YES			
		3. Supra need to re-file our FOC using non-documented, non-official instructions given to me verbally on the 10/28 call regarding HOW to document the desired space.		YES			
		4. That BellSouth had that morning returned Supra's FOC and a check for $344,526.50 (check no 2892) Saying the "FOC is not accepted"		YES			
		5. Supra floorspace need is properly documented and they need to process it correctly.		YES			
########	Supra	letter from M. Graham to P. McKay stating Supra's intentions to assume the burden of contracting BST certified vendors to perform Space preparation work, in addition to installation, and NOT use BST for this portion of collocation. Requesting the work statement to be presented to potential contractors.					
########	Supra	Letter from L. Bender to M. Cathey regarding Supra right to use Certified contractors *OTHER than BellSouth to prepare* the collocation space		YES			
########	Supra	**Application Response due Phase 3 - Second submission - per Supra**					
12/5/1998	FPSC	Awards Supra colo space in NDADFLGG and WPBHFLGR					
12/7/1998	Supra	Supra files collocation applications for 19 Georgia Central offic es and submits a check for $73,150.					

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
		AGSTGAMT, GSVLGAMA, ALPHGAMA, NRCRGAMA, LLBNGAMA, TUKRGAMA, ATHNGAMA, ATLNGASS, SMYRGAPF, ATLNGAIC, ATLNGABU, SVNHGABS, ASTLGAMA, RVDLGAMA, MACNGAMT, WYCRRGAMA, CLMBGAMT, ALBYGAMA, VLDSGAMA					
7/2/1999	BST	Contract amendment letter P. Finlen to O.A.Ramos, "706" amendment per changes in the ASO. BellSouth at that time tried to "sneak" in contract rate changes for floorspace, and power that had NOTHING to do with the ASO.	???				
6/1/1999	BST	Letter Robert T. Blau to Lawrence Strickling (FCC Chief CCB) stating BellSouth's *interpretation* of the FCC collocation order. Interesting reading, they try to twist the words their own way.		YES			
6/15/1999	BST	Notice to re-apply for Florida Exemption offices		YES			
		NDADFLGG, WPBHFLGR, DYBHFLPO, ORLDFLCO (included in error), omitted unintentionally was MIAMFLPL		YES			
6/23/1999	Supra	**Applied for the previously denied Florida Exemption offices FPSC Docets 98-0046, -0047,-0048, -0049, -1011, -1012, -1250**	**S00064**	YES			
		NDADFLGG, MIAMFLPL, WPBHFLGR, DBYHFLPO	S00064	YES			
7/18/1999	BST	**BST Finally understand the floorspace issue and their error in interpreting the instructions . "First time anybody applied for this."**					
7/26/1999	FPSC/BST	BST withdraws exemption request - space is available to all					
		CLEC has 60 days to file FOC (I.e. 9/26/99) CLECs get paperwork August 1 showing space and cost.					
8/1/1999		Acceptance Due on 4 Florida exemption office -- according to SUPRA based on Nancy Whites statements to the FPSC					
8/1/1999	Supra	Email to Nancy Nelson regarding the overdue responses.		YES			
8/19/1999	BST	N.Nelson email stating there is no July response date, their response date is August 31, 1999		YES			
8/13/1999	BST	Letter not received by Supra until AFTER 8/25/1999 Acceptance of 4 Florida Exemption offices		YES			
		NDADFLGG, WPBHFLGR, DYBHFLPO, MIAMFLPL					
8/25/1999	Supra	Email dnilson to n. Nelson regarding app checks, 4 or 5 offices the promised 7/26/99 promise for application acceptance packages,		YES			
8/31/1999	BST	Acceptance Due on 4 Florida exemption office -- according to BST					
8/31/1999	BST	Acceptance of 4 Florida Offices -- Very high prices for colo prep, no breakdown of any sort.		YES			
9/2/1999	Joint	Interconnection Conference Call - Email to document it.		YES			
		1. Justify prices					
		2. Notice of Supras intention to use Certified Contractors,					
		3. Orlando Colonial was an error on BST part, but acceptance is good **EVEN THOUGH THE APPLICATION WAS SUBMITTED WITH NO FUNCTIONAL CHANGES SINCE ORIGINAL REJECTION ON 9/1/1998**					
		4. Supra will not be in CLEC Common area is one does not exist or is full. Cageless					
		5. Supra will connect to the MDF, not IDC, even in common space					
		No colo agreement in Georgia is in laces					
9/2/1999	Joint	Conference Call to demand cost breakdowns on 4 application responses		YES			
9/8/1999	Supra	Letter demanding breakdown of costs requested in 9/2/1999 Conf call	S00065	YES			

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
9/10/1999	BST	**Rejects Supras 19 applications filed between May 19.1998 and September 18, 1998 for "errors" even though all issues except BellSouths improper allocation of space have been resolved for over a year.**	S00066				
		BCRTFLMA, FTLDFLCY, FTLDFLMR, FTLDFLPL, GSVLFLMA, HLWDFLPE, HLWDFLWH, JCVLFLSM, MAIMFLAE, MAIMFLBC, MIAMFLGR, MIAMFLHL, MLBRFLMA, ORLDFLCL, ORLDFLMA, PNCYFLMA, PNSCFLMA, PRRNFLMA,WPBHFLGA	S00066				
		BellSouth had previously accepted 14 of the 19 applications.	S00066				
9/10/1999	bst	p. Finlen to OA Ramos - Supra cannot use contractors.	S00067	NO			
9/20/1999	Supra	Request t\FCC Accelerated Docket		YES			
9/23/1999	Supra	D. Nilson to P. Finlen regarding Finlens 9/10 letter denying Supra the right to use contractors.		YES			
9/30/1999	Supra	Letter Documenting 9/29/99 telecom with Peggy McKay regarding cost breakdowns not yet available.		YES			
10/1/1999	BST	Application ACCEPTED - ORDLFLCO application is unchanged from version filed 9/9/1998, but rejected for "errors"		YES			
??????	Supra	Letter to Nancy Nelson formally requesting extension of BST deadline on the Four Florida Exemption offices as BST response to the FCC contains errors.					
	Supra	Re-files 11 applications on new BellSouth forms.					
		MLBRFLMA, BCRTFLMA, FTLDFLCY, HLWDFLWH, HLWDFLWH, HLWDFLPE, MIAMFLHL, MAIMFLBC, MAIMFLGR, MAIMFLAE, PRRNFLMA,MAIMFLRR					
10/6/1999	???	Deadline to file FOC on 4 Florida Offices					
10/6/1999	Supra	Letter to d. Nilson Mary Jo Peed regarding three unanswered letters re. Colo at BellSouth not answered in September		YES			
10/8/1999	BST	**R. Blau letter to GT Reynolds (FCC Enforcement) in response to Supras collocation complaint. The ONLY cost breakdown EVER provided to Supra.**	S00069				
########	Supra	Supra letter to FCC Glenn T. Reynolds requesting Accelerated Docket.		YES			
########	BST	Letter from P. Finlen to D. Nilson . Copy of BellSouth response to FCC that purports to answer my written request to Nancy Nelson on 9/8 and my letter to P. Fineln on 9/23/1999		YES			
########	BST	Letter from N. Nelson to D. Nilson regarding a revised process and access request document for Collocatoirs and Certified Vendors.		YES			
########	Bjoint	email(s) attempting to clarify BellSouths intent in requiring "706" Contract amendments prior to accepting collocation for Florida Exemption Dockets.					
########	BST	Letter P. Finlen to OA Ramos follow-up of 10/5 Conf call with Beth Shiroshi regarding 706 modifications to Supras IC,		YES	YES	YES	
########	Supra	Letter OA Ramos to P. Finlen regarding outrage at the underhanded tactics used to stall. BellSouth required "706" amendment to the IC to allow Supra to file FOC for the 4 Florida offices. Expressing outrage over tactics and delay and demanding colo go forward on existing contracted terms. BellSouth insists on IC amendment after previously refusing to make Amendments for Supras benefit. This amendment also "Snuck in" rate changes for floorspace and power outside of the ASO.		YES			
11/1/1999	Supra	Letter from D. Nilson to N. Nelson formally objecting to specific issues I the pricing of the 4 Florida Exemption office., based on rulings in 98-0810-FOF-TP and the contract.	S00070	YES			
		1. NR Expansion of the power plant in violation of the IC and 98-0604	S00070				

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
		2. Explanation that the letter to the FCC did NOT address all the items requested in the 9/2 Conf, 9/8 letter to N. Nelson	S00070				
		3. Demanding three quotes for space preparation and to prove same to Supra, as required by BST policy manual	S00070				
11/2/1999	SUPRA	email D. Nilson to N. Nelson reflecting corrections to N. Nelsons published notes regarding this conference call.	S00071				
########	Supra	Letter M. Buchelle to GT Reynolds regarding -- ??????????		NO			
########	BST	Letter Nancy White to D. Dimlich stating 30 day timeline is expired "some time ago" and BellSouth can no longer hold offices beyond 12/6/1999 even though they are in dispute.	S00072				
########	Supra	Letter A. Shelfer to G.T. Renoylds, FCC Regarding BST letter 11/22 stating they no longer could hold colo space for Supra					
########	BST	Letter W. Jorden to G.T. Reynolds re: BellSouth's response to Supra's Follow-up Letter regarding Accelerated Docket request.		YES			
########	Supra	Letter M. Buechelle to GT Reynolds Re. Supra requesting Accelerated Docket and Pre-Filing Mediation		YES			
12/6/1999	BST	**Ultimatum Deadline for FOC on 4 Florida Exemption offices**					YES
12/6/1999	Supra	**Letter D. Nilson to P. McKay with FOC for 4 Florida exemption offices, specific price discrepancies being disputed, a check for the non-disputed portion and all collocation documents for FOC.**	S00073	YES			
12/7/1999	Supra						
########	BST	Letter from P. Finlen to D. Nilson answering my 11/1/99 letter to Scott Kunze requesting prices on UNE loop and crossconnect with and without number portability.		YES			
		Finlens answer was that all 4 possibilities ALL required the maximum NR for loop and crossconnect. Justification - if Some work is done, the Max NR is charged, even if the ONLY work is on the Crossconnect. (I.e. Loop NR is not applicable in this case) No switch as is allowed. Must be disconnect - reconnect in violation of FCC orders.					
########	Supra	Letter D. Nilson to S. Kunze requesting BellSouth provide pricing on UNEs requested 11/1/1999, and follow-up to get UNE-P information requested 11/1/1999 and promised as "No problem" on 11/8/1999		YES			
########	Supra	**Letter D. Nilson to P. Mckay FOC on 11 central offices**	S00074				
		MLBRFLMA, BCRTFLMA, FTLDFLCY, HLWDFLWH, HLWDFLWH, HLWDFLPE, MIAMFLHL, MAIMFLBC, MAIMFLGR, MAIMFLAE, PRRNFLMA,MAIMFLRR	S00074				
1/6/2000	bst	**FOC Response due on 4 Florida Exemption offices - per Supra**					
1/17/2000	BST	**Letter Peggy McKay denying FOC to D.Nilsons 12/6 and 12/30 FOC returning Supra checks, restating their right to $2,263,421in colo prep costs for 15 offices ($150,894 avg. per office) and &1,131,710.50 up front to begin work.**	S00075	YES			
		They further go on to claim that the FCC complaint is material and a "serious omission" as if they can be removed of blame for lack of response due to a legal challenge. Claim they fully addressed the cost to the FCC for 4 offices and that Supra is "well aware" that a true up will take place after the project is complete. They point by point defend themselves and refuse to alter on penny of pricing.	S00075	YES			

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
1/17/2000	BST	**Outright denial of 12/6 and 12/30 FOC's. Letter P. McKay to D. Nilson. BST returned checks for $127,575 in non-disputed FOC costs.**	S00075				
		1. Reject because Supra did not supply 50% of $1,131,710.50 In other words BellSouth has claimed that EACH AND EVERY CHARGE RENDERED TO SUPRA IS VALID.	S00075				
		2. BellSouth claims "serious omission" in my summary letter because the FCC Complaint was not listed. As if it were a gating factor instead of a parallel issue.	S00075				
		3. BST Completely addressed the cost breakdown.	S00075				
		4. BST is allowed to recover card reader costs - issue of improperly dividing cost is not addressed	S00075				
		5. HVAC Charges are appropriate regardless of what Lucent says. No detail, no data, no way to investigate or re but the issues.	S00075				
		6. 98-0604 $0 NR cost for power does not apply to Supra.	S00075				
		7. BellSouth can charge Supra for demolition in NDADFLGG even though the FPSC said none was necessary as "usual, necessary costs". No mention of the fact this demolition was to site another CLEC from the exemption docket and Supra was paying an apportioned percent.	S00075				
		8. BellSouth is justified in its lighting costs. No answer regarding Supra photographs that the lighting was already there.	S00075				
		9. BellSouth denies the 1.3 multiplier.	S00075				
		10. Despite IC N/A for racking and cabling non-recurring costs, BellSouth insists that Supra is wrong and owes the monies.	S00075				
		11. The FCC response is correct - no changes.	S00075				
		12. Despite order 99-0060 in 98-0800, BellSouth "re-evaluated" Supras apps under 98-48 and the racking and cabling charges are thus appropriate. No cite to the law, and no answer regarding our IC having an N/A under NR costs.	S00075				
1/28/2000	BST	**FOC Response due on 11 offices - per Supra**					
1/31/2000	Supra	Letter D. Nilson to P. McKay , detailing lack of response from BellSouth regarding Supra use of contractors since the 9/2/1999 telecon. Letter rebuts P. McKay's 1/17/2000 letter	S00076				
2/17/2000	BST	Settlement Proposal from M.J. Peed to M. Buechelle		YES			
3/1/2000	Joint	Walkthru of 4 affected offices					
		Promises made by Mary Jo Peed					
		1. Supra can employ HVAC, electrical, and building contractors to do work in its own space.					
		2. Supra need not pay for power racking if BST turf vendor (Lucent) says space is available.					
		3. Supra need not pay for VF racking if BST turf vendor (Lucent) says space is available.					
		4. Supra may contract to run VF cables to DSx and MDF					
		5. Supra will not pay NR for Power.					
		6. BST will reprice Supra application responses.					
3/28/2000	BST	Files Colloc ation Tariff containing all elements Supra is fighting for. Supra is not entitled to enjoy this relief, however.		YES			
		Additionally Supra cannot buy from both the Tariff and IC, as Collocation must be bought one place or the other only.					
4/7/2000		Settlement Draft		YES			
6/9/2000		Settlement draft		YES			

