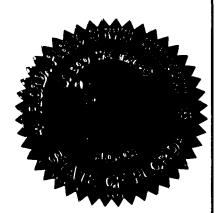
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1 BEFORE THE 2 FLORIDA PUBLIC SERVICE COMMISSION 3 4 In the Matter of 5 6 IMPLEMENTATION OF REQUIREMENTS ARISING FROM FEDERAL COMMUNICATIONS 7 COMMISSION'S TRIENNIAL UNE REVIEW: LOCAL CIRCUIT SWITCHING FOR MASS 8 MARKET CUSTOMERS. 9 10 11 12 13 VOLUME 6 14 15 16 17 PROCEEDINGS: HEARING 18 BEFORE: 19 20 21 22 DATE: 23 Commenced at 9:35 a.m. TIME: 24 PLACE: 25 Room 148



DOCKET NO. 030851-TP

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Pages 979 through 1176

CHAIRMAN BRAULIO L. BAEZ

COMMISSIONER J. TERRY DEASON COMMISSIONER LILA A. JABER

COMMISSIONER RUDOLPH "RUDY" BRADLEY

COMMISSIONER CHARLES M. DAVIDSON

Tuesday, February 24, 2004

Betty Easley Conference Center

FLORIDA PUBLIC SERVICE COMMISSION

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	PROCEEDINGS
2	(Transcript follows in sequence from Volume 5.)
3	MS. MAYS: The next BellSouth witness will be
4	Mr. Wayne Gray. He has rebuttal and surrebuttal testimony. He
5	does not have an errata. We would ask that that testimony be
6	admitted into the record as though read. And I do not believe
7	he has an exhibit, so if I could just double-check that.
8	CHAIRMAN BAEZ: Please do. Show the direct and
9	surrebuttal testimony of Witness Gray, without objection,
10	entered into the record. Can you confirm his exhibits?
11	MS. MAYS: I apologize, Mr. Chairman. He does have
12	exhibits. If those could be marked as 71.
13	CHAIRMAN BAEZ: Show Witness Gray's accompanying
14	exhibits marked as Composite 71.
15	(Exhibit 71 marked for identification.)
16	
17	
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25	

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF A. WAYNE GRAY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030852
5		December 22, 2003
6		
7 (Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11 /	4 .	My name is A. Wayne Gray. My business address is 675 West Peachtree Street, Atlanta,
12		Georgia 30375. My title is Director – Regional Planning and Engineering Center in the
13		Network Planning and support organization.
14		
15 (Q.	PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
16		
17 A	4.	I graduated from Georgia Tech in 1979, with a Bachelor of Electrical Engineering
18		degree. In 1992, I received a Master of Business Administration degree from Emory
19		University. I began working for Southern Bell in 1979, in the Equipment Engineering
20		organization in Miami, Florida. Over the course of my 24-year career with BellSouth, I
21		have held various line and staff positions in Equipment Engineering, Traffic Engineering
22		(Capacity Management), Infrastructure Planning and Project Management. In November
23		1999, I became Director-Collocation in the Network Planning and Support organization.
24		In December 2001, my scope of responsibility was expanded and my title was changed to
25		Director - Regional Planning and Engineering Center. In this position, I am responsible

1	for ensuring that BellSouth provisions collocation arrangements in the timeframes
2	established by contractual agreements and governmental mandates. I am also responsible
3	for managing the planning and engineering of BellSouth's Advanced Intelligent Network
4	Common Channel Signaling Network, Link Monitoring System, Public Packet Switching
5	Network, MemoryCall® Service platform, Pooled Internet Access Platforms, and
6	corporate transport network. My responsibilities also include the activities performed by
7	BellSouth's Numbering and Technology Forecasting groups. In addition, I direct all
8	switch software upgrades and contract administration for the purchase of network
9	technologies.
10	
11 Q .	WHAT IS THE PURPOSE OF YOUR TESTIMON Y?
12	
13 A.	The first part of my testimony describes the network architecture an efficient
14	Competitive Local Exchange Carrier ("CLEC") would utilize to self provide high
15	capacity loops over which it serves its customers. The second part of my testimony
16	describes the network architecture an efficient CLEC would utilize to self provide high
17	capacity interoffice transport facilities. I address Issues 4, 6, 8, 12, 13, 17 and 19 in
18	whole or in part.
19	
20	I. HIGH-CAPACITY LOOPS
21	
22 Q .	WHAT DO YOU MEAN BY "HIGH CAPACITY LOOPS?"
23	
24 A.	The types of loops covered in my testimony are DS1, DS3, and dark fiber. These loops
25	are known as "high-capacity loops" because they allow transmission speeds significantly

1	higher than the 64 Kbps of voice grade lines. High-capacity loops are typically used in
2	corporate data networks and to provide voice service to enterprise locations requiring a
3	large number of lines.
4	
5	"DS1 loop facilities" refer to digital loops having a total transmission speed of 1.544
6	Mbps provided over various transmission media including, but not limited to, two-wire
7	and four-wire copper, coaxial cable, fiber optics, wireless, radio, and power line facilities.
8	A DS1 capacity loop contains the equivalent of 24 voice-grade or DS0 channels.
9	
10	"DS3 loop facilities" refer to digital loops having a total transmission speed of 44.736
11	Mbps provided over various transmission media including, but not limited to, fiber optics,
12	coaxial cable, wireless, radio, and power line facilities. A DS3 capacity loop contains the
13	equivalent of 28 DS1 channels or 672 DS0 channels.
14	
15	"Dark fiber" refers to optical transmission loops without attached electronics, through
16	which no light is transmitted and no signal is carried. There is no transmission speed
17	associated with dark fiber since the transmission speed of the loop depends on the type of
18	electronics used to light the fiber.
19	
20 Q .	PLEASE DISCUSS THE CAPACITY LEVELS ACHIEVED WHEN CARRIERS
21	DEPLOY FIBER-OPTIC BASED TRANSMISSION SYSTEMS.
22	
23 A.	Carriers typically deploy fiber-optic facilities that can operate at a range of capacities
24	determined by the electronics attached to them. For example, when laying fiber it makes
25	sense to deploy high-capacity, "OCn" facilities so that there will always be enough

1	bandwidth to handle the traffic on a given loop. The term "OCn" refers to Optical Carrier
2	where "n" designates the optical carrier level. The optical carrier level "n" is directly
3	related to the quantity of DS3 capacity units the system is capable of handling
4	simultaneously. For example, OC48 systems provide capacity for 48 individual DS3
5	transmission "pipes". The carrier can then attach electronics to subdivide (or
6	"channelize") the available capacity, activating the amount of capacity and number of
7	channels needed along the loop. The electronics used to do this channelization of OCn
8	facilities into DS1 or DS3 facilities are relatively inexpensive, are widely available, and
9	can be quickly installed whenever the carrier has demand for DS1 or DS3 facilities.
10	
11 Q .	ONCE AN OCn FACILITY IS INSTALLED, IS IT CAPABLE OF
12	TRANSPORTING DS1 OR DS3 LOOPS?
13	
14 A.	Yes. As explained in the previous answer, a carrier with channelized OCn facilities is
15	operationally ready to provide DS1 or DS3 facilities.
16	
17 Q .	PLEASE DISCUSS THE COSTS A CARRIER WOULD INCUR WERE IT TO
18	CONSTRUCT ITS OWN HIGH CAPACITY LOOP FACILITIES.
19	
20 A.	There are two types of cost that a carrier would incur the costs of extending the loop
21	facility and the other costs of offering service (e.g., sales costs, and general and
22	administrative costs). I will describe the first category of costs below; the second
23	category is discussed by BellSouth witness Dr. Banerjee.
24	
25	

1 Q. WHAT COSTS ARE INCURRED FOR A COMPETITIVE CARRIER TO EXTEND A LOOP FACILITY TO A PARTICULAR CUSTOMER LOCATION? 2 3 4 A. Costs for network extension consist of one-time capital expenditures as well as operating 5 expenses incurred on a recurring basis. These costs are incurred at three points in the 6 network (see Exhibit AWG-1) – at the newly connected building, at the currently 7 collocated wire center or building that the new location is being connected to, and at a 8 "node" along the fiber route itself. 9 10 Moving from the left of Exhibit AWG-1, the "Off Net Building" is the one that is not 11 connected directly to the existing fiber network. It is sometimes referred to as a "spoke" 12 off the fiber-optic network. At that Off Net Building, one would find the equipment 13 elements listed on the left hand side of Exhibit AGW-1. The Light Guide Cross-connect 14 ("LGX") allows the attachment of individual fiber optic strands (via fiber optic 15 "jumpers") to connectors that allow the fiber to be interfaced with other electronics such 16 as the multiplexers. The fiber optic "pipe" is then channelized into smaller DS1 or DS3 17 transmission paths (dependent on customer demand) via plug-in electronic cards and 18 other cross-connect panels. At the customer's premises, channel-bank equipment is 19 utilized to convert the DS1 or DS3 pipes into individual channels (at DS0 level) via so-20 called D-4 channel bank equipment. The intra-building network cable and termination 21 (INCT) provides the inside wiring required to access the entire customer location. INCT 22 is not always required to be purchased for various reasons so I have made the 23 conservative assumption that the CLEC requires INCT in 50% of the buildings it serves. 24 25

Between the Off Net Building and the node on the CLEC's existing fiber-optic network 1 2 is the fiber optic cable itself. Here, a CLEC would incur the (distance-sensitive) material 3 cost of the fiber-optic cable, as well as construction fees and other fees paid to use another party's poles, ducts or conduits. 4 5 6 At the node location on the CLEC's fiber optic network, the CLEC would incur costs for 7 the same types of equipment needed at the Off Net building (LGX bays, fiber jumpers, 8 etc.) 9 10 The configuration of the network equipment required at the new and existing wire centers to terminate the fiber and provide DS0/DS1/DS3 loops to end-use customers is illustrated 11 in Exhibit AWG-2. This diagram shows pictorially the relationship of the individual 12 "piece parts" described above. 13 14 WHAT ARE THE COSTS FOR THE EQUIPMENT ELEMENTS LISTED? 15 Q. 16 17 A. Both the capital and operating costs for each piece of equipment is listed in Exhibit 18 AWG-3. These numbers reflect the fully installed costs of all equipment, including material, labor, all overhead, and taxes. These costs are taken directly from the cost 19 20 study that BellSouth filed in the Commission's most recent UNE cost case, Docket 21 No. 990649-TP, and which underlie the UNE rates approved by this Commission. 22 23 24 25

1	Q.	HOW DO YOU DETERMINE THE QUANTITY OF MULTIPLEXERS AND
2		DS1/DS3 CARDS NEEDED?
3		
4	A.	The quantities of network equipment needed scales with demand. We assume that one
5		DS1 circuit equivalent to be provided for every \$500 per month of revenue. After
6		determining the number of DS1 equivalents (N) needed, the requirement of DS1/DS3
7		plug-ins is calculated as follows:
8		If $N \le 28$, number of DS1s = N, number of DS3s = 0
9		If $N > 28$, number of DS1s = max (28, N x 1/3), rounded up to the next integer,
10		number of DS3s = $2/3 \times N/28$, rounded up to the next integer
11		If more than 3 muldems are needed, equipment is scaled by adding another OC3
12		multiplexer, as shown in Exhibit AWG-2.
13		
14		II. HIGH-CAPACITY TRANSPORT
15		
16	Q.	WHAT IS A "ROUTE?"
17		
18	A.	A route is defined in the FCC's rules as "a transmission path between one of an
19		incumbent LEC's wire centers or switches and another of the incumbent LEC's wire
20		centers or switches" within a LATA. Furthermore, "a route between two points (e.g.,
21		wire center or switch "a" and wire center or switch "z") may pass through one or more
22		intermediate wire centers or switches (e.g., wire center or switch "x"). Transmission
23		paths between identical end points (e.g., wire center or switch "a" and wire center or
24		switch "z") are the same 'route,' irrespective of whether they pass through the same
25		intermediate wire centers or switches, if any." 47 C.F.R. §51.319(e).