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
6/28/2000	BST	**Carrier Notification SN91081846 Collocation interval (15 days) and rate changes. Includes HVAC, Ground bar, cable racking, Frame/Aisle lighting , listing power as ALWAYS HAVING BEEN JUST A RECURRING CHARGE (and then doubling the rate). Changes as a result of the generic collocation docket, but are still unavailable to Supra.**					
8/30/2000	SUPRA	**Letter D. Nilson to P. McKay requesting BellSouth proceed with collocation during billing dispute per FCC order *Fifth Report and order in the Avanceced Services Docket.***	S00077				
10/4/2000		Letter MJ. Peed to B. Chaiken regarding 10/3/2000 letter and previous days telecom demanding Supra deploy offices in BellSouth's preferred order, not Supras order		YES			
########	Supra	Letter B. Chaiken to MJ Peed clearly stating collocation on terms of the IC, and requests IMMEDIATE processing of the 4 Florida exemption offices.		YES			
6/5/2001	Legal	Arbitral Tribunal Issues order on collocation to proceed "immediately"	1	YES			
6/10/2001	Legal	Deadline to effect colloc comes and goes with no response.		YES			
6/15/2001	BST	Missing the 6/10/2001 date, BellSouth provides outrageous cost estimates inconsistant building practices and Non-recurring costs that vary wildy for same work in differenct offices by different engineers	10	YES			
6/25/2001	Supra	Supra announces its intention to deliver Class 5 switches on June 27, 2001 and demands walkthrus beginneing 6/26/2001 -- Letter L. Williams to T.Twomey.	11	YES		12	
6/25/2001	BST	Letter T.Twomey to L. Williams. BellSouth requires Supra to 1) confirm accuracy of assumptions, 2) indicate agreement or disagreement, and insists Supra must file NEW Firm Order Committments to replace those filed in Dec 1999.	12	YES		13	
6/28/2001	Supra	Implementation letter P/Turner to T.Twomey in response to 6/25 letter. Supra re-iterates it is NOT require to file FOC, and that 15 such FOCS were already filed in December 1999. Also that Supra will respond to price issues under seperate cover.	13	YES		N/A	
		Site Visits					
		Conference call with Greg Folensbee, formerly of AT&T negotiation team, the new BellSouth negotiator for Supra.					
7/11/2001	Supra	Letter D.Nilson to G. Follensbee, newly appointed collocation implementation contact. Letter documenting telephone call with Follensbee who indicatd power charges were "wrong" as were racking and Common systems Modifications. disputing assumptions made on Power, racking and space preparation, i.e. Disputes charges in two of three collocation copnstruction categories. Ref FPSC arbitration on power cost, rack cost, previous FOC's and previous cost disputes.	15	YES			
7/29/2001	Joint	Conference call with G. Follensbee and d.Nilson (others?) where Follensbeee had reviewed Supra's pricing isssues and "found merit" in Supra's complaint					
7/30/2001	Supra	Letter D. Nilson to T.Twomwy documenting call of 7/29/2001 on requested price quotations, Supra accepts 18 offices, and identified a 30 day window for office completion witch was subsequently ignored. Supra specifically disputes space in 6 remaining offices a s being environmentally unsound	17	YES			

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
8/3/2001	BST	Undated letter from G. Follensbee to D. Nilson CORRECTING price quotes of June 15, 2001. BellSouth acknowledges that Supra application ask for BellSouth to do ALL work.	18	YES			
		1) BellSouth claims charges include Supra's costs for BellSouth NOT provisiing POTS bays and NOT provisioning cages, although how this can be is never detailed or explained.	18	-			
		2) Follensbee acknowleges the 7/30 leeter to T.Twomey accepting space, despite future testimony that such acceptance never ocurred.	18	-			
		3) BellSouth place NEW requirements BEYOND the 6/25 letter from T.Twomey. Specifically:	18	-			
		a) During site walkthrus the BellSouth Engineers strongly encouraged Supra to use BDFB's instead of heavy power feeds that cost BellSouth more, and would save Supra monthly charges. This letter states that Supra indicated it wanted to make the change, but nothing about the pressure from bellSouth to do so.	18	-			
		b) Despite acknowledging that Supra applications ask for BellSouth to do all work, suddenly Supra is now required to state who will place the feeds. This due to Bellsouths position that it is not responsible for this cost despite FPSC order PSC-980604-FOF-TP	18	-			
		c) Because Supra elects not to use POTS bays, an ILEC mandated schem that hte D+FCC outlawed in its "706" collcoation order, Supra must now confirm that what we asked for on the applications is still valid. Why this is so is not explained.	18	-			
		d) BellSouth now requires Supra to confirm that the space engineered by BellSouth, which includes Supra's equipment space and common aisle areas outside Supra's control. BellSouh has used this as a disputed issue since 1998, despite the equipment remaining unchanged. Naturally there are errors in the calcualtions. However the underlying applications remain unchanged.	18	-			
		e) Supra must now state which work it wants to do itslef, despite the acknowledgement, earlier in the letter that Supra has requested that BellSouth do all work, and that we have disputed prices only for them doing work.	18	-			
		4) BellSouth states Supra can gain early entry into the ofice, ONLY if Supra does the above, unecessary work.	18	-			
8/21/2001	Joint	Conference Call - BST Action Items	88				
		1) When will colloc charges be due from Supra	88	-			
		2) SMEs to relook at 6 offices rejected in 7/30/01 ;letter.	88	-			
		3) Although Follensbee has yet to "find" the cost studies for the arbitration of the October 5, 1999 Conrtact, he has now reversed himself and states that Supra, not bellSouth is responsible for the charges. Of high cap power feeders, despite PSC-98-0604-FOF-TP which is clear as cavil that they are not to do so any longer, and that they must re-educate their personeell. ---------- Further a commitment is made to provide a reduced charge due to reduced cost	88	-			
		4) Letter misreprets Supras statments regarding space acceptance, power needs (critical data still not supplied by BST here) and where Supra intends to do its own work.	88	-			
########	BST	Letter G. Follensbee "offering" a 25 cent reuction in power per amp per month for the isolated swich feeds. No formal statement of non-recurring costs which was the initial issue to begin with.	23	YES			

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
		b) Now the is a new demand. Since Supra agreed to investigate the BDFB supplied power AT BELLSOUTHS INSISTENCE, Follensbee is now demanding a letter from Supra explaining what we really want, state this is outside our current contract (after just stting it ws the oly power IN the contract) and telling Supra to file a Bona Fide request "for BellSouth to evaluate."	23	-			
		Follensbee demands	23	-			
		1) Supra Indiacte what offices it will be doing work in despite our acceptance of the offices based on the applications and their acceptances which CLEARLY allow fo only BellSouth to do work.	23	-			
		2) Demanding revised collocation application forms	23	-			
		3) Demanding FOC's AGAIN!!!!!!!!!	23	-			
		4) Demanding a response to BellSouth's prior "take it or leave it" offer in the 6 rejected offices.	23	-			
12/5/2001	BST	Further demand for items 1,2,3,4 above response for which has already been given, except 2. Power. However BellSouth seems to no longer need an explanatory letter or a Bona fide request as demanded on 10/20/2001	24	YES			
		Recants D.Nilson sworn testimony that Supra accepted the space on 7/30/2001 after site visits to see the space.	24	-			
		Tries to create an issue with D. Nilsons swom testimony that only BellSouth has delayed doing the actual work, short of power work, depsite the 7/30/2001 acceptance letter.	24	-			
		Tries to declare Supra in violation of the award for not telling BellSouth what work to do, despite the 7/30/2001 letter of acceptance.	24	-			
		With the post hearing brief due in 48 hours, BellSouth gives Supra a 48 hour notice to respond or "BellSouth will issue contracts for the netire sope of work in the 18 office" which is EXACTLY what Supra wantd since 7/30/2001 (December 1999 actually)	24	-			
12/6/2001	Supra	Letter D. Nilson to G.Follensbee tetifying to BellSouth's Bad faith, lack of SOW, erros in the price sheets,	25	YES			
########	sUPRA	Letter D.Nilson to G.Follensbee stating that based on the 12/5 letter, BellSouth should indeed go ahead and contract for all work. Indicates that the cost issue has still not been resolved and a cost dispute still exists.	26	YES			
		1) the work Supra would be performing. The 7/30/2001 letter said it all - BellSouth should proceed.	26	-			
		2) Promised power figures to come when complete.	26	-			
		3) Refused to supply FOC for a third time.	26	-			
		4) Space a ailable is unsuitable.	26	-			
########	BST	Letter G. Follensbee to D. Nilson	27	YES			
		1) Make Ready Work. Supra cannot get a SOW until it decidess to do its own work. AT that point the SOW would be determined. No explanation of how cost wuoted are arrived at. No explanation as to how Supra can engage a contractor without a SOW unless on an open ended contract basis.	27	-			
		2) BellSouth claims Supra never told them that we wanted to do all the make ready work despite his 8/3/2001 letter which says otherwise.	27	-			
		3) BellSouth has the HLWDFLPE, HLWDFLWH, NDADFLGG, MIAMFLBC, AND WPBHFLGA offices ready for early acceptance.	27	-			
		3) DC power - complain over wait	27	-			
		4) FOC -- Claim Supra wanted to do own work until December 12.	27	-			
		5) Space formula agreed to	27	-			
		5) Security card forms. Must be filed.	27	-			
1/31/2002	SUPRA	Letter D. Nilson to G. Follensbee regarding issues raised in the 12/19/2001 letter	28	YES	NO		27

Date	Party	Action	Exhibit Number	Have Document	Sent / Received Answer	Have Answer Document	Have Precedent Document
			29	YES			
			30	YES			
			31	YES			
			32	YES			
			33	YES			
			34	YES			
			35	YES			
			36	YES			
			37	YES			
			38	YES			
			39	YES			
			40	YES			
			41	YES			
			42	YES			
			43	YES			
			44	YES			
			45	YES			
			46	YES			
			47	YES			
			48	YES			
			49	YES			
			50	YES			
			51	YES			
			52	YES			
			53	YES			
			54	YES			
			55	YES			
			56	YES			
			57	YES			
			58	YES			
			59	YES			
			60	YES			
			61	YES			
			62	YES			
			63	YES			
			64	YES			
			65	YES			
			66	YES			
			67	YES			
			68	YES			
			69	YES			
			70	YES			
			71	YES			
			72	YES			
			73	YES			
			74	YES			

BY MARTIN VILABOY

Local Motion

Real-time, voice-activated services add zip to Z-Tel's channel plans

When setting up shop back in 1998, still under the shadow of the Telecommunications Act of 1996, the folks at Z-Tel Technologies knew that lots of companies would be looking to take advantage of the deregulated local loop. They also figured that most of those new entrants would focus, at least initially, on putting in iron and facilities, which would mean "they probably wouldn't have much time to build applications that would make their services stand out," says Greg Smith, company president and CEO.

Z-Tel likewise figured there'd be some opportunities for these providers to hit the Bell companies where they were likely to be weakest. "We knew the Bells wouldn't invest in the old wireline network to create compelling new applications," says Smith. "They don't have to; they can count on inertia."

So Z-Tel set out to develop ways for competitive providers to creatively combat the inertia in the residential local market. With expectations to operate as a type of service bureau, the company drilled down on real-time and automated capabilities combined with voice recognition and directory-based applications.

"I always thought there was an opportunity to personalize the plain old telephone and make it work more like the Internet," says Smith.

One prime example is Z-Tel's new personal voice assistance (PVA), an exclusive voice-activated feature that enables customers to store contact information in a virtual address book, then make calls, send voice emails and look up contact information through simple voice commands from any phone.

Quickly evolving into much more than just an advanced service, Z-Tel is positioning PVA as the foundation of its delivery and distribution strategy as the company pushes past its roots in residential voice services toward managed business services and from predominately direct sales to a greater reliance on wholesale and indirect channels. Z-Tel also believes some attributes of PVA can provide the agent channel with an efficient means for attacking the residential market.

Z-Tel Revenue and Retail Line Growth ($000)

	1999	2000	2001	2002	1H03
Z-Tel Technologies Inc. total revenue	7,000	177,668	275,897	235,255	130,151
Period ending Z-Line count	40,000	240,000	254,000	203,000	272,000

Source: Company reports

At its basic level, what PVA does is allow users to pick up the phone and say, "call Uncle Joe on his cell phone."

"Verizon can't do that," says Smith. "So we have something compelling to offer, particularly if you can hit the same price point as the Bells."

That's not to say that Z-Tel expects PVA to drive a premium. Rather, PVA already is included "for free" as part of the Z-LineHOME Unlimited local and long distance bundle, and plans are to attach the product to every consumer offering.

"We want to out-local the Bell company," says Smith. "We do that by making a Z-Line better than a phone line. And, in turn, our agents stand out from the crowd."

Big Steps

Just as significant as PVA to its channel push, however, is Z-Tel's nationwide local service footprint, built on the unbundled network element platform (UNE-P). When UNE-P first hit the scene in early 1999, Smith and his cohorts immediately recognized the opportunity to attach their enhanced services platform to the public phone network and quickly decided to move from a service bureau model to national service provider.

Of course, at that time, "there really wasn't an OSS that catered to UNE-P," says Smith. "So we had to take our people who were building real-time services and focus them on the back office." Adding to the complexity, of course, were all the procedures and processes that came with quickly opening up operations in as many states as possible.

In what Smith describes as a "painstaking and expensive" journey, often akin to "building a jet while flying it," Z-Tel raised more than $100 million going public in December of 1999 and proceeded to build a nationwide system of flow-through provisioning and functionality with all the incumbent local exchange carriers (ILECs). Today, Z-Tel is operating in 47 states, and "we get orders in every state every month," says Smith.

The company currently has around 260,000 residential lines in service and has been EBITDA positive for five straight quarters, with "little or no debt to speak of," Smith says.

FLORIDA PUBLIC [redacted]
DOCKET NO. 030851-TP EXHIBIT NO. 116
COMPANY/ Z-Tel/Reith
WITNESS: MR-1 thru MR-7
DATE: 02/24-27/04

Down to Business

In 2003, top-line growth has shifted to Z-Tel's newer business services group, which now accounts for nearly half of newly provisioned lines. "And that is a huge change from the first of the year," says Smith.

The shift can be attributed largely to two factors. For starters, the business product could just recently be described as "fully built," says Smith, and secondly, "People are finally realizing that UNE-P is perfect for a business with a lot of branches."

Through its UNE-P platform, and a larger coverage than any Bell company, Z-Tel can offer a unique "managed local" product whereby customers can create either a customized package for all their domestic locations or transfer their current services to Z-Tel, which then consolidates and administers all aspects of the communications services for each location, including any existing relationships with other local providers.

"Multi-location businesses of all sizes have a critical need to monitor and control what each of their distributed sites is using and spending on telecom services," says Frank Grillo, senior vice president of business services for Z-Tel.

Z-Tel's "Communications Briefcase" offers reporting and analytics, one bill and one point of contact across any number of locations and can reduce communications spending by an average of 20 percent, say company executives.

"Instead of going for the DS-3 sale at corporate headquarters, which several people are bidding up, we talk about the fact that a majority of a business's phone bill probably isn't the headquarters but all the branches," says Smith. "Those also are the locations where you tend to have the least control," which can lead to some level of frustration, as businesses often don't know what services they have at various locations or what provider to call when there's a problem, he continues.

Converting to Z-Tel is relatively seamless, since businesses don't have to change their phone numbers or re-install services. And Z-Tel is leveraging its relationship with Covad Communications to offer broadband services within the Communications Briefcase. These options can be combined with email and Web hosting offerings through a relationship with XO Communications, as well as with toll-free and long distance services.

An early customer of the Communications Briefcase is Darden Restaurants Inc., the parent company for Red Lobster, Olive Garden, Bahama Breeze and Smokey Bones BBQ. Under the three-year contract, Z-Tel will provide approximately half of Darden's North American locations with local services, including approximately 3,200 telephone lines in 45 states.

Z-Tel also is working on a business-class version of its PVA feature, which already has experienced healthy acceptance among residential users. According to the company, about 35 percent of customers with access to PVA have taken the time to visit the Web site, load up an address book, tweak some settings and become active users of the service. And logic suggests that PVA's capabilities only will create greater interest among business users.

Homeward Bound

As far as the residential market, Z-Tel believes that the combination of PVA and its real-time, automated back office systems puts the company in position to attack what it sees as the primary barriers to a successful agent play in the consumer/home office space.

"There are really three things agents need to attack this market," says Smith, "and the first is very timely knowledge as to whether an order passes or not." Rather than wait the three to five business days it can often take for order confirmation, says Smith, agents can enter an order at a Z-Tel Web site and via flow-through provisioning know within 30 seconds if the order has passed. Fifteen seconds later, the order is at the ILEC.

The second thing agents need is a cafeteria of products, says Smith. "Consumers have a widely divergent range of needs. So if all you're offering is a $49.99 bundle, you're really limited to folks with lots of long distance usage." Furthermore, the most desirable customers within the residential market often can be the most resistant to a bundled offering, says Smith. "Their wireless phone means a lot to them, and their Internet connection means a lot, but there wireline phone is way down the list."

So Z-Tel's consumer offering includes a choice of eight products, ranging from the full unlimited bundle down to PVA as a standalone product. Of course, targeting consumer accounts one at a time is a hard way to make a living. But PVA's capabilities allow agents to target a large group or community with a single effort.

As an example, an agent could go to St. Andrew's church, obtain a church directory and offer every parishioner a free trial of PVA, in which all 400 members listed in the directory are preloaded into an address book – whether or not they choose the sign up for the service. This provides every church member with the ability to call or email any other church member simply by speaking his or her name into a phone.

A similar approach can be taken to little league teams or day care facilities, for example, and best of all, even users who initially choose not to sign on with Z-Tel have an ongoing exposure to PVA's convenience and personalization features via the use of other members in their group or community that may be contacting them. And if users decide to make the service permanent, they can simply visit a self-service Web site to set things up, while the agent picks up any accounts that result from the free trial. Here again, PVA's unique features also mean agents come to the table with more than a "better price" or "better bundle"-type sell.

The Whole Story

Beyond the retail channels, Z-Tel is preparing for rapid development in its wholesale business, as well. Due to its extensive local footprint, the company already has entered into agreements with major interexchange carriers looking to streamline the process of provisioning local lines from the Bell companies. Smith fully expects competitive carriers and even Bell companies to increasingly look toward UNE-P as a possible off-net strategy, as well.

But Z-Tel's greatest wholesale opportunities stand to come from the wireless market. Quite simply, with local number portability on the horizon, and an inevitable move toward wireless/wireline bundles already in the works, many wireless network operators that want to maintain a consumer business will be forced to find a way to integrate wireline.

"It opens up a whole new avenue of wholesale opportunities for us," says Smith. And what about an agent offering that includes a wireline/wireless bundle?

"We are working on it," says Smith. Just don't be surprised if PVA sits at the center of any such initiative.

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Z-Tel Technologies Inc. (ticker: ZTEL, exchange: NASDAQ) News Rele
20-Sep-2001

Z-Tel Ranked Number One Company On 2001 Florida High Tech Corridor Technology Fast 50 Rising Star List

TAMPA, Fla., Sep 20, 2001 (BUSINESS WIRE) --

Attributes 126,806 Percent Revenue Growth Over Three Year Nationwide Demand for Web-Enhanced Local Phone Service

Z-Tel Technologies, Inc. (Nasdaq/NM: ZTEL), a leading provider of telecommunications services to residential and small business customers, today announced that it has been named a Rising Star o the Florida High Tech Corridor Technology Fast 50 list, a ranking of 50 fastest growing technology companies in the state. Rankings for Rising Star are based on three-year (1998-2000) revenue growth.

Z-Tel's Chairman and CEO Gregg Smith credits the Company's drive innovate local telecommunications services with its 126,806 percent revenue growth over the past three years. Mr. Smith stated, "Being named a Rising Star is a proud achievement for Z-Tel. We have alw strived to be technology and industry pioneers, and to be recognize our vision of adding intelligence to the home phone and changing th way people communicate is extremely rewarding."

Z-Tel's increase in revenues of 126,806 percent over the three-year period of 1998 to 2000 resulted in Z-Tel being ranked the Number company on the 2001 Florida High Tech Corridor Technology Fast 5 Rising Star list. Companies recognized as a Rising Star are on their to becoming a Technology Fast 50 winner. The average five-year revenue growth among the 50 companies comprising the 2001 Flori High Tech Corridor Fast 50 is 882 percent. Among the Rising Star winners, the three-year average revenue growth is 25,680 percent.

"Today, there are more than 22,000 technology companies in the U States, many of whom are competing for the same markets here in states and worldwide," said Roger Nanney, managing partner of the North Florida practice of Deloitte & Touche. "The 2001 Florida High Corridor Technology Fast 50 winners have proven that they can co successfully by consistently delivering technological wonders. We at Deloitte & Touche commend Z-Tel for having the vision and determination to become one of the 50 fastest growing technology companies in Florida's High Tech Corridor."

To qualify as a Rising Star in the Technology Fast 50, companies m

have had operating revenues of at least $50,000 in 1998 and $1,000,000 in 2000, must be public or private companies headquart in the Florida High Tech Corridor and be "technology companies", defined as companies that produce technology, manufacture a technology product or devote a high percentage of effort to the rese and development of technology.

About Z-Tel

Z-Tel is a leading competitive provider of telecommunications servic to residential and small business customers. Z-Tel's proprietary technology imbues the telephone with "Intelligent Dial Tone," allowi the Company to offer personalized phone service that meets consu diverse communications needs in an intelligent, intuitive way. Z-Tel' flagship service is Z-LineHOME(TM), formerly known as Z-Line Hom Edition(TM), which bundles local and long distance phone service wi Tel's unique Web-enhanced communications features, including Find a multiple-number call forwarding feature, and unlimited member t member long distance calling. Z-Tel offers Z-LineHOME in 34 states, representing more than sixty-five percent of the U.S. residential ph market. Z-Tel also offers Z-LineCOMMUNITY(TM), a speech recognit enabled interactive voice portal that allows organizations, businesse and groups to organize and deliver information to their membership For more information about Z-Tel and our innovative services, pleas visit the Company's Web site at www.ztel.com.

About Deloitte & Touche

Deloitte & Touche LLP, one of the nation's leading professional servi firms, provides assurance and advisory, tax, and management consulting services through nearly 30,000 people in more than 100 cities. The firm is dedicated to helping our clients and our people ex Known as an employer of choice for innovative human resources programs, Deloitte & Touche has been recognized as one of the "10 Best Companies to Work For in America" by Fortune magazine for fo consecutive years. Deloitte & Touche is the U.S. national presence o Deloitte & Touche Tohmatsu. Deloitte & Touche Tohmatsu is a Swis Verein, and each of its national practices is a separate and independ legal entity. For more information, please visit Deloitte & Touche's site at www.us.deloitte.com.

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Z-Tel Technologies Inc. (ticker: ZTEL, exchange: NASDAQ) News Rele
11-Dec-2001

Z-Tel Ranked Number One Company On 2001 Technology Fast 500 Rising Star List; Three-Ye Revenue Growth of 126,806% Earns Z-Tel Top Position on National Rising Star List

TAMPA, Fla., Dec 11, 2001 (BUSINESS WIRE) -- Z-Tel Technologies Inc. (Nasdaq/NM: ZTEL), a leading provider of telecommunications services to residential and small business customers, today announ has been named a Rising Star on the 2001 Deloitte & Touche Technology Fast 500, a ranking of the 500 fastest growing technolo companies in the U.S. and Canada. A special category of 25 Rising winners, companies in business less than five years but more than three, are ranked based on percentage of growth in revenues for th years (1998 to 2000). Z-Tel's increase in revenues of 126,806 perc over the three-year period resulted in its being named the number company on the Rising Star list.

Commenting on the Company's achievement, Gregg Smith, preside and CEO, stated, "It is a great honor to be on the Rising Star list be so many notable companies from around the country. Although we only been in business for four years and were not eligible for the Fa 500 program, we are very pleased to receive the number one positi on the Rising Star list.

"We have invested over $100 million in R&D, software and systems pioneer and refine the technology that allows us to provide more th quarter of a million consumers nationwide with enhanced phone ser and that has contributed to our rapid revenue expansion over the p three years. It is gratifying to be acknowledged for that work and fo commitment to innovation."

"To rank on the Deloitte & Touche Technology Fast 500 Rising Star l companies must have phenomenal revenue growth in a three-year period. Z-Tel has proven to be one of the fast-growth success storie and we applaud their success and vision," said Mark A. Evans, man director, Deloitte & Touche Technology & Communications Group.

Earlier this year, Z-Tel was named the number one company on the Rising Star list for the Florida High Tech Corridor Technology Fast 5 program, which ranks the fastest growing technology companies in Corridor.

To qualify as a Rising Star in the Deloitte & Touche Technology Fast 500, entrants must have had revenues of at least $50,000 USD and

$75,000 CD for the United States and Canada, respectively. Each entrant is a public or private company headquartered in North Amer and must be a "technology company," defined as a company that develops proprietary technology that contributes to a significant por of the company's operating revenues, manufactures a technology-related product, or devotes a high percentage of effort to research development of technology. The overall five-year revenue growth ra for all Fast 500 companies was 6,184 percent.

About Z-Tel

Z-Tel was founded in the wake of the Telecommunications Act of 19 With the establishment of the Unbundled Network Element Platform (UNE-P), competitive telecommunications companies became able t provide telephone service to end-users over the incumbents' networ Z-Tel was formed around UNE-P with the vision of developing technology that would imbue the home phone with "Intelligent Dial Tone," wherein home phone service can be personalized to meet consumers' diverse communications needs in an intelligent, intuitive way.

Z-Tel's flagship service is Z-LineHOME(TM), formerly known as Z-Li Home Edition(TM), which bundles local and long distance phone ser with Web-enhanced communications features, including Find Me, a multiple-number call forwarding feature, and unlimited member to member long distance calling. Z-Tel currently offers Z-LineHOME se in 35 states, representing over 65% of the nation's total residential phone market. For more information about Z-Tel's innovative servic about Z-Tel, please visit the Company's Web site at www.ztel.com.

About Deloitte & Touche

Deloitte & Touche LLP, one of the nation's leading professional servi firms, provides assurance and advisory, tax, and management consulting services through nearly 30,000 people in more than 100 cities. The firm is dedicated to helping our clients and our people ex Known as an employer of choice for innovative human resources programs, Deloitte & Touche has been recognized as one of the "10 Best Companies to Work For in America" by Fortune magazine for fo consecutive years. Deloitte & Touche is the U.S. national practice of Deloitte & Touche Tohmatsu. Deloitte & Touche Tohmatsu is a Swis Verein, and each of its national practices is a separate and independ legal entity. For more information, please visit Deloitte & Touche's site at www.us.deloitte.com.

About Deloitte & Touche's Technology and Communications Gro

The Technology & Communications Group is composed of service professionals who have a wealth of experience serving technology a communications companies throughout the world in areas including Internet, software, semiconductors, cable, media and publishing, communication utilities, networking, wireless, computers and peripherals, and related industries. These specialists understand the challenges that technology and communications companies face throughout all stages of their business growth cycle and are commit

to helping them succeed. Deloitte & Touche is a leader in providing strategic, financial, operational, and information technology assista to its technology and communications clients.

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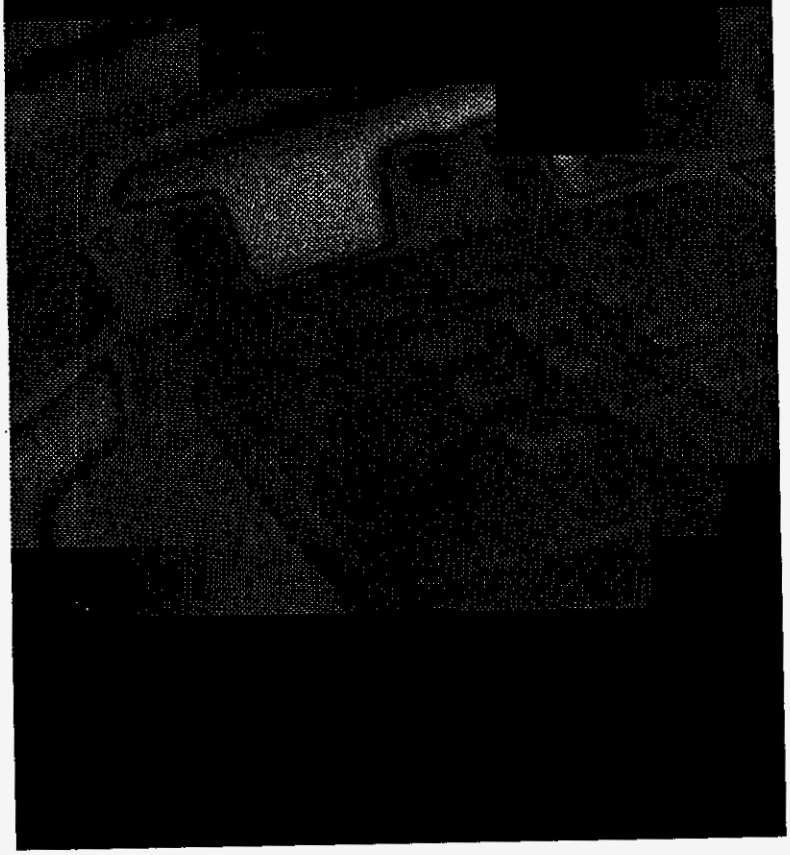
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Z-LINEPVA™

Member's Guide



Z-Tel has forever changed the way you communicate, with the most exciting innovation in phone service ever. Introducing Z-LinePVA™ featuring Personal Voice Assistant™ (PVA), a truly revolutionary new way to stay in touch with your world.

Pick up any phone and say "Call Mom" to complete a call. *Call a person, not a number.* Access any of your contact information anytime, anywhere, without an electronic or paper address book. Simplify your life, by just telling your phone what you'd like to do. Save time by sending a single voice message to many people at once. Read on to find out how to do all this, and a lot more, with PVA.

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Load Contact Information

Getting started with PVA *is easy!* It takes just a few steps and a few moments to set up your Address Book online. Then you're ready to go. Add all your existing contacts at once, or enter new contacts one at a time. You can even keep your contacts synchronized with other contact management programs/devices. It's up to you. Just follow the simple instructions below.

No Web access? Just dial 1-877-345-ZTEL (9835) then your Z-Line number and follow the prompts until you hear, "Press 1 for Personal Voice Assistant." The very first time you do this, you'll be asked if you wish to add contacts. Just answer "Yes" for live assistance with adding contacts. Be sure to have a few of your frequently called numbers handy when you call.

PVA lets you store the following information for each contact:

First and last name
Nickname
Business name
Email address
Z-Line Member ID
Home phone number
Business phone number
Cellular phone number
Pager number
Fax number
Home address
Business address
Birthday

Required fields: First and Last Name **or** Business Name.
All other fields are optional. A note about the Z-Line Member ID: This is a unique ID that each Z-Tel customer chooses. If your contact is a Z-Tel customer and you include a Z-Line Member ID with his or her contact information in your Address Book, you will be able to take advantage of specific PVA features.