1 Q .	IS IT REASONABLE TO ASSUME THAT A CARRIER HAS A "ROUTE"
2	BETWEEN ANY PAIR OF INCUMBENT LEC WIRE CENTERS IN THE SAME
3	LATA WHERE IT HAS OPERATIONAL COLLOCATION ARRANGEMENTS?
4	
5 A.	Yes. It is logical and reasonable to assume that a carrier can route traffic between any
6	pair of wire centers within a LATA where it has operational collocation arrangements,
7	i.e. that a carrier's network is fully interconnected. Although, for network and cost
8	efficiency reasons it is unlikely that a CLEC would have a direct link between every
9	ILEC wire center where it is collocated (e.g., it may instead have a "hub and spoke"
10	layout where traffic is routed through the CLEC's point of presence), that fact is not
11	determinative under the FCC's definition of a "route," because that definition expressly
12	states that intermediate wire centers or interconnection points outside the ILECs'
13	facilities (e.g., collocation hotel, data center, CLEC point of presence) may be present on
14	the transmission path between two ILEC wire centers.
15	
16 Q .	IF A CARRIER HAS AN OCn TRANSPORT FACILITY TO A COLLOCATION
17	ARRANGEMENT IN AN ILEC WIRE CENTER, CAN THAT CLEC PROVIDE
18	DS3 TRANSPORT?
19	
20 A.	Yes. As described above for loops, carriers typically deploy fiber-optic facilities that can
21	operate at a range of capacities determined by the electronics attached to them. For
22	example, when laying fiber it makes sense to deploy high-capacity, OCn facilities so that
23	there will be enough bandwidth to handle all traffic on a given route and leave additional
24	capacity available for growth. The carrier can then attach electronics to subdivide (or
25	"channelize") the available capacity, activating the amount of capacity and number of

1 channels needed along the route. The electronics used to do this channelization of OCn 2 facilities into DS1 or DS3 facilities are relatively inexpensive, are widely available, and 3 can be quickly installed whenever the carrier has demand for DS3 transport facilities. 4 The fact that the capacity of the facility itself is at the OCn level is therefore independent of the carrier's ability to provide a dedicated DS1 or DS3 transport route over that 5 6 facility. 7 8 Q. WHEN CARRIERS CONSTRUCT FIBER OPTIC TRANSMISSION SYSTEMS, 9 IS IT COMMON TO INCLUDE AN ALLOWANCE FOR SPARE (SOMETIMES 10 REFERRED TO AS "UNLIT") FIBER OPTIC STRANDS? 11 12 A. Yes, for network engineering reasons and based on the cost structure of fiber cables, it is 13 common to place additional spare fiber strands in anticipation of future needs. Since the cost of deploying a fiber cable is mostly fixed (e.g., digging up the streets, attaching cable 14 15 to poles, and deploying the fiber) and only slightly correlated with the number of fiber strands in the cable, carriers almost always choose to deploy a considerable larger 16 number of strands than what they need for their immediate transmission needs. In fact, 17 although generally four (4) fibers are enough to support OCn circuits that can provide 18 enough capacity for any route (e.g., an OC192 has capacity for 192 DS3s, or 129,024 19 simultaneous voice conversation, and this capacity can be multiplied several times over 20 21 with the use of Dense Wave Division Multiplexing ("DWDM") technology), CLECs 22 typically deploy 144 fiber strands or more when extending a cable to large commercial buildings or ILEC wire centers. 23 24

1 Q. WHAT FACTORS INFLUENCE A CARRIER'S COSTS TO EXTEND THE CARRIER'S NETWORK TO AN ADDITIONAL WIRE CENTER? 2 3 4 A. A competitive carrier's network is typically fully interconnected. That is, transport can 5 be provided between all of a carrier's collocated wire centers in a LATA. It follows that 6 to add a new wire center to its network, all a carrier has to do is extend its fiber from any 7 location where it is currently present to the new wire center. This will allow it to connect 8 the new wire center with all its others in the LATA. To determine the costs of making 9 such an extension, one must first identify the nearest location, then determine what 10 expenses will be incurred in laying the new fiber and adding equipment to make the fiber operationally ready to provide transport. 11 12 HOW DO YOU DETERMINE THE COST TO EXTEND THE CARRIER'S 13 O. **NETWORK TO AN ADDITIONAL WIRE CENTER?** 14 15 16 A. Costs for network extension consist of one-time capital expenditures as well as operating 17 expenses incurred on a recurring basis. These costs are incurred at three points in the 18 network (see Exhibit AWG-4) – at the newly connected wire center, at the currently collocated wire center or building that the new location is being connected to, and along 19 the fiber route itself. 20 21 As is shown starting on the left side of the diagram in Exhibit AWG-4, the network 22 equipment required at the new (the so-called "Off Net" central office) and existing 23 24 central office to terminate the fiber and provide DS1/DS3 facilities is depicted. Those devices are functionally similar to those used in the context of providing high capacity 25

1	loops to a new customer location that I described earlier in this testimony. For the sake
2	of brevity, I will not repeat that discussion here. Exhibit AWG-5 shows the physical and
3	functional interaction between those devices. CLECs also have to pay BellSouth
4	nonrecurring and recurring collocation charges at the new central office, which vary
5	based on the equipment deployed and the amount of space occupied. Additional costs are
6	incurred in constructing fiber cable to the new wire center. This cost is a function of the
7	distance, and - depending on the geography - a combination of aerial, buried and
8	underground fiber may need to be deployed. There are additional pole and conduit costs
9	associated with aerial and underground fiber, respectively.
10	
11	
12 Q .	WHAT ARE THE COSTS FOR THE EQUIPMENT ELEMENTS LISTED?
13	
14 A.	Both the capital and operating costs for each piece of equipment is listed in Exhibit
15	AWG-6. These numbers reflect the fully installed costs of all equipment, including
16	material, labor, all overhead, and taxes. These costs are taken directly from the cost
17	study that BellSouth filed in August 2000, in the Commission's most recent UNE cost
18	case, Docket No. 990649-TP, and which underlie the UNE rates approved by this
19	Commission.
20	
21 Q .	HOW DO YOU DETERMINE THE QUANTITY OF MULTIPLEXERS AND
22	DS1/DS3 CARDS NEEDED?
23	
24 A.	The quantities of network equipment needed scales with demand. The number of OC12
25	and OC48 multiplexers is determined by the number of corresponding circuits demanded.

1	The number of OC3 multiplexers is determined by adding the number of OC3 circuits
2	demanded and the OC3 multiplexers needed to handle the demand for DS1 and DS3
3	circuits. The requirement of DS1s and DS3s cards is calculated by adding the DS1/DS3
4	cards needed to handle demand for these circuits, and the DS1/DS3 cards needed for
5	100% utilization of OC3, 90% utilization of OC12, and 80% utilization of OC48
6	multiplexers, assuming equal share of DS1 and DS3 muldems.
7	
8 Q .	ISSUES 8, 12, AND 17 RELATED TO TRANSPORT WHOLESALING BY CLECS
9	RAISE THE QUESTION OF WHETHER CROSS-CONNECTS ARE
10	AVAILABLE. CAN YOU ADDRESS THIS ISSUE?
11	
12 A.	The availability of cross-connects is discussed in the testimony of BellSouth witness Mr.
13	John Ruscilli in Docket No. 030851-TP, and I adopt his testimony regarding the
14	availability of cross-connects.
15	
16 Q .	DOES THAT CONCLUDE YOUR TESTIMONY?
17	
18 A.	Yes.
19	
20	
21	
22	
23	
24	
25	

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF A. WAYNE GRAY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 7, 2004
6		
7		
8	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
9		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
10		("BELLSOUTH").
11		
12	A.	My name is A. Wayne Gray. My business address is 675 West Peachtree Street
13		Atlanta, Georgia 30375. My title is Director – Regional Planning and Engineering
14		Center in BellSouth's Network Planning and Support organization.
15		
16	Q.	ARE YOU RESPONSIBLE FOR ENSURING THAT BELLSOUTH PROVISIONS
17		COLLOCATION ARRANGEMENTS ON A TIMELY BASIS?
18		
19	A.	Yes. I am responsible for ensuring that BellSouth provisions collocation
20		arrangements in the timeframes required by state commissions, including the
21		Florida Public Service Commission ("Commission"), and BellSouth's
22		interconnection agreements.
23		
24	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK
25		EXPERIENCE.

1 Α. I graduated from The Georgia Institute of Technology in 1979, with a Bachelor of 2 Electrical Engineering degree. In 1992, I received a Master of Business 3 Administration degree from Emory University. 4 5 I began working for Southern Bell in 1979, in the Equipment Engineering 6 organization in Miami, Florida. Over the course of my 24-year career with 7 BellSouth, I have held various line and staff positions in Equipment Engineering, 8 Traffic Engineering (Capacity Management), Infrastructure Planning, and Project 9 Management, In November 1999, I became Director-Collocation in the Network 10 Planning and Support organization. In December 2001, my scope of 11 responsibility expanded and my title was changed to Director – Regional 12 Planning and Engineering Center. In this position, I am responsible for ensuring 13 that BellSouth provisions collocation arrangements in the timeframes required by 14 state commissions and BellSouth's contracts with competitive carriers. I am 15 also responsible for managing the planning and engineering of BellSouth's 16 Advanced Intelligent Network, Common Channel Signaling Network, Link 17 Monitoring System, Public Packet Switching Network, MemoryCall® Service 18 platform, Pooled Internet Access Platforms, and corporate transport network. My 19 responsibilities also include the activities performed by BellSouth's Numbering 20 and Technology Forecasting groups. 21 22 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY? 23 24 Α. My testimony rebuts portions of the direct testimony of MCI witness James D. 25 Webber, AT&T witnesses Jay M. Bradbury and Mark Van De Water, and Supra

witness David E. Stahly. These witnesses suggest that competitive carriers are "impaired" as a result of issues regarding collocation in BellSouth's central offices. That is not true. As an initial matter, the only collocation issue that the FCC directed the states to consider in assessing impairment is "whether a lack of sufficient collocation space gives rise to impairment in [a] market." TRO ¶ 472. As set forth in the direct testimony of BellSouth witness John Ruscilli, the availability of sufficient collocation space in BellSouth's Florida central offices is not a problem and certainly does not give rise to impairment. Notably, none of the CLEC witnesses cite even a single instance of an alleged space availability issue. Moreover, BellSouth has consistently achieved excellent results with respect to the collocation performance measurements established by this Commission. BellSouth has paid only one SEEMS (Self Effectuating Enforcement Measures) penalty for missing a collocation interval, and that was over two years ago, for the month of June 2001, when the SEEMs plan had just been put into operation.

Testimony of MCI Witness James D. Webber

Q. ON PAGE 51, MR. WEBBER ARGUES THAT BECAUSE CLECS HAVE TO COLLOCATE THEY ARE "BY DEFINITION - DISADVANTAGED AND THEREFORE POTENTIALLY IMPAIRED." DO YOU AGREE?

A. No. As I stated above, the only question regarding collocation that is relevant under the impairment analysis set out by the FCC in its Triennial Review Order is whether a lack of sufficient collocation space gives rise to impairment in a particular market. As Mr. Ruscilli testified in his direct testimony, there is

1		collocation space available in all of BellSouth's Florida central offices, except for
2		two the Jacksonville - J.T. Butler office (CLLI Code: JCVLFLJT) and the Lake
3		Mary – Main office (LKMRFLMA). The Lake Mary Main central office is being
4		relocated because it is located on a sinkhole. It will be ready for occupancy and
5		collocation space will be available at the end of first quarter 2004. The J.T.
6		Butler office is located in space BellSouth leases and the landlord has been
7		unwilling to amend the lease to allow collocation.
8		
9	Q.	ON PAGE 52, MR. WEBBER STATES THAT MCI IS NOT COLLOCATED IN
10		ENOUGH OFFICES TO SERVE ITS UNE-P CUSTOMER BASE. PLEASE
11		COMMENT.
12		
13	A.	I do not dispute that MCI is not currently collocated in all of the BellSouth central
14		offices that serve MCI's UNE-P customers. That, however, is irrelevant. MCI
15		has had, and will continue to have very little incentive to collocate its equipment
16		so long as UNE-P is available. As I testified above, collocation space is available
17		to MCI, and BellSouth stands ready to provide whatever collocation space MCI
18		may require to serve its mass market customers.
19		
20	Q.	ON PAGE 52, MR. WEBBER SPECULATES, WITHOUT ANY EVIDENCE, THAT
21		IT IS "UNCLEAR WHETHER THE CLECS WILL BE ABLE TO OBTAIN ACCESS
22		TO COLLOCATION ARRANGEMENTS IN CONJUNCTION WITH THE
23		NECESSARY TRANSPORT FACILITIES ON A TIMELY BASIS." IS HIS
24		UNSUBSTANTIATED SPECULATION CORRECT?
25		

Α. Absolutely not. With the very limited exceptions noted above, BellSouth has collocation space available in its central offices and is prepared to fulfill CLEC requests for collocation. In addition, pursuant to the Service Quality Measurement (SQM) plan this Commission established, BellSouth must meet specific provisioning intervals to avoid the payment of SEEMs penalties. BellSouth is measured every month on the time it takes to respond to all CLEC applications (C-1 Measurement), the time it takes BellSouth to provision a collocation arrangement (C-2 Measurement), and the percentage of provisioning interval due dates missed by BellSouth (C-3 Measurement). The SQM describes each performance measurement and the associated penalties that BellSouth must pay to the CLEC and this Commission if any of these measurements are not met. BellSouth is committed to devoting the resources necessary to continue to provision collocation space in the intervals prescribed by this Commission.