Load Contact Information *Continued*

It's up to you how much information to include for contacts. However, keep in mind, in order to dial by name and/or specific location (cell phone, home phone, etc.) or to send voice email via PVA, you must first add the relevant contact information into your Address Book. Here's how:

1. **Using any computer with Web access, go to www.ztel.com, your secure online account management center for Z-Line features.**
2. **Log in using your 10-digit Z-Line number as your Login ID and your 4-digit PIN.**
3. **You will be taken to your Myzline Home page. From here, select My Address Book under Address Book.**
4. **Follow the onscreen instructions for Address Book setup. (You will only have to do this the very first time you access your Address Book.)**

Need Assistance?
A Customer Care representative can assist in setting up your Address Book. If you would like a walk-through, if you are experiencing problems, if you do not have access to the Web or if you've forgotten your Login or PIN, you can contact live assistance by saying "PVA Help" at any point in the PVA Main Menu. Live assistance is available Monday through Friday, 6 AM to 6 PM Central, and 9 AM to 5 PM Central on Saturday. We will assist you in getting your contacts loaded and provide you with helpful tips for managing your Address Book. After your contacts are in place, you will be able to start using PVA right away!

Now you're ready to load your contacts.
There are three ways to load contacts:

1. Upload an entire existing contact list. You can do this easily by exporting the information from an existing contact management software program, such as Microsoft Outlook or Yahoo!

How to Export contacts from Microsoft Outlook:

- **In Microsoft Outlook Main Menu: Click File, select Import and Export from the dropdown menu.**
- **An Address Book Wizard box will appear. This Wizard will walk you through exporting your Microsoft Outlook contacts.**
- **In the Wizard click Export to File and select Comma Separated Value for Windows (.csv file) as the file type.**
- **Now import the .csv file you just created into your PVA Address Book by selecting the Import *Contacts option and following the instructions* provided.**

Load Contact Information

Continued

2. Synchronize your PVA Address Book with your PDA or other contact manager with Intellisync for Z-Tel. This software will enable you to easily duplicate your existing contact list into your PVA Address Book and keep all your contact information up-to-date and organized in each location.

   - **Log in to your account at www.ztel.com and click on the Synchronization banner.**
   - **Perform a one-time, quick download of the Intellisync for Z-Tel software to your desktop.**
   - **Once the download is complete, you can sync up your contacts as often as you like.**
   - **Intellisync for Z-Tel performs two-way transfer, so the appropriate updates are made to both your PVA Address Book and contact management application. During synchronization, data is compared on your programmed contact management application (i.e. Microsoft Outlook, Outlook Express and/or Palm device).**

3. Enter your contacts in manually. Use this option if you have your contacts stored in a bound address book, on business cards, in your cell phone, etc. Just click on **Add a Contact**, type in all the relevant information for the contact, then click **Save** or **Save and Add Another**. Select **Quick Add** from the Address Book page to conveniently add several contacts at once.

Address Book Quick Tips:

- If you have multiple contacts with the exact same name, you may consider entering in a Nickname. For example, if you are adding two different individuals with the name "John Doe" into your Address Book, you may want to use "Johnny" as a Nickname for one, and "JD" for the other.
- You can choose a Nickname for any of your contacts, even if they are not a duplicate contact (as mentioned above). For example, you might choose to give "Dr. Jonathan Hartman" the Nickname "Susie's pediatrician." You can then dial that contact by saying "Susie's pediatrician" instead of his actual name.
- You can store up to 1000 contacts in your Address Book. Each Community Address Book can store up to 1000 contacts.

Accessing PVA

It's easy to access and use PVA from your cell phone or any phone. So, no matter where you go, you're always connected!

1. **Just dial 1-877-345-ZTEL (9835).**
2. **Enter your Z-Line number and follow the prompts to access Personal Voice Assistant.**

Time-Saving Tip
For PVA access from your home phone, cell phone or other phone you frequently use to access your Z-LinePVA, set up these numbers as Fast Access numbers. Fast Access can be found by logging in at www.ztel.com and selecting Fast Access under the Account Management section of the Myzline Home page. Enter up to six phone numbers you commonly use to access PVA and click Submit to save. With Fast Access, you no longer have to enter your Z-Line number and PIN after calling 1-877-345-ZTEL (9835)

"What would you like to do?"

"Make a Call"

Once you are in the PVA Main Menu (see instructions for Accessing PVA), you can access all the great PVA features that simplify the way you communicate every day!

Make a Call (Ways to Dial by Voice)

Say "Call" and the name of the contact.
Ex: "Call Salvador Dali."

OR

Say "Call" and the business name for the contact.
Ex: "Call Salvador Dali, Incorporated."

For the options above, PVA will respond with the Contact's Name and/or Business Name, and if applicable, offer you a selection of locations to call (e.g. home phone, cell phone, etc.)
Ex: "Salvador Dali, with Salvador Dali Incorporated, business phone."

OR

Say "Call" and the nickname of the contact.
Ex: "Call Sal."

OR

Say the number (including the area code).
Ex: "Call 404-555-1212."

Note: You can just dial the number directly, if you wish. Make sure to include the area code for ALL calls.

"What would you like to do?"

"Make a Call" *Continued*

Calling Quick Tips:

- Use your natural tone of voice and pace when accessing PVA. You don't need to slow down, over-enunciate or speak loudly for PVA to understand your instructions.
- You will need to say the contact name EXACTLY as you've entered it into your Address Book. Ex: "Joseph Smith" versus "Joe Smith."
- Saying "Cancel" will stop the current function and take you back to the beginning.
- To redial the last number dialed, just say "Redial."
- SHORTCUT: If you have multiple phone numbers for a contact, you can make a call more quickly by saying both the name and desired location/phone—"Call Vincent Van Gogh on his home phone/cell phone."
- To make another call, press "##." You will return to the PVA Menu.
- To exit the PVA Menu and go to the Z-Line Main Menu (to check voicemail or Account Options), say "Main Menu" at any time.
- Say "Help," "Help with Calling" or press "0" at any time to hear specific tips for using your PVA more effectively. If you need additional help and would like to speak to a live representative, say "PVA Help".

"What would you like to do?"

"Send Email"

No computer handy? With PVA all you need to send an email is a phone. You can get the message across using your own voice, which is much more personalized than any text email.

1. **Say "Send Email" and the name of the person to whom you would like to send an email.**
   Ex: Say "Send Email to Pablo Picasso."
2. **Record a voice message. PVA will then prompt you to Send, Listen or Re-record the message. Follow prompts as necessary until you are satisfied with the message.**
3. **Once you are satisfied with the message, say "Send" to send the message.**
4. **A .wav file of your voice message will be sent to the recipient as an email attachment.**
5. **You will hear "Message Sent," which confirms PVA has sent your message.**

Note: If you don't hear the "Message Sent" confirmation, your message has not been delivered.

"What would you like to do?"

"Send Email" *Continued*

Voice Email Quick Tips:

- In order to use this feature, you must first add a Return Email Address for yourself. Click My Settings under Address Book, enter your preferred email address in the Return Email Address field, then click Update
- When you send voice emails, the FROM section of the email will display your Return Email Address. To submit or update a Return Email Address, log in at www.ztel.com and click on My Settings under the Address Book section of the Myzline Home page. Then enter your Return Email Address and click Update
- In order to listen to the voice email, the voice email recipient must have an application that plays sound files, such as RealPlayer, Windows Media Player or QuickTime, as well as speakers or headphones on his/her computer.
- Voice emails cannot be sent to mobile devices that do not support attachments.
- Say "Help," "Help with Sending Email" or press "0" at any time to hear specific tips for using your PVA more effectively. If you need additional help, and would like to speak to a live representative, say "PVA Help."

Distribution Lists

Need to let the whole gang know that a game has been cancelled or that a surprise party is being planned? It doesn't have to be a hassle! Simply create a single voice email, send it, and they'll all know at once. What could be easier? You can send voice emails to an entire group of contacts in your Address Book by creating a Distribution List. It's fast and easy, too!

Log in at www.ztel.com and click on Distribution Lists under Address Book for simple instructions on how to set up this feature.

Send Email to a Distribution List:

1. **Say "Send Email" and the name of the Distribution List.**
   Ex: Say "Send Email to Sarah's Surprise Party Committee."
2. **If desired, you can add more recipients for the message, such as anyone who's not already part of the Distribution List you've selected.**
3. **Record a voice message. PVA will then prompt you to Send, Listen or Re-record the message. Follow prompts as necessary until you are satisfied with the message.**
4. **Once you are satisfied with the message, say "Send" to send the message.**
5. **A .wav file of your voice message will be sent to all the Distribution List members as an email attachment.**
6. **You will hear "Message Sent," which confirms PVA has sent your message.**

   Note: If you don't hear the "Message Sent" confirmation, your message has not been delivered.

"What would you like to do?"

"Send TeleMail"

Want to let the gang know about a last-minute change of plans? With TeleMail, you can record a single message and send it right to everyone's phone with one call. Each recipient's phone will ring, and when they pick it up, they'll instantly hear the news – in your voice! TeleMail will even send you a report on who received your message when, and at which number.

With TeleMail you will record one message, select the contacts and send the message to the selected phone numbers, all with one call. You will be able to select and prioritize the specific delivery number(s) for the TeleMail message.

To send TeleMail:

1. **Say "Send TeleMail". You will be prompted to provide the contact(s) or Distribution List(s) to which you would like to send the TeleMail.**

2. **You will then be prompted to specify your first, second and third choice of numbers to send the message to (choosing from home, business or cellular). If you choose, for example, business, and one of the recipients does not have a business phone number listed in your Address Book, your TeleMail will then be sent to the next number you have chosen. You are also able to send to every number available for each contact. To do this, just say "All numbers."**

3. **Record your name and, if you like, a short introduction message. Your recorded name (and message) will play at the start of the TeleMail so your recipients will know the message is from you.**

4. **Record a TeleMail message. PVA will then prompt you to Send, Listen or Re-record the message or add recipients to it. Follow prompts as necessary until you are satisfied with the message.**

5. **Once you are satisfied with the message, say "Send" to send the message.**

6. **You will hear "All right, I'll send your message," which confirms PVA will send your message.**

You will receive a delivery confirmation email within minutes of delivery of the final message. The report will provide you with the total number of messages delivered successfully to your recipients, total number of messages that provided a confirmation of delivery (actually delivered to a recipient, as opposed to voicemail or an answering machine) and the total number of messages which were rejected or undelivered.

The following illustrates your TeleMail message recipients' experience.

1. The TeleMail Message will begin with the following: "Hello, this is a TeleMail message for (your recipients name) from (your recorded name), powered by Z-Tel."

2. The recipient will be provided with the following prompts:
   - "To hear the message now, press 1."
   - "To put this message on hold, press 2."
   - "If you want me to call back in 15 minutes, press 3."
   - "If you don't want to hear this message, press 4."

3. After listening to the message, the recipient will be prompted to press "1" to replay or press "2" to provide you (the sender) with a confirmation that the message was received and listened to.

4. If the recipient rejects the message they will be prompted to just hang up or if they wish they may press "2" to register a compiaint with Z-Tel.

"What would you like to do?"

"Send TeleMail"

Continued

TeleMail messages ring another phone line, therefore there are nominal fees associated with sending these types of messages. Fees for sending TeleMail messages are based on the length of the message and the number of messages delivered. The same per-minute rate applies to all messages delivered, 24 hours per day, seven days a week.

For example:
You record a 60-second message and deliver it to five recipients (individually, or to a single Distribution List which has five members), equaling five total minutes. The per-minute rate is applied to the five minutes. The total number of minutes will vary slightly in the event the recipient puts the call on hold and/or the recipient replays the message.

These fees will appear on your Z-Tel statement under Summary of Services as TeleMail Messaging. You will also be provided with the per-message detail, plus the appropriate per-minute rating in the New Charges Detail section, under TeleMail Messaging. For more details on rates, please contact Customer Care.

TeleMail Quick Tips

- Before using TeleMail, let others know that you'll be sending them pre-recorded messages by phone. This will help ensure that your messages are accepted by their recipients, because they will be expecting to receive them.
- In order to use this feature, you must first add a Return Email Address for yourself to your account by clicking on the My Settings link on your Myzine Home page. This will allow the delivery confirmation report to be sent to you.
- Contacts must have at least one phone number in your Address Book in order to receive a TeleMail message.
- If a TeleMail call is answered by an answering machine or voicemail, the message will be delivered to the voicemail or answering machine.
- If the TeleMail call goes unanswered or the line is busy, the TeleMail call will be attempted every 15 minutes up to four times. If the TeleMail reaches an unanswered or busy line at the fourth attempt, the message will be reported to you as undeliverable.
- Say "Help," "Help with Sending TeleMail" or press "0" at any time to hear specific tips for using your PVA more effectively. If you need additional help, and would like to speak to a live representative, say "PVA Help."
- The maximum length of a TeleMail message is two minutes.

TeleMail is intended for person-to-person, personal use only and should not be used to deliver unsolicited messages to parties with whom you do not have an established relationship, or for any business purposes. Please contact Customer Care with any questions.

"What would you like to do?"

"Browse the Address Book"

You don't need to carry around an address book to stay in touch anymore. PVA enables you to quickly access phone numbers, email addresses and much more from any phone, so you can leave the address book at home!

There are two ways to browse information in the Address Book:

Hear the Contacts in the Address Book:
When you ask to "Browse the Address Book" you will be provided with the number of pages of contacts you have in your Address Book. It's set up to provide you a page-by-page, alphabetical list of your contacts -- similar to a white page listing in the telephone book. You are able to browse through the pages individually to hear each and every contact, or you can expedite the search by saying "Next page," "Previous page" or the page number, for example, "Page three." Or you can look up a specific contact just by following the prompts. Just say "Stop" to quit listening.

If you hear the name of the contact you're looking for just do the following:

1. **Say the name of the contact you would like to access.**
   Ex: "Claude Monet."

2. **You will be prompted to "Call", "Email" or "Look Up Contact Information" for this contact.**

Look Up Information on a Specific Contact:
Once in the Look Up option, you can specify the exact contact you would like to look up. Ex: "Look up Claude Monet."

SHORTCUT: You can skip directly to specific information for a contact by saying the information category. Ex: Just say "Birthday" or "Email," to hear the birthday or email address for the contact you are looking up.

Browsing the Address Book Quick Tips:

- Browsing enables you to hear every contact in your personal Address Book. There is also a Browsing option within each Community directory.
- When looking up a specific contact, say "Next" to hear the next available contact information entry.
- Stop the listing of information at any time by saying "Stop" or "Cancel."
- While looking up a contact, or immediately after, you can call the contact by saying "Call." You can also send a voice email to the contact by saying "Send Email."
- After looking up all or part of a contact's information, you can repeat the information by saying "Repeat."

  SHORTCUT: You can repeat a specific element of contact information by saying the element you would like to hear again. Ex: Say "Repeat Home Address."

- Say "Help," "Help with Browsing" or press "0" at any time to hear specific Lookup tips. If you need additional help, and would like to speak to a live representative, say "PVA Help."

"What would you like to do?"

"Visit a Community"

Member of a group, club or association? With PVA, you're also able to create separate Address Books for any group that you might be a part of. These Address Books allow you to create messaging groups, or "Communities," a great tool for getting yourself and your group members organized.

As the Community Coordinator, you're able to create a Community and notify each member via email that they are invited to participate in and access your Community. Each member that is not currently a Z-Tel customer will be able to enjoy the great benefits of PVA, too, because your invitation will also include a link for a Free PVA Trial account (free for 30 days), as well as information on other Z-Tel products.

Once your Community is built and all the members have accepted the invitation, communication between members becomes much simpler and more convenient than ever before! No more having to call everyone or print up newsletters/flyers to get the message out. No more having to flip through a thick address book to find contact information. All the great PVA features apply—sending voice emails to one member or many members at once with a Distribution List and/or retrieving contact information anywhere, anytime from a "virtual" Community Address Book, and dialing members by voice. As the Community Coordinator you keep the contact information up-to-date, and all changes you make are automatically reflected for the entire Community.

To find out more about Communities, log in at www.ztel.com, then click on the My Communities banner. Once in My Communities, click on Help for detailed instructions on creating Communities.

As a Community Coordinator or Community member, you will be presented with the "Visit a Community" option from the PVA Main Menu. Say "Visit a Community" to access either Communities that you are a member of or that you've created. Once in the "Visit a Community" prompt of the PVA Main Menu, say "Community List" to hear a list of available Communities to which you are either a Coordinator or member. Once you've selected the appropriate Community Address Book, you will be prompted to perform one of these PVA features: Make a Call, Send Email, Browse the Address Book or Change Communities.

Note: Change Communities allows you to visit another Community. You can either go directly to another Community or listen to the list of available Communities.

Distribution Lists for Communities
Distribution Lists for Communities are an invaluable communication tool, as they allow the Coordinator or members to conveniently send a voice email to the entire group or sub-segments of the group with one recording. Distribution Lists are created and managed by the Community Coordinator. All members have access to the Distribution Lists available in the Community Address Book, but only the Coordinator can apply changes to it.

For example, the "**Lincoln Elementary PTA**" Community may have the following Distribution Lists:

- **PTA Members**—Entire Community list;
- **PTA Board Members**—Selected members from the Community list who are responsible for managing the Community; or
- **Bake Sale Committee**—Smaller group responsible for a specific task

Visit a Community Quick Tips:

- To visit a Community just say "Visit a Community," then the name of the Community when prompted. Example: "Lincoln Elementary PTA Community."
- To return to your personal Address Book say: "Go to my Address Book."
- To exit the PVA Menu and go to the Z-Line Main Menu (to check/manage voicemail or Account Options), say "Main Menu" at any time.
- Say "Help," "Help with Communities" or press "0" at any time to hear specific tips for using your PVA more effectively. If you need additional help, and would like to speak to a live representative, say "PVA Help."

Additional Features

Receiving Calls
You can be reached by having callers dial the toll-free access number, 1-877-345-ZTEL (9835), then entering in your Z-Line number.

You also have the option of including a personal toll-free number as a part of your Z-LinePVA. The Z-Line800™ option allows for callers to dial a toll-free number to reach you directly. If you do not have this option, contact Customer Care for details.

Find Me
You're a person on the move. It's a good thing your Z-LinePVA knows just where to find you! Find Me will automatically send your calls to your cell phone, work phone, or up to any three phone numbers you choose! You must set up at least one Find Me number to receive calls, otherwise all calls will go to your Message Center (voicemail). To set up Find Me, access Z-LinePVA by dialing 1-877-345-ZTEL and following the prompts, then press [3] to access your Account Options. Press [4] and follow the prompts to select and/or change your Find Me numbers. If you chose to turn Find Me off, unanswered calls will go to your voicemail.

Message Center (Voicemail)
Your Z-LinePVA Message Center takes messages when you're unavailable at your Find Me numbers.

Message Center (Voicemail) Setup
To access your Message Center, just dial 1-877-345-ZTEL (9835) and follow the prompts to your Message Center, option [2].

Once in your Message Center, you will be walked through a series of setup prompts. Follow these prompts to record your name. Once you've completed this process you will also be prompted to record a personal greeting, which is like a message you might record on an answering machine or voicemail service.

Check your messages by accessing your Z-LinePVA and selecting option [2] from the main menu and follow the prompts. You are also able to check your messages anytime from any computer with a Web connection. Log in to your secure online account at www.ztel.com using your Z-Line number as your Login ID and 4-digit PIN. You can listen to all your voicemail messages as audio .wav files from one secure Web site. Your messages are listed by the caller's phone number, which helps you prioritize those return calls. Need to share a message with someone else? Forward it to anyone as an email attachment.

Voicemail Quick Tips:
- If you choose to turn voicemail off, callers will be unable to leave messages for you. Instead they will hear, "Your party is unavailable at this time and is not accepting messages. Goodbye."
- Maximum length of common and personal greetings: 30 seconds
- Maximum voicemail message length: 3 minutes
- Storage duration for new and saved messages: 14 days
- Message capacity of mailbox: UNLIMITED
- You can forward voicemail messages to other Z-Line members while or after listening to a message. Simply press [8] and follow the prompts.

Additional Features *Continued*

Notify Me
Tired of always checking your voicemail only to find you have no messages? Tired of not knowing when you received a message? Well, Notify Me can keep you alerted. Notify Me automatically notifies you by email, text-enabled pager and/or text-enabled cellular phone each time you receive a voicemail message. Set up your notification methods in just minutes at www.ztel.com. When you do not wish to be alerted, you may turn Notify Me off with a simple mouse click or by phone.

1. **Log in using your Login ID and PIN.**
2. **Click on the Notify Me link.**
3. **Follow the instructions.**

Contact Updater
Have friends or relatives moving out of town? Not to worry – PVA makes keeping your Address Book up to date as simple as sending a single email. The Contact Updater feature allows you to email multiple contacts from your Address Book to verify that the phone numbers and other information you have for them are correct. They can update any of this information right from the email, and all changes they make will automatically be updated in your Address Book! Keeping up with the important people in your life has never been easier.

Share Contacts
Z-LinePVA allows you to share contacts with anyone you choose. This is a quick and easy way to ensure all the other parents of your son's soccer team or everyone in your book club has access to all the important phone numbers in case they need them! Just select a list of contacts to share with one or several people at once. If the recipient is a Z-LinePVA member, your shared contacts will automatically appear in their PVA Address Book, as long as you include their Z-Line Member ID with their contact information in your PVA Address Book. If the recipient is not a Z-LinePVA member, they will receive a file that they can view with Excel or upload into Microsoft Outlook.

Note: In order for your shared contact information to automatically update in other Z-Tel customers' Address Books, you must have their Z-Line Member IDs stored in your Address Book with their contact information.

To use the Contact Updater or Share Contacts options, log in at www.ztel.com and click on My Address Book under Address Book, then click on the appropriate link from the left-hand navigation menu.

Birthday Reminders
If you enter a birth date for your contacts you will automatically receive a reminder voicemail five days prior to the birthday. This will give you more than enough time to go shopping for a gift, to buy a card, or – even better – to record and send a personalized birthday wish, in your own voice, by email! See Send Email section of this brochure for more information.

Additional Features

Continued

Conferencing

Z-Tel Conferencing allows you to set up on-demand conference calls quickly and conveniently with up to a total of 15 conference call participants. Imagine being able to conference your entire family—each member across the country—for a monthly "telephone family reunion." We're confident that you will find many ways to take advantage of this feature.

There are no setup fees and your charges are based on the number of conference call participants and the number of minutes that each participant is on the line. These charges will appear in the "Summary of Service" section of your bill under "Long Distance" charges as "Conference Calling." For more details on billing please call Customer Care at 1-877-ASK-ZTEL.

Access your Z-LinePVA by dialing 1-877-345-ZTEL (9835) and following the prompts. Host a conference is option [4] from the Z-Line Main Menu.

Setting up a conference call

1. **Choose the date and time for your meeting.**
2. **Notify your guests of the date and time the call will take place, the call topic and provide your guests with the necessary access instructions (see below for more details) and PIN (if selected).**

Accessing a conference call as a host

1. **Access the Z-Line Main Menu.**
2. **Press [4] to host a conference call.**
3. **As the host, you will be prompted to create an optional 1- to 12-digit conference PIN for security purposes. If you enter a conference PIN, your guests will need to know this PIN in order to enter the conference call.**
4. **If you are the first caller in the conference, you will remain on hold until your other participants have joined. If your guests are already on the call, your conference call will begin.**

Accessing a conference call as a guest

1. **Call the toll-free access number, 1-877-MEET-ME2 (1-877-633-8632).**
2. **Enter the 10-digit Z-Line number for the conference call host.**
3. **Enter the 1- to 12-digit conference PIN if one was created.**
4. **If you, the host, have not yet joined, your guests will be placed on hold until your arrival. Once you join, the conference call will begin.**

Conferencing Quick Tips:

- You may have up to 15 participants on a conference call at any time (one host and 14 guests).
- One conference call per mail box may occur at any given time.
- The conferencing host may also enter the conference call through the toll-free access number, 1-877-MEET-ME2 (1-877-633-8632)

Directory Assistance

Directory Assistance is now available through PVA. Now you won't have to dial Information separately when you need to look up a local or national phone number. With PVA Directory Assistance the rates are the same for both local and national directory assistance requests. You will experience a savings of up to 15% over traditional local Directory Assistance and even greater savings on national Directory Assistance service.

To access PVA Directory Assistance, simply say "Directory Assistance" at any point in the PVA Main Menu. You will prompted by an automated system to provide the city, state, and name of the listing you're looking for (operators cannot provide unlisted numbers). Once the number is provided to you, PVA Directory Assistance will also provide you with the option to complete the call for you.

Directory Assistance and Directory Assistant Call Completion services are rated per call. You will see these fees within your Summary of Services detail listed as PVA Directory Assistance on your statement. In addition, detail for each Directory Assistance request will be provided under the New Charges Detail section. For more details on rates, please contact Customer Care.

Additional Information

Touch Tone Usage Instructions
If you are in a noisy location, or for some other reason would prefer to use your phone's keypad instead of PVA voice prompts, you can switch to a touch tone key system at any time by pressing "#9" on your touch tone phone. You will still be able to perform any of the calling, look up or voice email features outlined in this Member's Guide (PVA will provide you with the appropriate prompts to help you navigate through the system). To return to the PVA voice system, press "#9" again at any time.

Understanding Your PIN
A Personal Identification Number (PIN) is assigned to you when you open your Z-LinePVA account. You will need to enter your PIN in order to gain access to your Z-LinePVA when you are not calling from a number you've set up with Fast Access (see page 6 for more on Fast Access). Your Z-Line also includes a PIN Security feature. PIN Security can be turned on or off for all phone access of your Z-LinePVA account. If you have PIN Security on, you will be prompted to enter your PIN, even if you have the number set up for Fast Access.

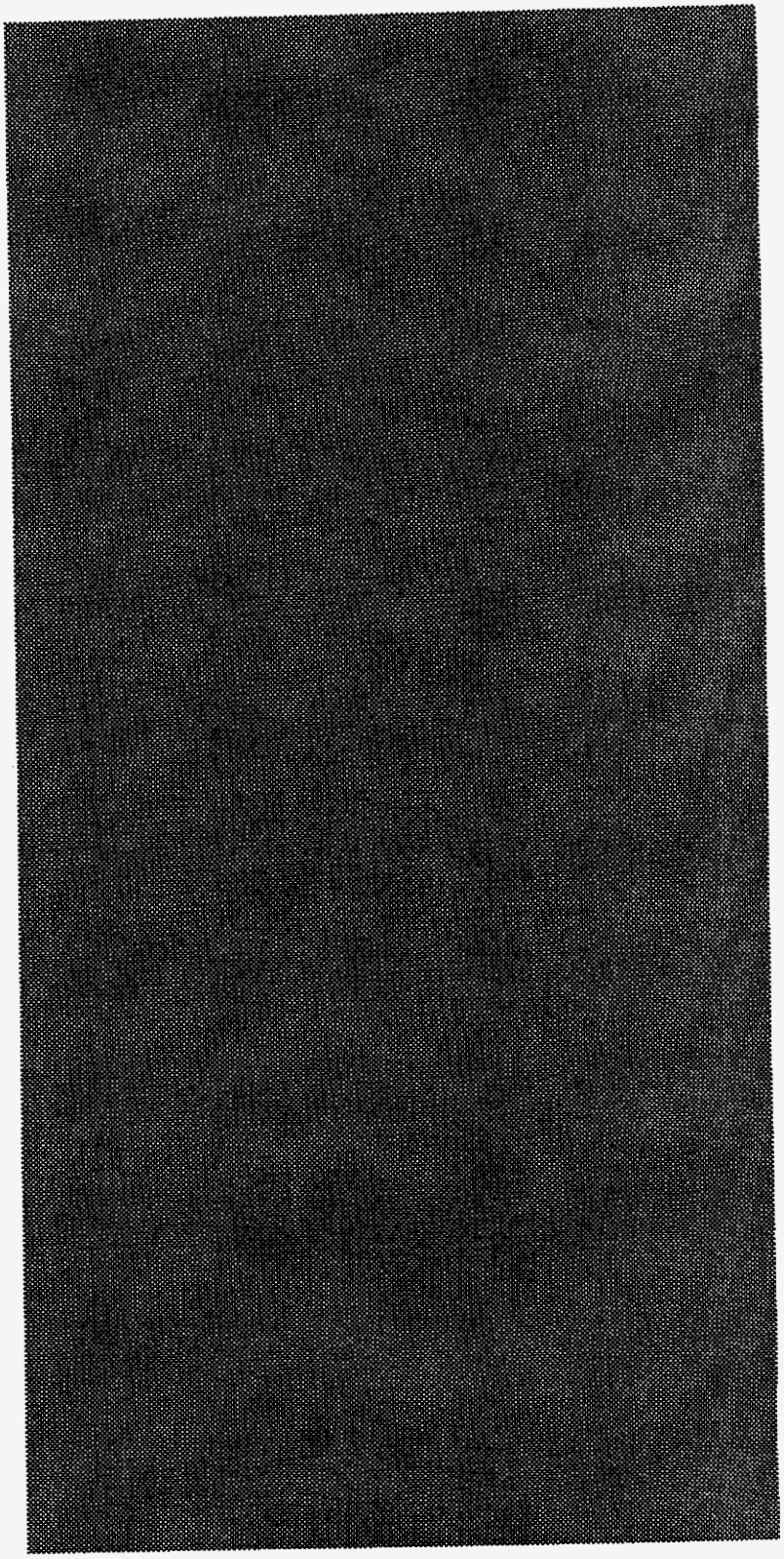
To turn PIN Security on/off:
- Access your Z-Line. Press "3" to change your Account Options.
- Press "6" to turn PIN Security on/off.

To change your PIN:
- Access your Z-Line. Press "3" to change your Account Options.
- Press "5" to change your PIN.
- Follow the prompts to save your new PIN.

Note: Be sure to change your PIN frequently to maintain the security of your account. Always choose a PIN that's easy for you to remember, but that's not obvious to others. If you forget your PIN, please call Customer Care at 1-877-ASK-ZTEL.

Troubleshooting
Please be aware that PVA may not always understand your instructions. If this should happen, simply say "Cancel" to try again. To refresh your PVA session, say "Main Menu" then press "1." If you are unable to use PVA by voice for any reason, see the touch tone instructions above.