Q. HAS BELLSOUTH EVER MISSED ANY OF ITS COLLOCATION
PROVISIONING INTERVALS AND PAID SEEMS PENALTIES AS A RESULT?

Α.

Yes, but as I mentioned above, only once. BellSouth paid a \$5,000 penalty to a CLEC in June 2001, shortly after the SEEMS plan was first implemented in Florida. The miss was due to human error in the calculation of the due dates for provisioning the space. This issue was addressed at the time and BellSouth has not missed any of its provisioning intervals in Florida since this one occasion in June 2001. BellSouth's goal is to complete the provisioning of collocation space as quickly as possible. Moreover, a CLEC may request permission to occupy its requested collocation space, and BellSouth will not unreasonably withhold its

1		permission, prior to the completion of the space preparation activities by
2		BellSouth. This would enable the CLEC to install its equipment and facilities at
3		the same time that BellSouth is completing its work activities to prepare the
4		space in accordance with the CLEC's specifications.
5		
6	Q.	ON PAGE 53, MR. WEBBER CONTENDS THAT "IF ILECS ARE UNABLE
7		TO RESPOND QUICKLY ENOUGH TO THE NUMEROUS COLLOCATION
8		REQUESTS OVER THE NEXT SEVERAL MONTHS, COLLOCATION MAY
9		WELL CREATE BARRIERS TO THE MASS MARKET IN THE ABSENCE OF
10		ULS," AND ON PAGE 54, HE HYPOTHESIZES ABOUT THE "SIGNIFICANT
11		STRAIN" THAT WILL BE PLACED ON COLLOCATION WITHOUT
12		UNBUNDLED LOCAL SWITCHING. PLEASE COMMENT.
13		
14	A.	First, Mr. Webber's claims are rank speculation. Second, BellSouth must
15		provide collocation space to CLECs in accordance with Commission-ordered
16		provisioning intervals or pay SEEMS penalties. BellSouth has strong incentives
17		to provision collocation space on a timely basis, and it is my job to ensure that
18		BellSouth continues to do so, even if demand for space increases as Mr. Weber
19		speculates may happen.
20		
21	Q.	MR. WEBBER SPECULATES ON PAGE 55 THAT EVEN IF CLECS WERE TO
22		OBTAIN COLLOCATION, "IT IS NOT UNCOMMON TO EXPERIENCE
23		SIGNIFICANT DELAYS BEFORE GAINING ACCESS TO THE REQUESTED
24		ARRANGEMENTS." IS HE RIGHT?

A. No. As I said earlier in my testimony, BellSouth has an outstanding record of meeting the collocation provisioning intervals this Commission established.

BellSouth is not aware of any CLEC that has not been able to access its collocation arrangement pursuant to the terms and conditions contained in the CLEC's interconnection agreement, and Mr. Webber cites no evidence to support his assertion to the contrary.

BellSouth does have certain security access requirements that the CLEC must comply with, including certification that its employees and vendors have completed security training and meet certain security requirements, in order to gain access to a specific central office. However, once the CLEC has met these requirements, there would be no reason for a CLEC to be denied access to the central office in which its collocation arrangement is located. If the CLEC fails to comply with the security requirements, then the CLEC has the right to request a BellSouth Security Escort, which will be coordinated and scheduled with the CLEC before the CLEC is permitted access into the requested central office.

Testimony of AT&T Witness Jay M. Bradbury

Q. ON PAGE 11, MR. BRADBURY STATES THAT "CLEC BACKHAUL COSTS INCLUDE THE NON-RECURRING COSTS NECESSARY TO ESTABLISH A COLLOCATION ARRANGEMENT IN EVERY ILEC WIRE CENTER IN WHICH THE CLEC WISHES TO OFFER MASS MARKET SERVICES." PLEASE COMMENT.

1	A.	Mr. Bradbury is wrong it is not necessary for a CLEC to collocate in every
2		central office in which it wishes to offer mass market services. The CLEC can
3		purchase from BellSouth an EEL (extended enhanced loop), which is a
4		combination of a local loop and interoffice transport to a wire center where the
5		CLEC's switch is collocated BellSouth also offers an assembly point product,
6		which allows CLECs to combine UNEs in a specific central office, without the
7		necessity for the CLEC to collocate in that office.
8		
9		With respect to the rates a CLEC incurs for collocation, those rates are cost-
0		based and have been established by this Commission. I understand that
1		BellSouth's impairment model takes the actual costs a CLEC would incur for
2		collocation and backhaul into account in assessing whether a CLEC is impaired
3		in a particular market.
4		
5	Q.	ON PAGE 23, MR. BRADBURY STATES THAT "THE FCC'S RULES DO NOT
6		PERMIT A CLEC TO PLACE A CIRCUIT SWITCH IN A COLLOCATION" AND
17		THEN QUOTES FROM 47 C.F.R. §51.323 AS SUPPORT. IS HE CORRECT?
8		
9	Α.	No. 47 C.F.R. § 51.323(b) states:
20 21 22 23		An incumbent LEC shall permit the collocation and use of any equipment necessary for interconnection or access to unbundled network elements.
25		The FCC goes on to clarify the above statement in subsections $(b)(1) - (3)$ of the
26		Rule as follows:
27		
28		(1) Equipment is necessary for interconnection if an inability to

deploy that equipment would, as a practical, economic, or operational matter, preclude the requesting carrier from obtaining interconnection with the incumbent LEC at a level equal in quality to that which the incumbent obtains within its own network or the incumbent provides to any affiliate, subsidiary, or other party.

- (2) Equipment is necessary for access to an unbundled network element if an inability to deploy that equipment would, as a practical, economic, or operational matter, preclude the requesting carrier from obtaining nondiscriminatory access to that unbundled network element, including any of its features, functions, or capabilities.
- (3) Multi-functional equipment shall be deemed necessary for interconnection or access to an unbundled network element if and only if the primary purpose and function of the equipment, as the requesting carrier seeks to deploy it, meets either or both of the standards set forth in paragraphs (b)(1) and (b)(2) of this section. For a piece of equipment to be utilized primarily to obtain equal in quality interconnection or nondiscriminatory access to one or more unbundled network elements, there also must be a logical nexus between the additional functions the equipment would perform and the telecommunication services the requesting carrier seeks to provide to its customers by means of the interconnection or unbundled network element. The collocation of those functions of the equipment that, as stand-alone functions, do not meet either of the standards set forth in paragraphs (b)(1) and (b)(2) of this section must not cause the equipment to significantly increase the burden on the incumbent's property.

Q. DO THE FCC'S RULES PRECLUDE A CLEC FROM PLACING A CIRCUIT
 SWITCH IN A COLLOCATION ARRANGEMENT?

36 A. No, so long as the circuit switch is being used for the purpose(s) of interconnecting and/or accessing unbundled network elements.

1	Q.	DOES BELLSOUTH PERMIT CLECS TO PLACE CIRCUIT SWITCHES IN
2		COLLOCATION SPACE?
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4	A.	Yes, as long as the CLEC is utilizing the circuit switch primarily for the purposes
5		of interconnection and/or access to unbundled network elements.
6		
7	Q.	ON PAGE 27, MR. BRADBURY APPEARS TO IMPLY THAT SUFFICIENT
8		COLLOCATION SPACE DOES NOT EXIST IN THE ILEC'S CENTRAL
9		OFFICES? IS HIS ASSESSMENT ACCURATE?
10		
11	A.	No. While BellSouth cannot speak on behalf of the other ILECs in Florida, there
12		are, as I testified above, only two (2) BellSouth central offices listed on
13		BellSouth's Space Exhaust list as being currently out of available collocation
14		space, and one of those is about to be removed from the list.
15		
16	Q.	ON PAGES 27 AND 28, MR. BRADBURY STATES THAT "THE COLLOCATION
17		POWER CHARGES ARE DRIVEN BY THE CHARGES FOR REDUNDANT
18		POWER FEEDS (SIZED FOR THE MAXIMUM DEMAND IN THE
19		COLLOCATION) AND THE NECESSARY HVAC FOR THE COLLOCATED
20		EQUIPMENT." IS HE CORRECT?
21		
22	A.	Only partially. He is correct that the collocation power charges are driven by the
23		charges for redundant power feeds ("A and B" power cable feeds). However, he
24		is not correct in his statement that collocation power charges are driven by the
25		necessary HVAC for the collocated equipment. BellSouth's DC power charges

do not include any HVAC costs associated with collocation. These costs are included in the monthly Floor Space Charges that are assessed to the CLECs by BellSouth, not in the DC Power charges.

Q. MR. BRADBURY NOTES THAT "IN FLORIDA, A RECENT RULING BY THIS COMMISSION NOW REQUIRES THAT ILECS BILL CLECS FOR POWER BASED ON THE POWER ACTUALLY USED RATHER THAN BY FUSED AMPS." HAS THE PROVISIONING AND BILLING OF DC POWER RECENTLY CHANGED IN FLORIDA?

Α.

Yes. The Commission just issued its ruling in the Florida Collocation Order on November 26, 2003, that permits CLECs to request DC power in 5-amp increments from 5 amps up to 100 amps from the ILEC's Battery Distribution Fuse Board ("BDFB"), if technically feasible, commercially available and within current safety requirements, and at a minimum of 70 amps from the ILEC's Main Power Board ("MPB"). Order No. PSC-03-1358-FOF-TP ("Collocation Order"), at 28.

In regard to the billing of DC power, the Commission ruled "[a]n ILEC's per ampere (amp) rate for DC power provided to a CLEC's collocation space shall be based on amps used, not fused . . . calculated and applied based on the amount of power that the CLEC requests it be allowed to draw at a given time. An ILEC shall also allow a CLEC. . . to order a power feed that is capable of delivering a higher DC power level but to fuse this power feed so as to allow a power level

1 less than the feed's maximum to be drawn by the CLEC; the CLEC must specify 2 the power level it wishes to be able to draw." Collocation Order, at 40. 3 4 Q. ON PAGE 28, MR. BRADBURY COMPLAINS THAT "THE AVERAGE COST OF 5 COLLOCATION . . . MAY BECOME PROHIBITIVE, BECAUSE THE 6 EQUIPMENT DEPLOYED ACTUALLY REQUIRES SUBSTANTIALLY LESS 7 SPACE AND/OR POWER THAN THE MINIMUM SPACE REQUIRED OR 8 POWER CHARGED FOR BY THE ILEC." IS HIS ASSESSMENT ACCURATE? 9 10 Α. No. Mr. Bradbury's complaint is mere speculation and is not supported by any 11 facts. Moreover, as noted above, the Commission has already made a decision 12 to set the minimum requirements for the provisioning and billing of DC power. In 13 regard to Mr. Bradbury's allegation regarding ILEC minimum space requirements, 14 BellSouth permits CLECs to request cageless collocation space in increments as 15 small as a bay/rack. For caged collocation space, BellSouth recently reduced its 16 minimum requirement from 100 square feet to 50 square feet. Additional 17 increments of 50 square feet for caged collocation will continue to be allowed. 18 19 Q. FINALLY, ON PAGE 28, MR. BRADBURY STATES THAT "THE INCUMBENT

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MANAGEMENT,

IS HE CORRECT?

SPACE

SOMETIMES APPLIES LARGE UP-FRONT ONE-TIME CHARGES FOR THE

COLLOCATION APPLICATION, CAGE ENGINEERING (WHETHER FOR

SPACE OR POWER) OR ADMINISTRATIVE FEES (SUCH AS PROJECT

AVAILABILITY

REPORTS,

ETC.)."