PVA Updates
Look for us to continually make PVA even more beneficial to you. Check your Myzline Home page for the latest PVA updates!



QUESTIONS?

Contact Customer Care at:
1-877-ASK-ZTEL
Or visit us on the Web at:
www.ztel.com

Z-Tel
PO Box 10751
Atmore, AL 36504-5751

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Z-Tel Technologies Inc. (ticker: ZTEL, exchange: NASDAQ) News Rele
15-Sep-2003

Top U.S. Retailers Name Z-Tel's Personal Voice Assistant(TM) "Best New Technology"

TAMPA, Fla., Sep 15, 2003 /PRNewswire-FirstCall via COMTEX/ -- Z-Communications, Inc., a wholly-owned subsidiary of Z-Tel Technolo Inc. (Nasdaq: ZTEL) and leading provider of local, long distance and enhanced telecommunications services, announces its Personal Voic Assistant(TM) (PVA) product was named "Best New Technology" at t RetailVision(R) Fall 2003 event. RetailVision, hosted by Vision Event Gartner, Inc. (NYSE: IT ITB) company, showcases the hottest technologies to hundreds of key decision-makers in the retail indust Frontline Specialists, a technology-focused retail strategy consulting firm, partnered with Z-Tel to introduce and unveil PVA to the event' retail attendees.

Z-Tel's PVA is a voice-activated communication service provided to residential customers at no charge. The service allows users to voic email or voice dial their contacts stored in a virtual, voice-activated address book, which they can access from any phone in the world u simple, spoken commands. With PVA, users can pick up the phone, "Send email to family," and PVA will record their message and deliv in their voice to the entire group at once. They can also place indivi directed calls by saying, "Call Angie on her cell phone." PVA include conference calling, birthday reminders, an automatic contact update and Communities(TM), a network of PVA address books available to group to help it stay in close touch with its members. PVA is also available to Z-Tel's non-residential customers nationwide on a stand alone basis.

"The industry's response to PVA is indicative of the product's ability bring consumers a personalized, yet new age approach to communication," commented Gregg Smith, president and chief executive officer of Z-Tel. "This prestigious award further demonstr Z-Tel's commitment to bringing enhanced communication capabilitie consumers, allowing us to compete beyond today's price war in the residential services market."

Award winners were chosen by hand-selected, top U.S. retailers, su as CompUSA, Circuit City, HSN, Staples, Best Buy, Radio Shack, Co Buy.com, OfficeMax.com, AOL, Office Depot and Amazon.com. Participating retailers researched and compared technology product across every major category sold through the consumer channel, including hardware, software, accessories, and peripherals. Z-Tel, a first-time RetailVision presenter, was also nominated for the "Best R Strategy" award. A complete list of winners and nominees in all

categories is available at www.visionevents.com/rv/awards.php.

"Congratulations to the winners and nominees of the Fall 2003 "Bes RetailVision Awards," said Pete Prentice, event director for RetailVisi "Being recognized by the industry's most powerful retail decision m is a tremendous honor which should make the winners and nominee extremely proud."

About Vision Events

Vision Events, a Gartner company, is a leading producer of highly focused business events that bring resellers and end users together leading and emerging vendors in private boardroom appointments t form strategic partnerships and secure new business in the technolo sector. Additional information about Vision Events can be found at www.visionevents.com.

About Gartner, Inc.

Gartner, Inc. is a research and advisory firm that helps more than 10,000 clients leverage technology to achieve business success. Gartner's businesses are Research, Consulting, Measurement, Event and Executive Programs. Founded in 1979, Gartner is headquartere Stamford, Conn., and has more than 3,800 associates, including approximately 1,000 research analysts and consultants, in more tha locations worldwide. Revenue for calendar year 2002 totaled $888 million. For more information, visit www.gartner.com.

About Frontline Specialists

Frontline Specialists was founded in 1996 to provide customizable s resources to companies that compete in high-technology and consu electronics markets. Through event-driven "sell days," in-store sale training sessions, merchandising programs, and inventory control services, the company helps to increase product visibility, sell-throu and overall profitability for its clients. Based in Escondido, California Frontline operates a nationwide network of 450 sales contractors, a well as a staff of regional managers and account managers who gui and implement the company's sales, training and merchandising programs. This network has helped to increase product sell-through a number of market leading companies, including Targus, Handspri Eastman Kodak, Philips Electronics, Kyocera Wireless, Sanyo Fisher Belkin Components. For more information, visit www.frontlinespecialists.com.

About Z-Tel

Founded in 1998, Z-Tel offers consumers and businesses nationwid traditional and enhanced telecommunications services. Z-Tel's enha services, such as Internet-accessible and voice-activated calling and messaging features, are designed to meet customers' communicatio needs intelligently and intuitively. Z-Tel also makes its services avai on a wholesale basis to other communications companies, including Sprint and MCI. For more information about Z-Tel and its innovative

services, visit www.ztel.com.

SOURCE Z-Tel Technologies, Inc.

Sarah E. Bialk, Director of Investor Relations of Z-Tel Technologies, Inc., +1-813-233-4586, or ir@z-tel.com

http://www.visionevents.com/rv/awards.php



News provided by COMTEX. User agreement applies

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Docket No. 030851-TP
Z-TEL Witness Reith, Ex. No. 5, Page 1 of 3
Title: Z-TEL Announcement of Expanded Business Services



Learn About Us
Overview
Management Team
Stock Quote
Stock Chart
Fundamentals
Press Releases
In The News
Earnings Estimates
Analyst Coverage
SEC Filings
Presentations
Annual Reports
Audio Archive
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Email Alerts
Contact Investor Relations

Z-Tel Technologies Inc. (ticker: ZTEL, exchange: NASDAQ) News Rele
15-Jul-2003

Z-Tel Strengthens Its Business Services Focus, Launches Nationwide Managed Voice and Data Solutions for Companies Large and Small

TAMPA, Fla.--(BUSINESS WIRE)--July 15, 2003--

Olive Garden and Red Lobster Parent Becomes First Communicati
Briefcase(TM) Customer, Consolidating Local Service for Hundre
Its Nationwide Locations with Z-Tel

Z-Tel Technologies, Inc. (Nasdaq/SC: ZTEL), a leading provider of lo long distance and enhanced telecommunications services, today announced it has expanded its Business Services Suite to include managed local, broadband, email and hosting services. Serving busi customers since October 2001, Z-Tel has combined its nationwide lo phone service footprint, the largest in the country, with broadband a long distance services to create a complete managed service packag the Communications Briefcase(TM).

The first Communications Briefcase customer is Darden Restaurants, (NYSE: DRI), the parent company for Red Lobster, Olive Garden, Bahama Breeze and Smokey Bones BBQ. Under the newly signed, th year contract, Z-Tel will provide approximately half of Darden's Nort American locations with local telecommunications services. The agreement encompasses approximately 3,200 telephone lines in 45 states.

With the Communications Briefcase, customers can create either a customized package for all their U.S. locations or simply transfer the current services to Z-Tel. Z-Tel then consolidates and manages all aspects of the customer's communications services for each location an average of twenty percent less than they currently pay. The Communications Briefcase also offers consolidated account manage comprehensive billing, reporting and analytics and simplified product management across any number of customer locations.

Frank Grillo, senior vice president of business services for Z-Tel, commented, "We're honored that Darden employees and customers across the country will rely on our services. Multi-location businesse all sizes have a critical need to monitor and control what each of the distributed sites is using and spending on telecom services. Our nationwide reach enables us to take over all aspects of a company's service, giving them just one contract, one bill and one point of cont for multiple sites, regardless of the number or location of the offices.

For customers choosing to convert all of their local lines to Z-Tel, Z- takes over and administers all aspects of the customer's local servic including existing relationships they may have with other local provi Converting to Z-Tel is seamless, as companies don't have to change phone numbers or re-install their phone services. Z-Tel is also lever its recently announced relationship with Covad to offer three types o broadband services, or Z-Speed(TM), with the Communications Briefcase: ADSL, SDSL and T-1. These options can be combined wit email and Web hosting offerings through Z-Tel's new relationship wi Communications, as well as with toll-free and long distance services Every Communications Briefcase customer will receive round-the-clo technical support and a dedicated account manager to handle all ser and account issues.

Mr. Grillo continued, "We're also introducing a business-class versio our highly popular Personal Voice Assistant(TM), or PVA, feature wit Communications Briefcase. PVA offers businesses enhanced communications capabilities previously unavailable to them, such as speech-enabled directories, voice-activated emailing and remote acc to an online Address Book from any phone. PVA is a paramount exa of today's most advanced communication services that allow busines professionals to stay connected, have constant access to critical con information, send emails and set reminders."

Please direct all inquiries regarding the Communications Briefcase to bizinfo@z-tel.com.

About Z-Tel

Z-Tel was founded in the wake of the Telecommunications Act of 19 With the establishment of the Unbundled Network Element-Platform (UNE-P), competitive telecommunications companies like Z-Tel beca able to provide telephone service to end-users over the incumbent l telephone providers' network. Unlike its competitors, Z-Tel was form with the vision of developing technology that would imbue the telep with "Intelligent Dial Tone," wherein telephone service can be personalized to meet consumers' and businesses' diverse communications needs intelligently and intuitively. Z-Tel offers residential and business customers in 47 states value-added bundle local and long distance phone service, commercial broadband servic and powerful Internet-accessible and voice-activated calling and messaging features. Z-Tel also makes its voice services available on wholesale basis. Current customers include Sprint and the MCI grou more information about Z-Tel's innovative services, please visit the Company's Web site at www.ztel.com.

CONTACT: Z-Tel Technologies, Inc.
Sarah E. Bialk, 813-233-4586
ir@z-tel.com

SOURCE: Z-Tel Technologies, Inc.

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Now your family and all military families can enjoy an enhanced, personalized e experience with your loved ones serving overseas. Voice email messages provid connection that ordinary email can't. Imagine what the sound of your own voice, your children, would mean to your loved ones stationed far away from home.

- Tell them how much you miss them
- Have the kids sing "Happy Birthday"
- Send any message you like - use your imagination

There are many benefits to voice email:

- More personal than any text email
- Send unlimited messages up to 1 minute in length anywhere oversea
- Use right from your home phone with simple voice prompts
- Easy for anyone to use right away

As part of this free service, you also get 30 minutes of nationwide long distance t service members anywhere within the 50 states! Save money and time by makin distance calls using just the power of your voice!

Start sending voice emails FREE today! Click here to sign up in 2 sim

*Z-Tel makes this service available to military and their families until further notice; however, Z-Tel reserves amend or discontinue the service at any time.

Tell the CEO | About Z-Tel

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Z-Tel Technologies Inc. (ticker: ZTEL, exchange: NASDAQ) News Rele
14-Apr-2003

Industry Call to Action: ``Operation Connect'' Z-Tel Makes Communications for Military and T Loved Ones Free, Simple and Reliable

TAMPA, Fla., Apr 14, 2003 (BUSINESS WIRE) -- Z-Tel Technologies, (NASDAQ/SC:ZTEL) announced today "Operation Connect," a free p service the company is offering to military families nationwide. Throughout the duration of Operation Iraqi Freedom and until U.S. troops come home, Operation Connect will provide military families unlimited access to Z-Tel's voice email service free of charge, allowi them to send personalized voice email messages to their loved ones serving overseas. Military families are not required to purchase any Tel service to take advantage of Operation Connect.

Military families throughout the country can get more information a register at www.ztel.com/ustroops or by calling 1-888-ZTEL-USA (9 5872). Beginning Monday, April 14, 2003, Z-Tel representatives will on hand at the MacDill Air Force Base Family Resources Center in Brandon, Florida to help people sign up and instruct them on how to the voice email service. MacDill families can visit the Center to send their voice emails beginning at 9 a.m. EST and can call the Center a 813-655-9281 for more information.

Gregg Smith, president and chief executive officer for Z-Tel, stated, realize that communication in this time of war is crucial and difficult after learning of the difficulties military personnel serving in the Mid East have had accessing phone service and managing the high cost international calls, we realized that our voice email service could bri families closer than traditional email. With voice email, a mother or father stationed in Kuwait can hear their child sing happy birthday t them, say their nightly prayers, or give a daily update about the sch year. There is no substitute for hearing the sound of a loved one's v and Operation Connect makes it possible. And, because we are headquartered in Tampa, Florida, as is Central Command, many of employees, partners and customers in the local community are feeli direct impact from the absence of military personnel who are servin overseas. We wanted to do something to make their burden easier t bear and to support the brave soldiers serving our country."

Operation Connect allows families to send voice email messages to loved ones serving in Operation Iraqi Freedom anytime, anywhere, f any telephone in the United States. This makes communicating easi and helps overcome the challenges of expensive international calls, often-unreliable phone and mail service in the field, and call schedul difficulty. Z-Tel is the only service provider offering this type of pers

and secure communication - and is doing it free of charge.

With Operation Connect, Z-Tel is leveraging its innovative telephone software and advanced technology messaging server to make it sim for military families to communicate with their loved ones abroad.

"We have been investing in advanced voice technologies since our founding, and I am proud that we have been able to leverage that investment into a service that can help American servicemen and women and their families at this time," Smith added. "The service is simple to use. Just visit www.ztel.com/ustroops and follow the instructions for registration, which takes less than a minute. Then a family member can just pick up the phone, speak his or her messag and say 'send.' The service captures the sound of the sender's voice an email format and sends the message via a .wav file to loved one overseas or at remote military bases around the world. To take advantage of Operation Connect, all that families need are the emai addresses of those service people they want to communicate with a access to a phone."

About Z-Tel

Z-Tel was founded in the wake of the Telecommunications Act of 19 With the establishment of the Unbundled Network Element-Platform (UNE-P), competitive telecommunications companies gained the abi to provide telephone service to customers using the incumbent local telephone providers' network. Z-Tel was formed around UNE-P with vision of developing technology that would imbue the telephone wit "Intelligent Dial Tone," changing telephone service to be personalize meet consumers' and businesses' diverse communications needs intelligently and intuitively. Z-Tel offers residential and business customers in 47 states value-added bundled local and long distance phone service with proprietary Internet-accessible calling and messaging features. Z-Tel also makes these services available on a wholesale basis. For more information about Z-Tel and its innovativ services, please visit www.ztel.com.

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Z-Tel Technologies Inc. (ticker: ZTEL, exchange: NASDAQ) News Rele
12-Jun-2003

Middle East Strain Continues: Z-Tel Stands Beh U.S. Servicemen and Women

TAMPA, Fla.--(BUSINESS WIRE)--June 12, 2003--

Due to demand for free voice email service, Z-Tel extend "Operation Connect" through Father's Day and beyond

"Operation Connect", a free public service offered to military familie nationwide by Z-Tel Technologies, Inc. (NASDAQ/SC: ZTEL) in connection with Operation Iraqi Freedom, remains available to milit families who wish to send warm wishes to their dads serving overse this Father's Day, Sunday, June 15. On Father's Day, Z-Tel expects hundreds of military families to access the service to send personali voice-recorded email messages to their loved ones serving overseas Military families are not required to purchase any Z-Tel service to ta advantage of Operation Connect.

"With the recent troop deployments and continued controversies in Middle East, Z-Tel remains supportive of U.S. servicemen and wome who have sacrificed this time away from their families," commented Gregg Smith, CEO and president for Z-Tel. "We want to show our ongoing support by continuing to offer unlimited, free of charge voic emails to keep them connected during this difficult time - a time wh father should be with his family. Voice emails overcome the challen of expensive international calls, often-unreliable phone and mail ser in the field, and call scheduling difficulty."

Military Organizations and Families Recognize Operation Connect

Operation Connect is recognized by the USO (United Service Organizations) of Metropolitan Washington, the largest USO chapter the country, as a unique voice email service for military families see cost-effective ways to stay in touch with men and women of the Ar Forces. "The voice email technology makes communication easy an secure," said Elaine Rogers, president, USO of Metropolitan Washin

"My husband was deployed overseas in Operation Iraqi Freedom for several months, and Z-Tel's service came as an unexpected and amazing surprise," said Dawn Miller, wife of AF Sergeant Tom Miller stationed at MacDill Air Force Base, in Tampa, Florida. "Our two boy myself, and even my in-laws, used the voice email to send message Tom while in Iraq. It was just so wonderful."

"Each day, members of the US Armed Service leave their families a

loved ones to enter basic training, or report to active or reserve dut Millions of family members around the country seek ways to stay connected to their loved ones who are away," added Lisa Miller, fou and executive director of Families of Military Personnel (FMP), "and communication during times of deployment is key to both their well being and that of their loved ones who are serving. Operation Conn comforts them by allowing them to reach out to their loved ones wh are serving in a personal, simple way."

Operation Connect captures the sound of the sender's voice in an e format and sends the one-minute message via a .wav file to the recipient's email account, accessible via the Internet at remote milit bases around the world. To take advantage of Operation Connect, families only need the email addresses of those service people they want to communicate with and access to a telephone.

Military families throughout the country can get more information a register at www.ztel-usa.com or by calling 1-888-ZTEL-USA (983-5

About USO Metro

USO Metro is a private, nonprofit 501(c)(3) organization whose mis is "to serve those who serve...and their families," from Baltimore to Quantico. The USO of Metropolitan Washington receives no federal, state or local funding. However, the generous financial support of th local community enables us to provide many free services to the military. On a daily basis we provide vital human services and progr Remember, USO-Metro is always here for you. Visit www.usometrodc.org for more information.

About Families of Military Personnel

Families of Military Personnel is a national nonprofit organization dedicated to ensuring the well-being of families and their loved one enlisted in the United States Armed Services. Through a national membership network of Community Support Posts across the count we provide support, services, education and access to military advis so that every family member is well informed and can serve as a so of strength at home. Donations are accepted to support the progra FMP and its members, either online at www.fmpusa.org or by callin toll-free 1-800-272-2227.

About Z-Tel

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phone service with proprietary Internet-accessible calling and messaging features. Z-Tel also makes these services available on a wholesale basis. For more information about Z-Tel and its innovativ services, please visit www.ztel.com.

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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE PERIOD ENDED September 30, 2003

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER: 000-28467

Z-TEL TECHNOLOGIES, INC.

(Exact name of Registrant as specified in its charter)

DELAWARE	59-3501119
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

601 SOUTH HARBOUR ISLAND BOULEVARD, SUITE 220
TAMPA, FLORIDA 33602
(813) 273-6261
(Address, including zip code, and
telephone number including area code, of
Registrant's principal executive offices)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: COMMON STOCK, PAR VALUE $.01 PER SHARE, PREFERRED STOCK PURCHASE RIGHTS

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12B-2 of the Exchange Act)

Yes ☐ No ☒

The number of shares of the Registrant's Common Stock outstanding as of November 12, 2003 was approximately 35,596,195.

Table of Contents

Z–Tel Technologies, Inc. and Subsidiaries

Consolidated Balance Sheets
(In thousands, except share data)
(Unaudited)

	September 30, 2003	December 31, 2002
Assets		
Current assets:		
Cash and cash equivalents	$ 14,544	$ 16,037
Accounts receivable, net of allowance for doubtful accounts of $16,765 and $17,401	25,183	26,749
Prepaid expenses and other current assets	5,071	5,741
Total current assets	44,798	48,527
Property and equipment, net	40,769	48,320
Intangible assets, net	2,744	4,116
Other assets	4,940	5,748
Total assets	$ 93,251	$ 106,711
Liabilities, Mandatorily Redeemable Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued liabilities	$ 53,682	$ 51,771
Deferred revenue	14,710	10,172
Current portion of long–term debt and capital lease obligations	6,553	5,964
Total current liabilities	74,945	67,907
Long–term deferred revenue	481	6,277
Long–term debt and capital lease obligations	562	4,180
Total liabilities	75,988	78,364
Mandatorily redeemable convertible preferred stock, $.01 par value; 50,000,000 shares authorized; 8,855,089 issued; 8,738,422 and 8,855,089 outstanding (aggregate liquidation value of $153,980 and $145,503)	138,559	127,631
Commitments and contingencies (Note 6)		
Stockholders' deficit:		
Common stock, $.01 par value; 150,000,000 shares authorized; 35,837,412 and 35,609,803 shares issued; 35,495,862 and 35,268,253 outstanding	358	356
Notes receivable from stockholders	(1,121)	(1,589)
Additional paid–in capital	194,274	205,090
Accumulated deficit	(314,419)	(302,753)
Treasury stock, 341,550 shares at cost	(388)	(388)
Total stockholders' deficit	(121,296)	(99,284)
Total liabilities, mandatorily redeemable convertible preferred stock and stockholders' deficit	$ 93,251	$ 106,711

The accompanying notes are an integral part of these consolidated financial statements.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Direct Testimony and Exhibits of Michael Reith on behalf of Z-Tel Communications, Inc. has been provided by (*) hand delivery, (**) email and U.S. Mail this 4th day of December 2003, to the following:

(*)(**)Adam Teitzman, Staff Counsel
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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO. 117
COMPANY/ Verizon
WITNESS. FDN WebPage Product offering
DATE: 02/24-27/04

Line Count Study Results

Tampa – St. Petersburg – Clearwater

DENSITY ZONE	CLEC NAME	VERIZON COUNTS (CLEC SWITCHED DS0s)
1	CLEC 053	6,128
	CLEC 003	371
	CLEC 088	567
	CLEC 087	12,997
	CLEC 073	917
	CLEC 074	48
	CLEC 026	285
	CLEC 002	5
	1 Total	21,318
2	CLEC 053	1,841
	CLEC 087	3,762
	CLEC 074	33
	CLEC 026	90
	2 Total	5,726
	Total 1 and 2	**27,044**

Source: Direct ODF-2

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 118
COMPANY/ Verizon Chart
WITNESS: Real time (denied)
DATE: 02/24-27/04

Ex. 119. entire Order

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Implementation of the Federal Communications Commission's Triennial Review Regarding Local Circuit Switching in the Mass Market.	))))	Case No. 03-2040-TP-COI
In the Matter of the Implementation of the Federal Communications Commission's Triennial Review Regarding Local Circuit Switching in SBC Ohio's Mass Market.	))))	Case No. 04-34-TP-COI
In the Matter of the Implementation of the Federal Communications Commission's Triennial Review Regarding Local Circuit Switching in the Cincinnati Bell Telephone Company's Mass Market.	))))	Case No. 04-35-TP-COI

OPINION AND ORDER

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP EXHIBIT NO 119
COMPANY/ BellSouth
WITNESS: Ohio PUC Order 03-2040-TP-CO
DATE: 02/24-27/04

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business
Technician CH Date Processed 1/14/04

030851-TP
Verizon Ohio
Exhibit 119 (Tina Orwig)
2/24-27/04

has stated that the same geographic market definition should be used when applying the trigger analysis and when conducting the full review of operational and economic impairment (potential deployment analysis).[17] Additionally, AT&T/CoreComm note that the FCC has also stated that the market should be sized to allow the CLEC to take advantage of the available scale and scope economies from serving a wider market.[18] Thus, AT&T/CoreComm surmise that it would be unlikely that an efficient LEC would enter a market intending to serve a single wire center or small group of wire centers (AT&T/CoreComm Reply Brief at 10).

III. DISCUSSION

Based on the evidence in the record, and consistent with 47 CFR 51.319(d)(2)(i) and the *Triennial Review Order* market definition requirements,[19] the Commission finds that the appropriate geographic markets to be used for the purpose of assessing whether a CLEC is impaired in serving mass market customers in the absence of access to unbundled local switching shall tentatively be established in the following manner:

(1) The service area of an ILEC within each of the MSAs at issue in this proceeding (Akron, Cincinnati, Cleveland-Elyria-Mentor, Columbus, Dayton, and Toledo) shall be divided into separate areas according to the Commission-established UNE-loop TELRIC rates (Access Areas B, C, and D for SBC Ohio or Rate Bands 1, 2, and 3 for Cincinnati Bell).

(2) Each resulting area established above shall be further subdivided into clusters of contiguous wire centers within each applicable UNE-loop TELRIC rate zone.[20]

The first criterion ensures that the wire centers within a particular area have similar loop densities and identical wholesale loop rates. The second criterion ensures that the wire centers that have similar loop densities and identical loop rates are also geographically contiguous.

Therefore, the Commission tentatively finds that by grouping contiguous wire centers on the basis of the Commission-established UNE-loop rate zones within each MSA, the Commission has defined separate geographic markets consistent with the criteria set forth in the *Triennial Review Order*. The individual markets and the wire centers

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17 *Triennial Review Order* at footnote 1579.

18 *Id.* at ¶495.

19 *Triennial Review Order* at ¶¶495-497.

20 In its Entry of October 2, 2003, the Commission stated that it was tentatively adopting the FCC's cut off for multi-line DSO customers to be included within the mass market (*Triennial Review Order* at ¶497_.

find that groupings of wire centers should be based on uniformity of economic and operational characteristics. We note that the FCC stated that state commissions "should attempt to distinguish among markets where different findings of impairment are likely."[22]

The Commission finds that grouping contiguous wire centers on the basis of the Commission-established UNE-loop rate zones within each MSA as separate geographic markets satisfies all the criteria set forth in 47 CFR 51.319(d)(2)(i) and ¶¶495-496 of the *Triennial Review Order*. First, the Commission's market definition takes into consideration the locations of mass market customers actually being served (if any) by competitors as required by 47 CFR 51.319(d)(2)(i). The data presented by SBC Ohio witness Deere (SBC Ex. 1, Attachment WCD-8 at 3-8) demonstrates that the presence of CLECs that use their own switches to serve mass market customers is concentrated more in Access Area B than in Access Area C, and more in Access Area C than in Access Area D. Also, the data demonstrates that the presence of those CLECs varies among the five MSAs (*Id.* at 1, 2). Similarly, in Cincinnati Bell's MSA, as demonstrated by data presented by Cincinnati Bell witness Maggard (CBT Ex. 1, Attachment A), the presence of CLECs that use their own switches to serve mass market customers, and the extent to which they provide the service, is concentrated more in Rate Band 1 than in Rate Band 2, and more in Rate Band 2 than in Rate Band 3.

The record reflects that Allegiance recommends that the Commission should use UNE-loop rate zones as the criterion to group the wire centers that belong to a given geographic market within each MSA (Allegiance Reply Brief at 6).[23]

The Commission also notes that SBC Ohio and Cincinnati Bell acknowledge (SBC Ohio Reply Brief at 14; Cincinnati Bell Reply Brief at 10 and 13) that the FCC recognized the importance and relevancy of the difference in pricing UNE-loop in different geographic markets when it stated that:

> We recognize that many states have implemented varied administrative tools to distinguish among certain markets within a state on a geographic basis for other purposes including retail ratemaking, the establishment of UNE loop rate zones, and the development of intrastate universal service mechanisms. If a state determines, after considering the factors just described, that these already-defined markets would be

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22 *Triennial Review Order* at ¶495.

23 SBC Ohio, Cincinnati Bell, and MCI agree that Allegiance's proposal may be used as an alternative to their respective market definitions (SBC Ohio Reply Brief at 6; Cincinnati Bell Reply Brief at 17; MCI Reply Brief at 23).

> appropriate to use in this context as well, it may choose to use these market definitions.[24]

The Commission notes that Cincinnati Bell actually began its analysis by examining the data for each wire center and considered the Commission-approved UNE-loop rate zones for the purpose of defining the geographic markets. However, when it came to grouping the wire centers that belong to each market (Cincinnati Bell's proposed Market 1 vs. Markets 2 and 3), the company relied on the presence, or lack thereof, of CLEC switches serving mass market customers (Cincinnati Bell Ex.1 at 3). This criterion presupposes that Market 1 (with all of its wire centers) satisfies the triggers before the Commission and the parties have had an opportunity to thoroughly examine all relevant data. Although we agree with Cincinnati Bell's statement that we should attempt to distinguish among markets where different findings of impairment are likely, we find that there is not enough evidence in the record at this time to analyze Cincinnati Bell's assertion as to the number of alternative switch-based competitors providing service to mass market customers. This will be the task for the next phase of the proceeding. Therefore, Cincinnati Bell's proposed market definition is rejected. However, as discussed in this Opinion and Order, the evidence in the record does support the conclusion that different findings of impairment are likely among UNE-loop rate zones.

The Commission disagrees with the argument of Sage/Talk America and OCC that Cincinnati Bell and Allegiance's wire center cluster recommendations rely on the potential of CLECs to provide mass market services in areas of Ohio that they may or may not presently serve. According to Sage/Talk America and OCC, Allegiance's wire center cluster recommendation is not based on the locations of where CLECs are actually serving mass market customers as required by the FCC (Sage/Talk America Initial Brief at 15; OCC Reply Brief at 13). The Commission notes that, in the next phase of the impairment analysis, such market definition may be refined as necessary. Further, the Commission references the FCC's determination that:

> In circumstances where switch providers (or the resellers that rely on them) are identified as currently serving, or capable of serving only part of the market, the state commission may choose to consider defining that portion of the market as a separate market for the purposes of the analysis.[25]

The Commission emphasizes that by establishing the requirement of contiguous wire centers within a UNE rate zone, we have addressed Sprint's main criticism that use of wire center clusters based on UNE-loop rate zones within each LATA could result in non-contiguous wire centers belonging to the same market, despite the fact that the wire

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24 *Triennial Review Order* at ¶496.

25 *Id.* at footnote 1552.

centers could be miles apart that would produce diseconomies of scale (Sprint Reply Brief at 10-11). This problem will not exist when markets are comprised of contiguous wire center clusters based on UNE-loop rate zones within each MSA, and the non-contiguous wire centers that belong to the same UNE-loop rate zone are assigned to separate market(s) to avoid the diseconomies of scale issue.