No. As an initial matter, BellSouth's collocation rates are cost-based and have been established by this Commission. Non-recurring charges allow BellSouth to recover the one-time costs it incurs to provision collocation space for the CLEC. BellSouth's Initial Application Fee covers BellSouth's nonrecurring costs associated with the CLEC's submission of an initial application or service inquiry requesting a specific collocation arrangement. This fee includes the following work activities performed by BellSouth's employees and suppliers: reviewing the initial application and collocation agreement, gathering, preparing and distributing BellSouth's application response to the customer, processing the application fee, setting up billing account information, coordinating meetings with the appropriate work groups, developing a project timeline, resolving any Network issues, reviewing power capacity requirements to ensure that adequate capacity is available, determining the availability of duct space, researching options for the point of interconnection, reviewing the facility requested, entering tracking data and the associated work request(s), reviewing the application for space, power, and cabling requirements, performing a site visit to verify space availability and inspecting space conditions, coordinating space selection, preparation, cable and power requirements, and performing a central office survey and cost estimate for the CLEC.

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Q. DOES BELLSOUTH APPLY LARGE UP-FRONT ONE-TIME CHARGES FOR "CAGE ENGINEERING (WHETHER FOR SPACE OR POWER)" AS MR. BRADBURY ALLEGES?

1	A.	No. BellSouth does not assess one-time (nonrecurring) charges for the floor
2		space associated with a caged collocation arrangement, the central office and
3		common system modifications required to accommodate caged collocation
4		space, or the amount of DC power requested by the CLEC. The fees to recover
5		those costs are all billed as monthly recurring charges.
6		
7	Q.	WHAT DOES BELLSOUTH CHARGE FOR ADMINISTRATIVE FEES (SUCH AS
8		PROJECT MANAGEMENT, SPACE AVAILABILITY REPORTS, ETC.)?
9		
10	A.	"Administrative fees" (such as project management fees) are included in
11		BellSouth's Initial Application Fee (which is described above) or in the Firm Order
12		Processing fee (\$288.93), which includes the nonrecurring costs associated with
13		BellSouth's receipt, review, and processing of a collocation Bona Fide Firm
14		Order. These costs include processing payments, distributing information to
15		various work groups, scheduling meetings internally and externally, and

establishing and monitoring project critical dates.

BellSouth only bills a CLEC for a Space Availability report when a CLEC requests that BellSouth prepare this report for a specific central office. The CLEC is not billed for this report until after BellSouth has provided the requested report to the CLEC. To my knowledge, AT&T has never requested a Space Availability Report for any central office in the BellSouth Region.

Testimony of AT&T Witness Mark Van De Water

Q. ON PAGES 54 THROUGH 57, MR. VAN DE WATER COMPLAINS ABOUT

BELLSOUTH'S POLICY REGARDING THE USE OF MULTIPLE COMPANY

CODES TO PLACE ORDERS TO COLLOCATION ARRANGEMENTS. WHAT

IS BELLSOUTH'S UNDERSTANDING OF THIS ISSUE?

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BellSouth understands that this issue arises due to AT&T's use of multiple company codes. AT&T is complaining that one AT&T entity cannot place orders on behalf of another AT&T entity for services that it wishes to originate or terminate to the second AT&T entity's collocation space. What has happened is that AT&T has established its collocation sites using the Access Customer Name Abbreviation ("ACNA")"ATX" (for AT&T), but is placing service requests to these sites using the ACNA "TPM" for Teleport Communications Group or "FIM" for North Point (both of which AT&T acquired). In other words, AT&T wishes to permit those entities it has acquired over the years, and which have different ACNAs, to place orders to the collocation sites that belong to the ACNA "ATX" for AT&T. When AT&T orders collocation space from BellSouth, the collocation "address" is built into the cable and pair identification records using the ACNA of the ordering CLEC. It is BellSouth's policy not to accept assignments from CLECs other than the owner of the collocation space in order to protect a CLEC's assets/property. Therefore, BellSouth's ordering and provisioning systems contain edits that prevent unauthorized assignment of its customers' collocation assets.

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Q. ON PAGE 54, MR. VAN DE WATER ARGUES THAT "BELLSOUTH'S POLICIES, PRACTICES, AND SYSTEMS EFFECTIVELY PREVENT A CLEC FROM BEING ABLE TO ORDER A LOOP FROM BELLSOUTH AND SWITCHING FROM ANOTHER CLEC." IS THIS TRUE?

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A. No. BellSouth's policies, practices, and systems do not prohibit a CLEC from ordering a UNE loop from BellSouth and the switching function from another CLEC, except when the CLEC is requesting that a DS0 UNE loop be provided to another CLEC's collocation space.

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11 Q. IN SUPPORT OF HIS ARGUMENT, MR. VAN DE WATER ALLEGES "IF AT&T
12 WERE TO SUBMIT A SERVICE REQUEST TO PURCHASE A LOOP FROM
13 BELLSOUTH AND DELIVER IT TO ANOTHER CLEC'S COLLOCATION,
14 BELLSOUTH'S SYSTEMS COULD NOT PROCESS THE ORDER." PLEASE
15 COMMENT.

16

17 Α. If AT&T were trying to order a UNE loop at a DS0 level to terminate to another CLEC's collocation space, BellSouth's ordering system would reject the order for 18 19 manual intervention for the reasons described above, because AT&T's ACNA 20 and the receiving CLEC's ACNA would be different. BellSouth's billing systems. 21 cannot process a LSR at the DS0 (2-wire or 4-wire) level of service for the connection of a local loop to another CLEC's collocation space, because the 22 23 collocation "address" is built into the cable and pair identification records using the ACNA of the ordering CLEC. This edit has been in place from the initial 24 25 implementation of BellSouth's ordering system for all DS0 level services.

1 If AT&T wished to place an order for transport to another CLEC's collocation 2 space, at a DS1 or higher level of service, and the receiving carrier had provided 3 AT&T with the appropriate terminating Connecting Facility Assignment ("CFA") 4 and a Letter of Authorization ("LOA") indicating its permission for AT&T to 5 terminate its transport into the receiving CLEC's collocation space, then 6 BellSouth could process the order through its ordering system as requested by 7 AT&T. It should be noted that AT&T would be the party billed for the service and 8 would be responsible for requesting the appropriate cross connection, by service 9 type (DS1, DS3, 2-fiber, or 4-fiber). If the service requested by AT&T was for the 10 termination of UNE transport into another CLEC's collocation space, then the 11 associated cross-connects would be those contained in AT&T's interconnection 12 agreement. If AT&T ordered its transport service from the tariff, then the 13 appropriate cross-connects contained in the associated tariff would apply. 14 IN LIGHT OF THE ORDERING SYSTEM ISSUE IDENTIFIED ABOVE, HOW 15 Q. 16 COULD A CLEC ACHIEVE ITS DESIRE TO PLACE AN ORDER FOR A DSO LOOP FROM BELLSOUTH AND WHOLESALE SWITCHING FROM ANOTHER 17 CLEC? 18

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Α. The most effective means for AT&T to eliminate this problem is to use BellSouth's "Transfer of Ownership" process to convert all of its collocation sites to one common ACNA, presumably the "ATX" ACNA. This would eliminate AT&T's concern and there would be no further fall-out of AT&T's orders in BellSouth's ordering and provisioning systems resulting from the use of multiple ACNAs.

1 Another option would be for the ordering CLEC to request a DS0 loop into its 2 collocation space and then place a co-carrier cross connection ("CCXC") 3 between its collocation space and that of the receiving CLEC, if both CLECs 4 have collocation space in the same central office. This would allow the ordering 5 CLEC and the receiving CLEC to directly exchange their traffic in the same 6 central office, without any intervention by BellSouth. 7 8 Finally, AT&T could use a "Guest/Host" collocation arrangement to establish a 9 guest presence in the central office for which it is trying to order services. Under the "Guest/Host" arrangement, each Host/Guest ACNA has a unique ACTL and 10 11 Connecting Facility Assignments ("CFAs") within the caged collocation space. 12 The "Host" places a Collocation Augment Application, pursuant to its 13 interconnection agreement, and submits a LOA for the new entity ("Guest"). With 14 a Guest/Host arrangement, if the Augment Application requests that the Hosts' 15 existing CFAs be converted to a new ACNA for the Guest, then BellSouth would 16 require a 30-day freeze to make the necessary changes. However, if the 17 Augment Application requests the provisioning of new CFA facilities, then no 30-18 day freeze would be required. 19 20 Testimony of Supra Witness David E. Stahly 21 Q. ON PAGE 9 OF HIS TESTIMONY, MR. STAHLY STATES THAT "SUPRA WON 22 THE RIGHT IN DECEMBER 1998 TO COLLOCATE IN CENTRAL OFFICES 23 PREVIOUSLY DEEMED CLOSED BY BELLSOUTH. NOTWITHSTANDING THIS RIGHT, BELLSOUTH CONTINUED OVER THE NEXT FOUR (4) YEARS 24

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TO RAISE NEW BARRIERS TO COLLOCATION." [Footnote omitted.] DO YOU

AGREE WITH MR. STAHLY'S CHARACTERIZATION OF BELLSOUTH'S ACTIONS?

Α.

Absolutely not. If Mr. Stahly is referring to the central offices that were initially filed by BellSouth as being at space exhaust in Florida, for which Supra had applied for collocation space, then Mr. Stahly failed to mention that BellSouth reexamined those offices and identified additional areas that could be used for collocation purposes. BellSouth also instituted an aggressive removal of all unused and/or obsolete equipment in these offices to make additional space available for collocation. This had nothing to do with Supra's "right" to collocate. BellSouth has never denied Supra the right to collocate. The issue in these offices was simply a matter of identifying and making space available for Supra and any other CLEC seeking to collocate in these offices, and BellSouth took the necessary action to ensure that space for collocation was available.

In regard to Mr. Stahly's allegation that BellSouth has raised "new barriers to collocation" during the last four (4) years, he cites no evidence to substantiate this allegation, except for a footnote that refers to the orders entered in Docket No. 001305-TP, an interconnection agreement arbitration proceeding between BellSouth and Supra. Notably, no collocation issues were resolved by this Commission in that docket. There were three (3) collocation or collocation-related issues that were included in the initial list of arbitration issues - Issues 18(D), 35, and 53, but these issues were resolved by the parties prior to the hearing on September 26 – 27, 2001. This Commission did not hear any testimony nor make any decisions on these issues.

1	Q.	ON PAGES 28 - 29, MR. STAHLY CONTENDS THAT SUPRA WOULD BE
2		IMPAIRED FROM PROVIDING SERVICE TO ALL CUSTOMERS IN A
3		GEOGRAPHIC MARKET IF "COLLOCATION SPACE IS NOT AVAILABLE TO
4		THE CLEC SO THE CLEC CANNOT OFFER SERVICE IN PARTS OF THE
5		MARKET." IS THIS TRUE?
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7	Α.	Perhaps. If collocation space were not available in BellSouth's central offices in
8		Florida, then Mr. Stahly's contention would appear to be plausible. However, this
9		is just speculation, with no factual data to support it. Since this is not the case
0		(BellSouth has collocation space available in all of its one hundred ninety-eight
l 1		(198) central offices except two), Mr. Stahly's contention is incorrect.
12		
13	Q.	ON PAGE 29, MR. STAHLY PROVIDES EXAMPLES FOR WHY A CLEC
14		WOULD BE UNABLE OR UNWILLING TO SERVE CUSTOMERS IN A
15		GEOGRAPHIC MARKET. SPECIFICALLY, HE HYPOTHESIZES THAT
16		COLLOCATION SPACE MAY BE AVAILABLE BUT PROHIBITIVELY
17		EXPENSIVE. WHAT ARE YOUR COMMENTS?
18		
19	A.	As I explained above in my response to AT&T Witness Bradbury, this
20		Commission has established cost-based collocation rates and those rates are
21		taken into account in BellSouth's impairment model.
22		
23	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
24		
25	A.	Yes.

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		SURREBUTTAL TESTIMONY OF A. WAYNE GRAY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 28, 2004
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7		
8	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION WITH
9		BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").
10		
11	A.	My name is A. Wayne Gray. My business address is 675 West Peachtree Street,
12		Atlanta, Georgia 30375. My title is Director - Regional Planning and Engineering
13		Center in BellSouth's Network Planning and Support organization.
14		
15	Q.	ARE YOU THE SAME A. WAYNE GRAY WHO PREVIOUSLY FILED
16		REBUTTAL TESTIMONY IN THIS DOCKET ON JANUARY 7, 2004?
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18	A.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
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22	A.	The purpose of my testimony is to rebut portions of the rebuttal testimony filed
23		by MCI witness James D. Webber, AT&T witness Mark Van De Water, and Sprint
24		witness Kent W. Dickerson. In doing so I discuss collocation cost inputs included
25		in the BACE model, as well as respond to the suggestions that competitive

carriers are "impaired" due to collocation issues in BellSouth's central offices.

These issues range from the availability of sufficient collocation space, to
BellSouth's ability to handle the additional demand for collocation services that
will result from a "no impairment" finding. I point out the errors in these witnesses
testimony and explain how BellSouth is prepared to handle any collocation
issues that may arise as a result of these proceedings. I also discuss cross
connection issues that these witnesses raise, and demonstrate that BellSouth is
addressing these issues appropriately.

I also note again, as I stated in my rebuttal, the only collocation issue related to impairment is "whether a lack of sufficient collocation space gives rise to impairment in [a] market." TRO ¶ 472. The availability of sufficient collocation space in BellSouth's Florida central offices is not a problem and certainly does not give rise to impairment. Notably, none of the CLEC witnesses refer to a single instance of an alleged space availability issue. Moreover, BellSouth has consistently achieved excellent results with respect to the collocation performance measurements established by this Commission. No one has presented any evidence that would lead to a contrary conclusion, whether they are speaking about now or the foreseeable future.

Collocation Cost Issues

Q: PLEASE ADDRESS SPRINT WITNESS MR. DICKERSON'S DISCUSSION OF COLLOCATION COSTS.

1	A.	Mr. D	ickerson's rebuttal testimony includes an analysis of certain collocation cost
2		inputs	s. Mr. Stegeman addresses Mr. Dickerson's testimony in some detail, but
3		let me	e reiterate the collocation costs that have been included in the inputs to the
4		BACE	model. BellSouth provided the following inputs to the BACE model, which
5		are in	cluded as part of the ColloBuildOut cost element. Each item listed is
6		assun	ned with a quantity as one unless otherwise listed:
7		1.	Initial Application Fee
8		2.	Space Preparation – Firm Order Processing
9		3.	Security Access System - New Access Card activation, per card (used 4
10			cards)
11		4.	Space Availability Report per premise – per CO per request
12		5.	Nonrecurring Collocation Cable Records - VG/DS0 Cable, per cable
13			record, per CO, per request
14		6.	Nonrecurring Collocation Cable Records
15		7.	Cable records-VG/DSO Cable, per each 100 pair
16		8.	Cable records DS1-per T1TIE
17		9.	Cable records-DS3 per T3TIE
18			
19		In add	dition, BellSouth provided inputs relating to both recurring and non-recurring
20		costs	associated with 2W, 4W, DS1, and DS3 cross connects.
21			
22		Finally	y, BellSouth provided input for the monthly recurring collocation cost
23		eleme	ent, which includes the following: (a) space preparation, central office
24		modifi	cation per square feet; (b) space preparation – common systems
25		modif	ication per square foot/cageless; (c) floor space per square feet; (d) power

48V DC power, per fused amp; (e) security system per central office per assignable square feet; (f) security access system – new access card activation per card. With respect to the recurring collocation cost inputs, BellSouth believes that 100 square feet per collocation site, 60 fused amps of power per site, and 4 security cards are appropriate assumptions. All of the collocation "cost" inputs are based on the collocation cost studies and resulting rates approved by this Commission.

The fact is, the BACE model already includes, and incorporates all appropriate collocation costs. There is no need, and it would be inappropriate to attempt to add more. Doing so would be to overstate the collocation components necessary to efficiently compete.

Q:

Α.

DO YOU HAVE ANY OVERALL COMMENTS CONCERNING COLLOCATION COSTS?

I do. Some of the most important wire-center related cost factors for an efficient CLEC to consider, in addition to collocation costs, include loop costs and transport costs. With respect to collocation costs, there is very low variability in collocation costs per wire center. In other words, collocation costs are about the same in a Zone 1 wire center as in a Zone 3 wire center. In reference to the testimony of Dr. Pleatsikas, I would like to observe that both collocation and transport costs exhibit economies of scale because both collocation and transport costs are relatively similar across wire centers.

Rebuttal Testimon	v of MCI Witness	James D.	Webber
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Q. MR. WEBBER TAKES ISSUE WITH THE FACT THAT MCI WOULD HAVE TO

BUILD OUT ADDITIONAL COLLOCATION AND TRANSPORT FACILITIES OR

GAIN ACCESS TO EELS IF THIS COMMISSION WERE TO FIND THAT

THERE IS NO IMPAIRMENT WITHOUT ACCESS TO UNBUNDLED LOCAL

SWITCHING ("ULS"). PLEASE COMMENT.

Α.

While Mr. Webber is correct that MCI would need to use other means, besides UNE-P, to serve its customer base if this Commission determines that CLECs are not impaired without access to ULS, Mr. Webber ignores the fact that in all but two BellSouth wire centers, there is no impediment to adding collocation space. I understand that those two wire centers are in markets where Ms. Tipton demonstrates that the FCC's "triggers" are met, meaning that these limitations have evidently not acted as a barrier to competition in these markets.

Moreover, that MCI has chosen not to collocate in all of the BellSouth wire centers that serve its UNE-P customers, nor ordered any EELs to serve these customers, is a problem of MCI's own making, and in the context of this proceeding, this is irrelevant. MCI has had, and will continue to have, very little incentive to collocate its equipment in these other wire centers or request EELs from BellSouth as long as ULS and UNE-P are available.

Rebuttal Testimony of AT&T Witness Mark David Van De Water

Q. ON PAGE 14, MR. VAN DE WATER ASSERTS THAT BELLSOUTH DOES NOT
PROVIDE CROSS-CONNECTIONS BETWEEN THE COLLOCATED

FACILITIES OF TWO CLECS ON A TIMELY BASIS. PLEASE COMMENT.

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Mr. Van De Water is wrong. He is evidently talking about what BellSouth refers to as "Co-Carrier Cross Connects" ("CCXCs"), which are cross-connects placed between two different CLECs' collocated arrangements within the same BellSouth central office. BellSouth does not control the timeliness of the provisioning of the CCXC, the requesting CLEC does. BellSouth permits a CLEC to engage a BellSouth Certified Supplier ("supplier"), which may be the CLEC's own technicians if the CLEC has been certified by BellSouth as such, to provision the necessary cabling directly between its collocation space and that of another CLEC within the same central office. If the two collocation spaces are not contiguous, then the supplier must run the appropriate optical or electrical cabling between the two CLEC spaces utilizing BellSouth's cable support structure. If the two collocation spaces are contiguous, then the CLEC's supplier may place a cable directly between the two arrangements, without having to place the cabling in the BellSouth cable support structure. Therefore, if AT&T wished to place a CCXC between its collocation space and that of another CLEC, it would need to engage a supplier (or use its own technicians if AT&T has been certified as a supplier) to provision a cable directly between its collocation space and the other CLEC's space. The amount of time that would be required to place the cabling would be negotiated between AT&T and its supplier, since it will be the supplier that will be provisioning the cabling. Thus,

1		the timeliness of provisioning the CCXC would not be controlled by BellSouth,
2		but would be determined by AT&T and its supplier.
3		
4	Q.	ON PAGE 14, MR. VAN DE WATER CITES PARAGRAPH 514 OF THE FCC'S
5		TRO AS REQUIRING BELLSOUTH TO "PROVIDE CROSS-CONNECTIONS"
6		BETWEEN THE CLECS (emphasis in original). WHAT ARE THE FCC'S RULES
7		REGARDING BELLSOUTH'S OBLIGATION TO "PROVIDE CO-CARRIER
8		CROSS-CONNECTIONS"?
9		
10	A.	47 C.F.R. § 51.323(b)(h) states:
11		
12		(h) As described in paragraphs (1) and (2) of this section, an
13		incumbent LEC shall permit a collocating telecommunications
14		carrier to interconnect its network with that of another
15		collocating telecommunications carrier at the incumbent LEC's
16		premises and to connect its collocated equipment to the
17		collocated equipment of another telecommunications carrier
18		within the same premises, provided that the collocated
19		equipment is also used for interconnection with the incumbent
20		LEC or for access to the incumbent LEC's unbundled network
21		elements.
22		
23		(1) An incumbent LEC shall provide, at the request of a
24		collocating telecommunications carrier, a connection between
25		the equipment in the collocated spaces of two or more

1 2

incumbent LEC permits the collocating parties to provide the requested connection for themselves or a connection is not required under paragraph (h)(2) of this section. Where technically feasible, the incumbent LEC shall provide the connection using copper, dark fiber, lit fiber, or other transmission medium, as requested by the collocating telecommunications carrier. (emphasis added)

telecommunications carriers, except to the extent the

(2) An incumbent LEC is not required to provide a connection between the equipment in the collocated spaces of two or more telecommunications carriers if the connection is requested pursuant to section 201 of the Act, unless the requesting carrier submits to the incumbent LEC a certification that more than 10 percent of the amount of traffic to be transmitted through the connection will be interstate. The incumbent LEC cannot refuse to accept the certification, but instead must provision the service promptly. Any incumbent LEC may file a section 208 complaint with the Commission challenging the certification if it believes that the certification is deficient. No such certification is required for a request for such connection under section 251 of the Act. (emphasis added)

Q. DOES BELLSOUTH COMPLY WITH THE FCC'S RULES?

1		
2	A.	Yes. BellSouth permits collocated CLECs to provision the necessary CCXCs
3		themselves, in compliance with 47 C.F.R. § 51.323(b)(h)(1).
4		
5	Q.	WHAT ABOUT THE FCC'S REQUIREMENT UNDER 47 C.F.R. § 51.323
6		(b)(h)(2)? HAS BELLSOUTH FILED A SECTION 201 CCXC OFFERING IN ITS
7		FCC TARIFF NO. 1?
8		
9	A.	Yes. BellSouth recently filed its Section 201 CCXC tariff offering in FCC Tariff
10		No. 1 as required by 47 C.F.R. § 51.323(b)(h)(2). In order to differentiate the
11		tariff offering, CCXCs offered pursuant to the tariff are called "Intra-Office
12		Collocation Cross Connects." This tariff is in effect, so AT&T and other CLECs
13		can place orders pursuant to the Section 201 tariff offering. However, as the
14		FCC has stated in its rules, any CLEC that orders this product must certify that
15		more than 10% of the traffic transmitted over this intra-office cross connection will
16		be interstate.
17		
18	Q.	ON PAGES 14 – 15, MR. VAN DE WATER IMPLIES THAT IF BELLSOUTH
19		DOES NOT PROVIDE THESE CO-CARRIER CROSS CONNECTIONS, CLECS
20		WILL NOT BE ABLE TO PARTNER WITH OTHER CLECS TO OFFER VOICE
21		AND DATA SERVICES. IS THIS TRUE?
22		
23	A.	No. First, BellSouth complies with the FCC rule requiring it to allow CLECs to
24		install CCXCs. Also, as I have described above, there are several options
25		available to AT&T (and other CLECs) that allow CLECs to partner with each

other to offer voice, data and any other type of telecommunications service to their customers.

Q. IS MR. VAN DE WATER'S STATEMENT, ON PAGE 15 OF HIS TESTIMONY,
THAT BELLSOUTH'S NEW FCC TARIFFED "SPECIAL ACCESS PRODUCT"
REQUIRES CLECS TO CERTIFY THAT THE TRAFFIC CARRIED ON THAT
CFA TO CFA CONNECTION MEETS THE FCC'S DE MINIMUS (10%)
INTERSTATE RULE CORRECT?

Α.

Yes. As I stated above, the Intra-Office Collocation Cross Connect Service reflected in Section 13 of BellSouth's FCC Tariff No. 1 was filed pursuant to the FCC's Rules in 47 C.F.R. § 51.323(b)(h)(2), which requires that a carrier ordering this product must certify to BellSouth that more than 10% of the traffic transmitted over this intra-office cross connection will be interstate. This requirement is often referred to by the FCC as the "de minimus" rule. (This same rule has also been applied by the FCC for traffic that is being carried over special access facilities.) BellSouth included this requirement in order to comply with the FCC's Rules in 47 C.F.R. § 51.323(b)(h)(2), not because BellSouth wished to preclude carriers from requesting this service offering. CLECs also have access to CCXC pursuant to interconnection agreements with BellSouth and such arrangements do not contain the de minimus requirements of an interstate special access service.