As to the other criteria in 47 CFR 51.319(d)(2)(i), the Commission's market definition takes into consideration the variations of factors affecting a competitor's ability to serve each group of customers and a competitor's ability to target and serve specific markets profitably and efficiently using currently available technologies. In the *Triennial Review Order*, the FCC identified such factors to include the geographic variations in: UNE-loop rates, retail rates, number of high-revenue customers, cost of serving customers according to the size and location of wire centers, adequate collocation space availability in the wire centers and capability to handle large numbers of hot cuts.[26] We find that geographic markets established by grouping contiguous wire centers based on the Commission-established UNE-loop rate zones within each MSA, clearly considers all of the factors delineated above.[27]

The Commission notes that, for both SBC Ohio and Cincinnati Bell, the three rate zones used to set the UNE-loop rates are the same as the three rate zones used to set retail rates (OCC Ex. 3, Attachments KLH-1 and KLH-2). These three rate zones are titled Access Areas B, C, and D in SBC Ohio's service territory and Rate Bands 1, 2, and 3 in CBT's service territory. We find that wire centers in SBC Ohio's Access Area B and Rate Band 1 for Cincinnati Bell serve mainly the downtown area or major cities in each MSA, where a large number of high-revenue customers most likely exist (OCC Ex. 4, Map 2). Wire centers in SBC Ohio's Access Area C and Rate Band 2 for Cincinnati Bell serve mainly the geographic areas surrounding the downtown area of major cities (mostly suburban areas) in each MSA, where the number of high-revenue customers is likely to be smaller than the number of high-revenue customers in wire centers in SBC Ohio's Access Area B or Rate Band 1 for Cincinnati Bell. The same would apply to wire centers in SBC Ohio's Access Area D and Rate Band 3 for Cincinnati Bell, which are both comprised of mainly rural areas within each MSA.

As to the consideration of variations in cost of serving customers according to the size and location of wire centers, the record demonstrates that the Commission's determination of the geographic markets based on grouping contiguous wire centers within the Commission-established UNE-loop rate zones for each MSA clearly reflects such variations. For example, within the Akron MSA, SBC Ohio wire centers in Access Area B serve an average of 53,000 access lines, SBC Ohio wire centers in Access Area C

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26 *Id.* at¶¶495, 496.

27 The Commission notes that the batch hot cut issue will be subsequently addressed for both SBC Ohio and Cincinnati Bell in their respective impairment analysis dockets.

serve on an average of 25,000, and SBC Ohio wire center in Access Area D serves an average of 10,000 access lines (SBC Ohio Ex. 1, Attachment WCD-8). Similarly, in Cincinnati Bell's service territory, within the Cincinnati MSA, Cincinnati Bell wire centers in Rate Band 1 serve an average of 24,000 access lines. Cincinnati Bell wire centers in Rate Bands 2 and 3 serve an average of 18,000 and 4,000 access lines, respectively (OCC Ex. 2).

The data also demonstrate variation in wire center size for the same access areas across MSAs. For example, in Access Area B, an SBC Ohio wire center serves an average of 53,000 access lines in the Akron MSA, 40,000 access lines in the Cleveland MSA, 100,000 access lines in the Columbus MSA, 43,000 access lines in the Dayton MSA, and 47,000 access lines in the Toledo MSA.

Such variations reflect the differences in the cost of serving customers in each area and wire center size (access line density) relative to the determination of whether competitors can provide service, in a specific market, profitably and efficiently using currently available technologies. This conclusion is consistent with MCI witness Murray's statement that there are profit opportunities for competitors when contiguous wire centers are grouped by UNE-loop rate zone and where the retail rate zones are aligned with the UNE rate zones (Tr. II at 25).

Next, we address the *Triennial Review Order* requirement that state commissions should not define the market "so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market."[28] We note that several parties criticized the individual wire center proposal for market definition as not satisfying this requirement (AT&T/CoreComm Tr. I, 165, 167; Tr. III, 32, 33; Sprint Ex.1 at 8, 9; Allegiance Ex. 1 at 7, 8). The Commission finds that the grouping of contiguous wire centers on the basis of the Commission-established UNE-loop rate zones within each MSA complies with that requirement since it takes into consideration the potential of economies of scale and scope of all of the market entrants rather than for just an individual entrant.

The record demonstrates that there is no clear indication as to when and where such scale and scope economies would be achieved on an individual wire center basis inasmuch as these economies can be achieved for different companies at different levels depending on their size (Tr. II, 16). None of the parties advocating individual wire center geographic markets provided evidence that a competitive switch provider serving a single wire center alone would be able to take advantage of scale and scope economies available to it if such competitor would serve a wider market. Although OCC and Sage/Talk America criticized SBC Ohio for not performing a study of scale and scope economies of serving customers within an MSA, we note that no party to this proceeding performed

28 *Id.* at ¶495.

such a study (Sage Initial Brief at 12; OCC Initial Brief at 24). We agree with SBC Ohio's statement that such a formal study is not necessary to demonstrate that serving a single ILEC wire center with a switch ignores the significant economies of scale and scope associated with serving a larger geographic area.

B. Wire Center

In regard to using the wire center as the building block at which market information should be collected, the Commission agrees with Sage/Talk America and MCI. As to Sage/Talk America's argument that competitors enter the market on a wire center-by-wire center basis, we find that, although competitive carriers may expand their foot prints in a given market in wire center increments, this does not necessarily lead to a conclusion that the appropriate market for the impairment analysis is the wire center. We note that there is no evidence in the record that any switch-based competitive carrier has entered a market and provided services in only a single wire center in the state of Ohio. As AT&T/CoreComm witness Gillan stated, if this situation occurs, it will be the exception and not the norm (Tr. I, 167).

The Commission rejects the recommendation of Sage/Talk America and MCI that the geographic market should be defined as the wire center for the purpose of the impairment analysis. We find that such an approach violates the FCC criterion for capturing enough economies of scales and scope.[29] Furthermore, even if the FCC had not included a requirement in the *Triennial Review Order* regarding economies of scale and scope, the wire center-by-wire center approach will only produce better results if every wire center at issue in Ohio varies significantly from the rest of the wire centers at issue in Ohio relative to findings of impairment. At this time, the Commission is not persuaded, based on the record in this proceeding, that such a situation exists in Ohio. Additionally, there are several contiguous wire centers in Ohio that have homogeneous economic and operational characteristics, allowing for these wire centers to be clustered together to form one geographic market.

Sage/Talk America express a concern that the Commission is prejudging the outcome of the impairment analysis if it defines the geographic market to be a cluster of wire centers. To illustrate, Sage/Talk America opine that CLECs may be present in large wire centers within a cluster but not in others and, thus, are only serving a portion of the geographic market. It is the Commission's opinion that this concern has been addressed in the Commission's tentative geographic market definition. A Commission-defined cluster of wire centers will have homogeneous characteristics such as identical wholesale and

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29 The FCC, in its *Triennial Review Order* at ¶495, did not ask state commissions to define the geographic markets at the most granular level but, rather, at a level granular enough to detect differences in impairment findings among geographic markets and wide enough for an efficient facilities-based CLEC serving that market on its own to be able to take advantage of scale and scope economies.

retail loop rates, similar line densities, and will be geographically contiguous. Therefore, the Commission expects the CLEC presence to be similar across wire centers within a Commission-defined cluster.

As to the concerns raised by Sage/Talk America and MCI in regard to the existence of large differences among wire centers in terms of loop types (IDLC, UDLC, or copper), line density, revenues per access line, collocation space availability, and power, the Commission is not convinced, based on the record in this phase of the proceeding, that such differences exist throughout the SBC Ohio and Cincinnati Bell service areas at a level that would impact findings of impairment. The Commission recognizes, however, that if evidence is put forth during the second phase of this proceeding (the impairment analysis phase) that would demonstrate the existence of large differences among the wire centers in a particular wire center cluster, this would be a legitimate cause for breaking up this particular wire center cluster into two or more smaller wire center clusters. This is also consistent with the language in the *Triennial Review Order* in which state commissions are asked to attempt "to distinguish among markets where different findings of impairment are likely."[30]

C. MSA

In regard to defining the geographic market to be the ILEC's wire centers within an MSA, the Commission disagrees with both SBC Ohio and Sprint. The Commission stresses that the current market definition proceeding before us will be used in determining whether CLECs are impaired when unbundled local switching is no longer available at TELRIC rates in each of the geographic markets defined. It is, therefore, essential to tentatively define these geographic markets to be clusters of wire centers that have homogeneous economic and operational characteristics. It is the Commission's belief that there are enough differences among the wire centers of an ILEC within an MSA to warrant subdividing each MSA into smaller geographic markets.

To illustrate this point, the Commission focuses on SBC Ohio's wire centers contained in the Akron MSA (which is one of the smaller MSAs at issue in this proceeding). One can find wire centers in Access Area D that serve 5,000 to 6,000 access lines and that have no collocation arrangements present. There are also wire centers in Access Areas B and C in the Akron MSA that serve 40,000 or more access lines and that have collocation arrangements with nine or more CLECs (SBC Ohio Ex. 1, Attachment WCD-3). The Commission believes that this disparity is significant enough to warrant the clustering of the smaller and larger wire centers into different groups.

One of the principal arguments made by SBC Ohio and Sprint for using the ILEC service area within an MSA as the appropriate geographic definition of the market is that

30 *Triennial Review Order* at ¶495.

such a definition will allow a facilities-based CLEC to take advantage of scale and scope economies in advertising, billing, operational support system, and other costs. While the Commission agrees with the scale and scope economies argument in concept, the Commission believes that this reason alone is not sufficient for satisfying all of the *Triennial Review Order* requirements. In other words, there are other necessary conditions that the *Triennial Review Order* requires that the MSA, as a geographic market for the purpose of impairment analysis, does not satisfy. Specifically, an MSA-based market fails to satisfy the requirement that state commissions "should attempt to distinguish among markets where different findings of impairment are likely."[31]

Another argument SBC Ohio provides to justify the MSA market definition is that a large portion of the wire centers in each of the MSAs at issue in this proceeding have a CLEC presence. The Commission again stresses that, so long as there are economic or operational differences among the wire centers in the ILEC service area within an MSA, such differences necessitate subdividing an MSA into smaller geographic markets.

D. ILEC Traditional Serving Area[32]

The Commission finds that AT&T/CoreComm's request that the Commission tentatively establish SBC Ohio's and Cincinnati Bell's serving areas as the geographic market is unreasonable and misrepresents the Commission's statement in its Entry of October 2, 2003 (AT&T/CoreComm Initial Brief at 1 and 3). In that Entry, the Commission concluded that "the *starting point* for defining the market will be the ILEC's traditional incumbent service territory," and that the Commission in the market definition hearing "will evaluate how to *identify* and *define* markets *within* the ILEC's traditional incumbent service territory." (Emphasis added) This statement can hardly be viewed as a "decision" but, rather, was intended to provide guidance to the parties in the market definition phase.

AT&T/CoreComm's recommendation to use the SBC Ohio and Cincinnati Bell serving areas (or in the alternative LATAs) as the geographic market is primarily based on the fact that it has only considered the first criteria set forth in the *Triennial Review Order*, which is the location of customers actually being served by competitors, contending that that there are no data available to consider other criteria required by the *Triennial Review Order* (AT&T/CoreComm Initial Brief at 7; Tr. I, 170, 171). Additionally, with respect to considering actual customer locations, AT&T/CoreComm focused on customers served by competitors using UNE-P (*Id.* at 173, 174).

The Commission finds that AT&T/CoreComm's analysis fails to consider data presented in the record to distinguish between areas where CLECs are providing their

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31 *Id.*

32 The Commission finds that the concerns discussed relative to the ILEC's local service territory are also applicable to the proposal to utilize LATA boundaries as the market definition.

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SBC Ohio Markets

Market	MSA	Access Area	Wire Center Name
1	*Akron*	B	AKRNOH25
2	*Akron*	C	AKRNOH72
			AKRNOH78
			AKRNOH86
			CYFLOH92
			STOWOH68
3	*Akron*	D	ATWROH94
			KENTOH67
			MGDROH62
			MNTUOH27
			RTTWOH32
			RVNNOH02
			STBOOH62
			TLMDOH63
4	*Akron*	D	BRTNOH74
			BRTNOH82
			CVTPOH02
			GNBGOH89
			MNCSOH88
5	*Cleveland*	B	CLEVOH42
			CLEVOH43
			CLEVOH45
			CLEVOH62
			CLEVOH63
			CLHGOH32
			LKWDOH52
			SHHGOH92
6	*Cleveland*	C	BCWDOH46
			BEREOH23
			BKPKOH26
			CLEVOH25
			CLEVOH53
			CLEVOH64
			CLEVOH74
			ECLDOH73
			INDPOH52
			MPHGOH66
			MYHGOH44
			NOLMOH77
			PARMOH88
			RKRVOH33
			SECLOH38
			WLGHOH94
			WSLKOH87

7	*Cleveland*	D	BDFROH23 CHFLOH24 KRLDOH25 LYTPOH25 MNTROH25 MOTLOH25 PNVLOH35 SCLDOH72 SOLNOH24
8	*Cleveland*	D	BCVLOH52 NRTNOH23 SGVLOH23
9	*Cleveland*	D	BRTOOH83
10	*Cleveland*	D	OLFLOH23
11	*Columbus*	B	CLMBOH11
12	*Columbus*	C	CLMBOH23 CLMBOH25 CLMBOH26 CLMBOH27 CLMBOH29 CLMBOH44 CLMBOH47 CLMBOH86 DBLNOH89 UPAROH45 UPAROH48 WEVLOH88 WOTNOH88
13	*Columbus*	D	CNWIOH83 CRRLOH75 GVCYOH87 HLRDOH87 HRBGOH87 LCKBOH49 LNCSOH65 LONDOH85 NWRMOH66 RUVLOH53 SDLIOH87 SGGVOH74 SSLNOH88 WJSNOH87
14	*Columbus*	D	NHLDOH49
15	*Columbus*	D	NWALOH85
16	*Dayton*	B	DYTNOH22

17	*Dayton*	C	CNTMOH43 DYTNOH25 DYTNOH26 DYTNOH27 DYTNOH29
18	*Dayton*	D	BLBKOH84 BWRVOH45 CDVLOH76 DYTNOH23 DYTNOH89 FRBNOH87 JMTWOH67 SPVYOH86 XENIOH37 YESPOH76 ZMMNOH42
19	*Dayton*	D	FLTCOH99 PIQUOH77
20	*Dayton*	D	MMBGOH86
21	*Toledo*	B	TOLDOH21
22	*Toledo*	C	TOLDOH38 TOLDOH40 TOLDOH47 TOLDOH53 TOLDOH72
23	*Toledo*	D	HLLDOH11 MAUMOH11 ORGNOH69 PRBGOH14 PRBGOH66 WHHSOH87

Attachment B

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Cincinnati Bell Markets

Market	MSA	UNE Band	Wire Center Name
1	*Cincinnati*	1	AVONDALE
			CHERRY GROVE
			CHEVIOT
			COVEDALE
			CRESCENTVILLE
			EVENDALE
			FAIRFIELD
			GLENDALE
			GROESBECK
			HARTWELL
			HYDE PARK
			MADISONVILLE
			MONTGOMERY
			MOUNT HEALTHY
			MOUNT WASHINGTON
			NORTH GREENHILLS
			NORTHSIDE
			NORWOOD
			PRICE HILL
			ROSSMOYNE
			ST. BERNARD
			WEST SEVENTH
			WESTWOOD
2	*Cincinnati*	2	BATAVIA
			GOSHEN
			HAMLET
			LOVELAND
			MILFORD
			TOBASCO
3	*Cincinnati*	2	HARRISON
			MIAMI
			SAYLER PARK
4	*Cincinnati*	2	HAMILTON
			WEST CHESTER
5	*Cincinnati*	3	BETHEL
			NEW RICHMOND
			NEWTONSVILLE
			WILLIAMSBURG
6	*Cincinnati*	3	REILY
			SHANDON
7	*Cincinnati*	3	SEVEN MILE