1	Q.	ON PAGE 15 OF HIS TESTIMONY, MR. VAN DE WATER STATES THAT
2		BELLSOUTH'S NEW TARIFFED PRODUCT CANNOT BE ORDERED
3		EFFICIENTLY. IS THIS TRUE?
4		
5	A.	No. If a collocated carrier wishes to place an order for BellSouth's tariffed Intra-
6		Office Collocation Cross Connect Service, then it can do so by submitting an
7		Access Service Request ("ASR") to BellSouth for this service, along with (1) a
8		written certification that more than 10% of the amount of traffic to be transmitted
9		through the Intra-Office Collocation Cross Connect will be interstate traffic, and
10		(2) a Letter of Authorization ("LOA") from the receiving collocated carrier that
11		includes the appropriate CFA and collocation arrangement CLLI (or ACTL) that
12		BellSouth is authorized to use for interconnecting the networks and/or equipment
13		of the two collocated carriers. It is not a complicated process.
14		
15	Q.	MR. VAN DE WATER ALLEGES THAT SINCE A UNE LOOP IS ORDERED ON
16		AN LSR, BELLSOUTH WILL REQUIRE THAT THE CROSS CONNECTION
17		BETWEEN TWO CLECS THAT WISH TO "SPLIT" THE LOOP MUST BE
18		ORDERED AND PROVISIONED OUT OF THE FCC ACCESS TARIFF USING
19		AN ACCESS SERVICE REQUEST ("ASR"). PLEASE COMMENT.
20		
21	A.	As I explained above, the Intra-Office Collocation Cross Connect Service is a
22		tariffed interstate service offering that BellSouth is making available to satisfy the
23		FCC's Section 201 requirements, pursuant to the FCC Rules in 47 C.F.R. §
24		51.323(b)(h)(2). There is no mandate set forth by the FCC that requires
25		BellSouth to offer Intra-Office Collocation Cross Connect Service (or CCXC

1		Service) as a UNE, unless BellSouth refuses to permit collocated carriers to self-
2		provision CCXCs between their collocation spaces in the central office.
3		BellSouth has allowed (for several years), and will continue to allow, the
4		collocators to self-provision CCXCs between their individual collocation
5		arrangements. As I have already stated in my testimony, pursuant to 47 C.F.R. §
6		51.323(b)(h)(1), if BellSouth permits the collocators to self-provision CCXCs
7		between their collocation arrangements in BellSouth's central offices, then
8		BellSouth is not required to provision CCXCs for the collocators. Thus, if a
9		requesting CLEC wishes to provide voice over a UNE loop and "split" the line
10		with a data CLEC, it may do so within its collocation space and self-provision a
11		CCXC between its space and that of the data CLEC.
12		
13	Q.	MR. VAN DE WATER CONTENDS THAT THERE WILL BE NO MEANS OF
14		ELECTRONICALLY ORDERING SUCH AN ARRANGEMENT TO ESTABLISH
15		WORKING SERVICES FOR THE CUSTOMER. IS HE CORRECT?
16		
17	A.	No. BellSouth's tariffed Intra-Office Collocation Cross Connect Service must be
18		ordered electronically using an ASR.
19		
20	Q.	MR. VAN DE WATER INDICATES THAT IN ORDER FOR THE TWO CLECS TO
21		"SPLIT" THE LOOP BETWEEN THEM, BOTH CLECS MUST ISSUE AN LSR
22		AND THEN ONE OF THE CLECS MUST ISSUE AN ASR. IS THIS TRUE?
23		
24	A.	It depends upon how the two CLECs determine they will "split" the loop. It would
25		appear to BellSouth that the most efficient means of accomplishing a "split" of the

loop (which would presumably be ordered as a UNE-L) would be for the "loop splitting" CLEC (the CLEC that has the loop splitting equipment located in its collocation space) to order the loop, perform the "loop splitting" function and send the agreed-upon split portion of the loop (either voice or data traffic) to the receiving CLEC via a CCXC between the two collocated CLECs, if both CLECs are collocated in the same central office. If the receiving CLEC is not collocated in the same office or has a Point of Presence ("POP") located outside the BellSouth central office, then the "loop splitting" CLEC could send the agreed-upon split portion of the loop to the receiving CLEC via a UNE transport service (which may be an EEL) that either terminates to the receiving CLEC's POP or the receiving CLEC's collocation space in another BellSouth central office.

If the CLECs determined that they wished to order an Intra-Office Collocation Cross Connect, then it would seem likely to BellSouth that the ordering CLEC would need to be the "loop splitting" CLEC, as well as the CLEC that places the order for the loop that is to be split between the two CLECs. In this case, the ordering CLEC would perform the loop splitting function and then send the agreed-upon split portion of the loop to the receiving CLEC via the Intra-Office Collocation Cross Connect. It would then be up to the receiving CLEC to place this traffic on whatever transport facilities it has to route its traffic to its switch or other equipment. This arrangement requires the "loop splitting" CLEC to issue one LSR and arrange for its vendor to install a CCXC to the data CLEC's collocation space.

1	Q.	MR. VAN DE WATER SPECULATES THAT BELLSOUTH'S TARIFFED
2		PRODUCT WILL CREATE "OPERATIONAL AND ECONOMIC BARRIERS TO
3		PROVIDING DSL SERVICES TO MASS MARKET CUSTOMERS." DO YOU
4		AGREE?
5		
6	A.	No. There are several alternatives available to CLECs that wish to provide DSL
7		services to mass market customers. I noted two such alternatives in the
8		discussion above regarding the means by which two CLECs could "split" a loop
9		between them by utilizing a CCXC placed by the CLECs or by ordering a
10		BellSouth Intra-Office Collocation Cross Connect from BellSouth FCC Tariff No.
11		1. CLECs can also request cageless or virtual collocation space in increments
12		as small as that required for a single bay or rack of equipment in those central
13		offices in which they desire to serve mass market customers.
14		
15	Q.	MR. VAN DE WATER ALLEGES THAT "BELLSOUTH'S PROPOSED POLICIES
16		AND PRACTICES FOR THIS SERVICE ARE DESIGNED TO COMPLICATE
17		AND HINDER THE PROVISION OF LINE SPLITTING SERVICE TO CLEC
18		CUSTOMERS AND SHOULD BE REJECTED BY THIS COMMISSION." DO
19		YOU AGREE?
20		
21	A.	Absolutely not. As I have already explained above, BellSouth's Intra-Office
22		Collocation Cross Connect Service offering was filed by BellSouth to comply with
23		47 C.F.R. § 51.323(b)(h)(2), which requires BellSouth to file a Section 201 CCXC
24		(which is called an Intra-Office Collocation Cross Connect in the tariff) offering in
25		its FCC Tariff No. 1. It was not designed, nor contemplated, by BellSouth to

complicate or hinder the provisioning of loop (line) splitting service to a CLEC's customers. CLECs can still self-provision CCXCs pursuant to an interconnection agreement.

Q. ON PAGE 21, MR. VAN DE WATER STATES THAT BELLSOUTH HAS FAILED TO CONSIDER IN ITS HOT CUT FORECAST THAT CLECS MAY NOT HAVE THE COLLOCATED FACILITIES AND NETWORK EQUIPMENT IN PLACE TO SUPPORT THE MIGRATION OF THE EMBEDDED BASE OF UNE-P CUSTOMERS OVER TO CLECS' FACILITIES. DO YOU AGREE?

Α.

No, I do not. As discussed in the testimony of BellSouth's witnesses Ken Ainsworth and Al Heartley, BellSouth has estimated the number of hot cuts that would be needed to transfer the embedded UNE-P base to UNE-L over the three seven month periods outlined in the TRO. In some cases, as Mr. Van De Water has stated, the CLECs may not currently have the necessary collocated facilities and network equipment in place to support the migration of the embedded base of UNE-P customers; however, if the CLEC requires new or additional collocation space for the placement of its network equipment to achieve the migration of its UNE-P customers over to UNE-L, BellSouth would be required by this Commission to complete any requests for collocation space within the Commission-ordered provisioning intervals (which are dependent upon the type of collocation space requested – i.e., virtual, caged or cageless) or pay substantial penalties for missing these intervals. As soon as BellSouth receives orders for collocation space from the CLEC, BellSouth begins preparing the space to meet the specifications requested by the CLEC. In addition, the CLEC

1		can request permission to occupy the requested space prior to BellSouth's
2		completion of the space provisioning. BellSouth's outstanding performance in
3		timely delivering collocation space pursuant to measures established by this
4		Commission speaks for itself. BellSouth stands ready to meet CLEC demand for
5		new or augmented collocation arrangements.
6		
7	Q.	IS THERE ANY OTHER TYPE OF ARRANGEMENT, BESIDES COLLOCATION,
8		THAT CAN BE USED BY A CLEC TO MIGRATE ITS EMBEDDED UNE-P BASE
9		TO UNE-L SERVICE?
10		
11	A.	Yes. It is my understanding that a CLEC may also order EELs from its end user
12		at the DS0 level (which may or may not terminate into the CLEC's collocation
13		space) to its switch, POP or other designated location as a means of converting
14		its embedded UNE-P base to UNE-L service. As noted above, the transport
15		piece of the EEL may terminate to the CLEC's collocation space or, if ordered as
16		special access, it may terminate directly at the CLEC's POP.
17		
18	Q.	MR. VAN DE WATER CONTENDS THAT BEFORE CLECS CAN ISSUE
19		CONVERSION ORDERS, THEY MUST ESTABLISH NEW COLLOCATION
20		FACILITIES AND/OR AUGMENT EXISTING ARRANGEMENTS. IS THIS
21		TRUE?
22		
23	A.	It depends. If a CLEC already has sufficient collocation space in the central
24		offices that serve its mass market customers, then there would be no need for
25		the CLEC to augment its existing space. However, if the CLEC does not have

collocation space in a particular office or does not have sufficient space in a particular office to serve its mass market customers, then the CLEC must request 3 a new collocation arrangement, augment an existing collocation arrangement or 4 use EELs to reach these customers. As I have already explained above, the 5 length of time to provision collocation space is determined by intervals established by this Commission.

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Q. AT THE BOTTOM OF PAGE 21 OF HIS TESTIMONY, MR. VAN DE WATER OPINES THAT THE CLECS' ABILITY TO TRANSITION ITS EMBEDDED UNE-P. BASE TO UNE-L ON ANY KIND OF A BALANCED SCHEDULE WILL BE AFFECTED BY SEVERAL COLLOCATION-RELATED FACTORS. PLEASE COMMENT.

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Α.

The factors Mr. Van De Water lists - BellSouth's ability to manage and keep up with collocation demand, the ability of BellSouth's approved vendors to establish collocation arrangements, and the ability of the CLEC's manufacturer's to deliver and install equipment in the CLEC's new/expanded collocation space - are indeed outside the CLEC's control. However, what Mr. Van De Water fails to acknowledge, is that in this proceeding the Commission's only task concerning collocation is to determine whether or not sufficient space is available in BellSouth's central offices to ensure that collocation does not pose a barrier to competitive entry. Other factors are simply not relevant to this proceeding. It bears repeating, as BellSouth witness John Ruscilli noted in his direct testimony, BellSouth has collocation space available in all of its central offices in Florida, with the exception of the two that are currently reflected on BellSouth's space

1 exhaust list (one of which will be coming off the list within the next couple of 2 months). Furthermore, as BellSouth witness Al Varner points out in his direct 3 testimony, BellSouth has achieved excellent results, as evidenced by the Self-4 Effectuating Enforcement Mechanism ("SEEMS") plan in Florida, by meeting 5 100% of its collocation provisioning interval requirements, which have been set 6 by this Commission. 7 8 Concerning the last factor, BellSouth has no control over a CLEC's equipment 9 manufacturer's ability to deliver and install equipment in the CLEC's collocation 10 space. This transaction would have to be handled directly between the CLEC 11 and its chosen equipment manufacturer. However, this factor would not affect 12 BellSouth's ability to complete the required provisioning of the collocation space 13 requested for occupancy by the CLEC. 14 15 Q. ON PAGE 22, MR. VAN DE WATER SUGGESTS THAT THE AMOUNT OF 16 TIME TO ESTABLISH THE NECESSARY COLLOCATION ARRANGEMENTS 17 AND INSTALL THE NECESSARY FACILITIES MAY RESULT IN THE NEED FOR UNE-L CONVERSIONS IN THESE OFFICES TO BE "BACK-LOADED" AT 18 THE END OF THE SCHEDULE. DO YOU AGREE? 19 20 21 Α. No. If the CLEC requires new or additional collocation space for the placement 22 of its network equipment to achieve the migration of its UNE-P customers over to 23 UNE-L, BellSouth must complete any requests for collocation space within the

Commission-ordered provisioning intervals or pay SEEMs penalties for its

1		inability to meet these intervals. Therefore, BellSouth has every incentive to
2		timely provision collocation applications as such applications are received.
3	Q.	WOULD HAVING MORE CONVERSIONS "BACK-LOADED" AT THE END OF
4		THE TWENTY-SEVEN (27) MONTH PERIOD SPECIFIED BY THE FCC
5		RESULT IN AN UNDERSTATEMENT OF BELLSOUTH'S ACTUAL STAFFING
6		NEEDS, AS MR. VAN DE WATER SPECULATES?
7		
8	A.	It might, if one believed the assumption upon which Mr. Van De Water relies.
9		do not agree, however, with Mr. Van De Water's contention that UNE-P to UNE-L
10		conversions associated with all of the BellSouth central offices in which the
1 1		CLEC has requested new collocation space or the augmentation of existing
12		collocation arrangements would take an inordinate amount of time and result in a
13		delay of the migration. There is no reason for a CLEC to experience a delay in
14		the provisioning of the collocation space, pursuant to the Commission-ordered
15		intervals, unless it is the CLEC that has caused the delay by not submitting its
16		orders for the space in the time that is necessary for BellSouth to complete its
17		space preparation activities.
18		
19	Q.	ON PAGE 31, MR. VAN DE WATER STATES THAT BELLSOUTH HAS FAILED
20		TO DISCUSS HOW IT WILL HANDLE "THE SURGE OF APPLICATIONS FOR
21		NEW COLLOCATION ARRANGEMENTS AND AUGMENTATIONS OF
22		EXISTING COLLOCATIONS" PLEASE COMMENT.
23		
24	A.	BellSouth has not discussed the means by which additional applications for new
25		collocation arrangements will be handled in this proceeding, because BellSouth's

processing of future collocation applications is not anticipated to change from BellSouth's current procedure for handling collocation applications. Whether or not there is a surge of requests for new collocation applications and/or augmentations applications in the future, BellSouth is prepared to handle these applications utilizing its existing processes. If, as a result of a significant increase in the number of applications received by BellSouth, there becomes a need for BellSouth to increase its current staffing levels, BellSouth is prepared to do so. Also, BellSouth is continually analyzing and updating its electronic ordering system, called the e.App system, for the processing of collocation applications to ensure that BellSouth uses the most efficient means of processing all requested applications.

Q. WILL BELLSOUTH STILL BE REQUIRED TO MEET THE COLLOCATION INTERVALS SET BY THIS COMMISSION IF THERE IS A SURGE IN THE NUMBER OF FUTURE APPLICATIONS?

17 A. Yes. BellSouth will still be required to comply with the ordering and provisioning
18 intervals established by this Commission, as set forth in the BellSouth Service
19 Quality Measurements ("SQM") document, for collocation. Furthermore, if
20 BellSouth fails to meet the Commission-ordered provisioning intervals, then
21 BellSouth must pay SEEMs penalties for its inability to meet these intervals.

23 Q. ON PAGE 31, MR. VAN DE WATER ALSO STATES THAT BELLSOUTH HAS 24 NOT MENTIONED "THE NEED TO PLAN AND CONSTRUCT NECESSARY 1 ADDITIONS TO ITS CENTRAL OFFICE BACK-UP POWER PLANTS." PLEASE 2 COMMENT.

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Α.

BellSouth's central office managers consistently monitor the current power usage of BellSouth's individual power plant needs, as well as what the future power plant needs are expected to be. Power plant forecasts are developed after BellSouth's network and facility planners have determined what equipment and facilities are anticipated to be installed by BellSouth and the CLECs in the near and distant future. To the extent BellSouth has received any forecast information. from CLECs, such forecast information is also included in the forecast developed by BellSouth. In other words, BellSouth forecasts the demand for DC (direct current) power for each central office to determine if, and when, the existing power plant will need to be upgraded or a new power plant will need to be installed. If it appears that an upgrade or the installation of a new power plant is required immediately or sometime in the current year at a specific central office or a group of central offices, these requirements are communicated to BellSouth's network managers and included in the appropriate budget that is submitted to BellSouth's Network and Finance organizations for approval. As soon as the approval has been granted, the central office managers move forward with the necessary upgrade to the existing power plant or the installation of a new power plant.

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Q. AT THE BOTTOM OF PAGE 31, MR. VAN DE WATER CLAIMS THIS COMMISSION CANNOT DETERMINE HOW MANY NEW CLECS

1		BELLSOUTH'S CENTRAL OFFICES CAN ACCOMMODATE IN THE FUTURE.
2		PLEASE COMMENT.
3		
4	A.	This claim is simply a distraction. BellSouth has not stated how much collocation
5		space is available in its central offices in Florida, because, as stated in
6		BellSouth's response to AT&T Interrogatory No. 40 in AT&T's 1st Set of
7		Interrogatories, BellSouth does not keep a running total of how much collocation
8		space is available in each central office. The amount of space available for
9		collocation in each individual central office could conceivably change from day to
10		day or even many times throughout the day, depending upon the number of
11		applications BellSouth receives from CLECs and other carriers for new
12		collocation space, augmentation or termination of existing collocation space, and
13		the reservation of future collocation space (up to 18 months). The amount of
14		space available in an individual central office would also change based on space
15		that is utilized or reserved (up to 18 months) by BellSouth for its own operations
16		during the course of the day. Therefore, even if BellSouth were to prepare a
17		report listing the amount of space available for collocation in BellSouth's central
18		offices in Florida, such a report would quickly become obsolete as a result of
19		ongoing activity. The reality is that BellSouth is committed to taking all
20		reasonable measures to ensure that CLECs have adequate space to collocate in
21		BellSouth's central offices.
22		
23		BellSouth provides space availability information to CLECs and other carriers via
24		a "Space Availability Report" pursuant to CFR §51.323. Upon request from a

carrier, BellSouth will provide a written report describing in detail the space that

is available for collocation at a particular central office. This report includes not
only the amount of collocation space available at the central office requested, but
also the number of collocators present at the central office, any modifications in
the use of the space since the last report on the central office requested (if a
previous report had been performed), and the measures BellSouth is taking to
make additional space available for collocation arrangements.

Q. ON PAGE 32, MR. VAN DE WATER SUGGESTS THAT BELLSOUTH'S

CURRENT PERFORMANCE RESULTS HAVE LITTLE RELEVANCE IN AN

ENVIRONMENT THAT IS MUCH MORE DEPENDENT UPON TIMELY

COLLOCATION INSTALLATIONS. DO YOU AGREE?

Α.

No. BellSouth's current performance demonstrates that BellSouth is extremely committed to providing carriers with collocation space in its central offices as quickly as possible and in accordance with the provisioning intervals ordered by this Commission. Mr. Van De Water implies that this will change if BellSouth experiences an increase in the number of collocation applications it receives, which Mr. Van De Water is assuming will be significantly greater than the number of current applications being processed by BellSouth today. Mr. Van De Water neglects to mention, however, that if BellSouth fails to meet the performance standards ordered by this Commission, BellSouth must pay SEEMs penalties to those CLECs that are directly affected by BellSouth's inability to complete the CLECs' collocation arrangements within the required provisioning intervals. Consequently, BellSouth has no incentive to delay the provisioning of a CLEC's requested collocation space and every incentive to continue to provision space on a timely basis.

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2	Q.	MR. VAN DE WATER STATES THAT "BELLSOUTH HAS PROVIDED NO
3		DETAILS ON HOW IT PLANS TO MANAGE INCREASED DEMAND FOR
4		COLLOCATION OR WHAT IT ESTIMATES THAT DEMAND TO BE." PLEASE
5		COMMENT.
6		
7	Α.	Since I have already responded to this issue, I will only reiterate here that if
8		BellSouth does not have the appropriate level of work forces it needs to support
9		an increase in collocation applications, then BellSouth will take whatever action
10		is necessary to ensure that these collocation applications will be processed
11		within the ordering and provisioning intervals established by this Commission.
12		
13	Q.	FINALLY, MR. VAN DE WATER OPINES THAT IF BELLSOUTH CANNOT
14		PROVIDE COLLOCATION IN A TIMELY MANNER, THEN BELLSOUTH'S
15		ABILITY TO PERFORM HOT CUTS BECOMES A MOOT POINT. PLEASE
16		COMMENT.
17		
18	A.	Obviously, I do not agree with Mr. Van De Water's conclusion that BellSouth may
19		be unable to provide collocation in a timely manner. There is no reason to
20		believe, nor has Mr. Van De Water offered any evidence to the contrary, that
21		BellSouth cannot fulfill its obligations to make collocation space available to
22		CLECs in BellSouth's central offices in Florida. Therefore, collocation should
23		not even be a factor in this Commission's determination of whether BellSouth
24		can perform the necessary hot cuts that will be required to convert the embedded

UNE-P customer base to UNE-L.

2 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

4 A. Yes.

MS. MAYS: The next BellSouth witness will be Mr. Heartley. Mr. Heartley has direct and surrebuttal testimony. We would ask that it be admitted into the record as though read. He does not have an errata, and we would ask that his exhibits be marked as Number 72. CHAIRMAN BAEZ: Show direct and surrebuttal testimony of Witness Heartley entered into the record as though read, and show his accompanying exhibits marked as Composite 72. (Exhibit 72 marked for identification.)

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1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF ALFRED A. HEARTLEY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		DECEMBER 4, 2003
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	A.	My name is Alfred A. Heartley. My business address is 754 Peachtree Street,
12		Atlanta, Georgia 30308. My title is General Manager – Wholesale Performance
13		and Regional Centers.
14		
15	Q.	PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE WITH
16		BELLSOUTH.
17		
18	A.	I graduated from North Carolina State University in 1971 with a BS Degree in
19		Applied Mathematics. I have over 32 years experience in the
20		telecommunications industry working for BellSouth. I have held numerous
21		management positions in BellSouth, including positions involving outside plant
22		engineering and construction, installation and maintenance, central office
23		operations, data processing and process and performance improvement.
24		
25		

1	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
2		
3	A.	The purpose of my testimony is to explain how the BellSouth Network Services
4		organization is prepared to scale the network operations to provide seamless,
5		cost-effective hot cuts (whether individual; project; or batch) in the volumes likely
6		to be presented if BellSouth obtains full relief from providing unbundled circuit
7		switching. My testimony will demonstrate that BellSouth's network operations
8		can be scaled both to convert the embedded base of UNE-Ps and to provision
9		the new UNE-L orders that would result from the removal of unbundled circuit
10		switching.
11		
12		Second, I will demonstrate that the network operations portions of BellSouth's hot
13		cut processes are regional.
14		
15	Q.	WHAT ISSUES ON THE FLORIDA ISSUES LIST DOES YOUR TESTIMONY
16		ADDRESS?
17		
18	A.	My testimony addresses Issues 3(d).
19		
20	Q.	PLEASE EXPLAIN NETWORK SERVICES ROLE IN THE HOT CUT PROCESS.
21		
22	A.	BellSouth provides service to both retail and wholesale customers through its
23		Network Services organization. This department is responsible for performing
24		the actual provisioning, maintenance, and repair of customer services within the
25		nine BellSouth states. Network Services is a single team of employees that

reports to one corporate officer, the President of BellSouth Network Services, who in turn reports to the CEO of BellSouth. These Network employees are organized into common work functions. These work functions are independent of the type of customer – retail, access, or wholesale. The main work functions into which these employees are organized are central office operations, engineering and construction, and installation and maintenance.

In the single or batch Hot Cut process the central office operations employees will perform the actual central office wiring required to perform the hot cut. The installation and maintenance employees will perform any wiring changes required in the outside plant network to perform the hot cut.

I.

SCALABILITY OF THE NETWORK OPERATIONS

Q. HOW WILL NETWORK SERVICES HANDLE INCREASED HOT CUT DEMAND
WITH CURRENT FORCE IF RELIEF IS GRANTED FROM UNBUNDLED
CIRCUIT SWITCHING?

Α.

Network Services is prepared to move personnel to locations requiring additional staffing if the local employees cannot handle the increased load. As the FCC recognized in BellSouth's section 271 proceedings, BellSouth's network forces and network processes and procedures are regional. Our employees are trained in regional training centers and therefore can be relocated to areas requiring additional staffing when necessary. Our methods and procedures are developed and maintained by a regional staff and therefore minimal training will be required

1		for any loaned forces. If the additional staffing is required on a permanent basis,
2		Network Services will hire the necessary personnel to handle any increased load.
3		
4	Q.	ARE BELLSOUTH'S NETWORK OPERATIONS SCALABLE?
5		
6	A.	Absolutely. BellSouth has over one hundred years of experience in managing
7		force and load to ensure that it can provide its customers service. Managing
8		force and load for hot cuts to provide UNE loops to BellSouth wholesale
9		customers is no different. Staffing the network forces to meet expected needs is
10		business as usual for BellSouth.
11		
12	Q.	HOW DOES BELLSOUTH MANAGE FORCE AND LOAD?
13		
14	A.	One of the major tools BellSouth uses to manage force and load in both network
15		operations and in its centers is the Force Model. A Force Model allows the user
16		to take certain inputs and generate anticipated volumes and the force needed to
17		handle those volumes.
18		
19	Q.	HAS NETWORK SERVICES DONE A FORCE MODEL TO FORECAST THE
20		ADDITIONAL HOT CUT LOAD THAT WILL BE REQUIRED IF UNE-P RELIEF IS
21		GRANTED?
22		
23	A.	Yes. BellSouth has run force models to forecast the additional load necessary in
24		the centers and in network operations if BellSouth receives relief from unbundled
25		switching. I will discuss the network operations force model and the results of

1		that model for the network services operation. BellSouth witness Ken Ainsworth
2		discusses the results of the centers force model for the centers personnel.
3		
4	Q.	WHAT ARE SOME OF THE INPUTS THAT GO INTO THE NETWORK FORCE
5		MODEL?
6		
7	A.	Some examples of the network inputs that go into the force model are as follows
8		1. Forecast of inward movement and lines in service for various products
9		including 1FR, 1FB, UNE, ADSL, DS1, DS3 etc
10		2. Assumptions for trouble report rates and dispatch rates
11		3. Productivity levels
12		4. Productive vs. non-productive hours
13		5. Capital expenditures
14		6. Span of Control
15		
16	Q.	WHAT ASSUMPTIONS DID BELLSOUTH MAKE ABOUT THE VOLUME OF
17		HOT CUTS IF BELLSOUTH OBTAINS RELIEF FROM UNBUNDLED CIRCUIT
18		SWITCHING?
19		
20	A.	BellSouth made various assumptions about the volume of UNE-L in its forecast.
21		In each instance, however, BellSouth took the highest expected volumes to
22		generate a "worst-case" view of UNE-L volume. As I will demonstrate, BellSouth
23		can scale its network forces to meet that "worse-case" scenario.
24		
25	Q.	WHAT DO YOU MEAN BY WORST CASE SCENARIO?

1	A.	By that, I mean the absolute maximum amount of not cuts that the central oπice
2		forces and I&M forces would have to handle if the following were to occur:
3		1. This Commission finds that CLECs are not impaired without unbundled
4		switching (and thus, UNE-Ps) in any market in BellSouth's nine-state region.
5		2. CLECs decide to convert the totality of their UNE-P base to unbundled loops
6		attached to the CLECs' switches rather than BellSouth's switches.
7		3. UNE-P growth and UNE-L growth is maintained throughout the relevant
8		period for the absolute <u>highest volumes</u> of each that has occurred at any time
9		in the last 33 months that BellSouth has maintained records.
10		
11	Q.	WHAT MONTHLY VOLUME OF UNE-P TO UNE-L CONVERSIONS RESULTS
12		FROM YOUR ASSUMPTIONS?
13		
14	A.	The worst case monthly volume of hot cuts (except for adjustments to that
15		volume that I will discuss later in this testimony) is 317,998 across the entirety of
16		BellSouth's nine-state region. The following explains how I arrived at that value:
17		
18		The quantity of UNE-Ps in service across BellSouth's nine-state region was
19		about 2.21 million at the end of October 2003. The highest single-month volume
20		of UNE-Ps added (116,295) occurred in June 2002. The highest single-month
21		volume of UNE-Ls inward movement (19,029) occurred in January 2001. The
22		pictorial in Exhibit KLA-3, which is attached to Ken Ainsworth's testimony, depicts
23		how those volumes grow over time.
24		
25		

1 Following is a brief explanation:

In October 2003, there were about 2.21million UNE-Ps in service. Projecting forward for nine (9) months to July 2004 (the earliest expected decision by a Public Service Commission in BellSouth's region), there would be 3.26 million UNE-Ps in service (2.21M + (9 * 116,295). However, because the conversion of a BellSouth retail account to a UNE-P arrangement does not require a hot cut, the monthly volume expected in July 2004 is equal to the quantity of "standalone" unbundled loops requested (19,029).

Assuming that in July 2004, all nine Commissions in BellSouth's region decided that CLECs are not impaired without unbundled switching and that CLECs may continue to request UNE-Ps for an additional five (5) months, the expected quantity of UNEP-s in service in December 2004 would be 3.84 million. This level of UNE-Ps becomes the "embedded base" which later will be converted to stand-alone unbundled loops via the hot cut process. For the next eight (8) months, the monthly volume of hot cuts would rise to 135,324. This is the sum of the worst case unbundled loop volume (19,029) plus the worst case monthly growth for UNE-Ps (116,295) that now would be unbundled loops also.

Beginning in August 2005, BellSouth would begin the transition of the embedded base of UNE-Ps (3.84 million) plus handle the worst case monthly unbundled loop volume (19,029) and the worst case monthly UNE-P growth volume (116,295). During each of the subsequent seven-month intervals, BellSouth would migrate one third of the embedded base. Thus, the worst case monthly hot cut volume at the region level would be 317,998 (that is, 19,029 + 116,295 +

1		((3.84M * 0.333)/7))
2	٠	
3		Because on average there are 22.3 business days per month, the daily volume
4		becomes 14,260 (that is, 317,998 / 22.3) at the regional level.
5		
6	Q.	WHAT OTHER ADJUSTMENTS TO ANTICIPATED VOLUMES HAVE YOU
7		ASSUMED?
8		
9	A.	During CLEC workshops, CLECs have suggested that two adjustments to
10		anticipated volumes should be made. While I do not necessarily agree with such
11		a suggestion, I have included those adjustments to prove my point that BellSouth
12		can enlarge its LCSC and CWINS groups to handle even worst case volumes
13		with these additional factors considered. The two adjustments suggested are to
14		increase the volumes to include some level of "churn" from one local carrier to
15		another and to increase the volumes to include some level of increased trouble
16		report rate for unbundled loops compared to UNE-P arrangements. Accordingly,
17		I made an upward adjustment of 4% churn per month (48%) per year and an
18		upward adjustment of 5% increased trouble report rate. I treated these
19		adjustments as if they resulted in additional hot cuts (again, a worst case
20		assumption) and the resultant monthly volume for hot cuts rose to 347,254 per
21		month (15,572 per business day).
22		
23	Q.	DID BELLSOUTH FACTOR DISPATCHES AS A RESULT OF IDLC INTO ITS
24		FORCE MODEL?
25		

1	A.	Yes. The model includes the percent of IDLC in each central office. Employees
2		in our installation and maintenance operations perform hot cuts when IDLC is
3		involved. These employees will be involved in hot cuts when we have to change
4		the outside plant facility, such as converting a loop from integrated digital loop
5		carrier (IDLC) to non integrated DLC or a copper pair. This will vary by central
6		office and facility availability.
7		
8	Q.	DID BELLSOUTH CONSIDER COORDINATED VERSUS NON-COORDINATED
9		CUTS IN THE MODEL?
10		
11	A.	Yes. Network Services staff considered the percent of conversions and ongoing
12		activity that would go to SL1s and SL2s and the percent that would be
13		coordinated and non-coordinated.
14		
15	Q.	ONCE YOU HAVE THE LOAD PROJECTIONS, HOW DO YOU USE THEM?
16		
17	A.	The load projections were multiplied by the amount of time required in the central
18		office and field to complete the wiring and perform the hot cuts. We calculated
19		the time projections based on wiring and cutting one line per order. This method
20		yielded the largest number of employees required. We anticipate that when the
21		conversions do occur, there will be some efficiency gained when multiple hot cuts
22		can be performed at the same location.
23		
24	Q.	USING THESE ASSUMPTIONS, WHAT FORCE AND LOAD DID THE MODEL
25		GENERATE?

1	A.	The model generated a load of a maximum of 277 hot cuts in a central office per
2		business day. Exhibit AH-1 sets forth the expected load per day per central
3		office in Florida. Based on this load, the model yielded a force increase of an
4		additional 687 central office employees in Florida and an additional 394
5		installation and maintenance employees.
6		
7	Q.	COULD BELLSOUTH HIRE 687 CENTRAL OFFICE EMPLOYEES AND 394
8		INSTALLATION AND MAINTENANCE EMPLOYEES?
9		
10	A.	Absolutely. Again, force and load management is something BellSouth has been
11		doing for decades. BellSouth would hire the additional force by engaging its
12		Human Resources Department. Human Resources would advertise the jobs in
13		local media and conduct job fairs and testing events to screen applicants.
14		Human Resources would require 90 days from notification to employees being
15		added to the payroll.
16		
17	Q.	WHERE WOULD BELLSOUTH FIND THIS KIND OF WORKFORCE?
18		,
19	A.	BellSouth will find these potential employees in technical schools, military bases
20		and other colleges. Based on the amount of downsizing that has occurred in the
21		industry, many applicants may be looking for technical jobs like we will have.
22		
23	Q.	COULD BELLSOUTH TRAIN 687 NEW CENTRAL OFFICE EMPLOYEES AND
24		394 NEW INSTALLATION AND MAINTENANCE EMPLOYEES SUFFICIENTLY
25		TO PERFORM HIGH QUALITY HOT CUTS?

1 A. Absolutely. First, as Mr. Ainsworth explains in his testimony, hot cuts are not 2 difficult. Consequently, BellSouth's basic training will permit employees to 3 perform the hot cut functions. BellSouth trains new employees through its 4 region-wide training program. Technical training is developed and delivered by a 5 centralized BellSouth Training organization that operates training facilities in 5 6 locations scattered throughout the nine-state region. These training locations are 7 staffed with 35 people and are supplemented by contract trainers as needed. 8 Approximately 70% of the training is performed at the training centers with the 9 remaining 30% being "suitcased" to the various locations throughout the nine-10 state region. Technical personnel throughout the nine-states attend training at all 11 of these locations depending on the subject matter and class sizes. Because the 12 training is identical, it is irrelevant which location is selected. Training is divided 13 by subject matter, not by state. Consequently, BellSouth has more than enough 14 training facilities to train these new network employees. 15 16 The training necessary to perform hot cuts will typically take between 15 to 35 17 days of mandatory training. In addition, employees receive on-the-job training 18 related to their work assignments. 19 20 BASED ON THIS HIRING AND TRAINING PLAN, HOW LONG WOULD IT Q. 21 TAKE FOR BELLSOUTH TO FIND CANDIDATES, HIRE THEM, TRAIN THEM, AND HAVE THEM ON THE JOB PERFORMING HOT CUTS? 22

11

on the job and have them performing high quality hot cuts.

BellSouth would required 4 to 5 months to hire, train and place job applicants

23

24

25

Α.

1	Q.	DOES BELLSOUTH HAVE TO HIRE ALL OF THESE PEOPLE AT ONCE?
2		
3	A.	No. The transition period in the order is almost 2 years. So BellSouth has an
4		extended period over which to add and train the force additions.
5		
6	Q.	HAS BELLSOUTH HAD TO INCREASE FORCE IN THE PAST TO HANDLE
. 7		LARGE CONVERSIONS OR WORKLOADS?
8		
9	A.	BellSouth has formed cutover teams in the past to handle central office
10		conversions, the 1996 Summer Olympic Games in Atlanta. We have also hired
11		and trained temporary employees to help handle the increased summer
12		workload. For example, BellSouth hired and trained 1000 Service Technicians
13		in 1999 to handle our service order and trouble load and to reduce overtime.
14		During 1998 to 2001 we hired over 3300 employees related to ENCORE and
15		Wholesale Operations. During 2001 and 2002 we hired over 800 Service
16		Technicians to handle increased ADSL demand. We organize our training
17		around the tasks to be performed and focus our force on those tasks. We
18		anticipate that the hot cuts generated by UNE-P relief will require teams of
19		employees performing specific tasks for up to 21 months. We also anticipate that
20		we will be able to supplement existing force in an area with employees from other
21		areas and to hire the necessary force to accomplish our goal in the required
22		timeframe.
23		•
24	Q.	ARE THERE ANY INHERENT LIMITATIONS IN THE NUMBER OF HOT CUTS

THAT CAN BE PERFORMED IN A CENTRAL OFFICE IN A SINGLE DAY?

There are no limitations that BellSouth cannot manage around. Loop conversion work is just part of the overall work done on a daily basis in any given central office. Depending on the workload and lay out of the central office, anywhere from 2 to 10 (or more) central office technicians may be at work simultaneously on the same Main Distributing Frame ("MDF") with no negative impact on productivity. Cable pairs are deployed on the MDF as cables are brought into the central office. Moreover, when multiple loop conversions are scheduled in a single day for a single central office, the pre-wiring work may be done over several shifts in the days leading up to the due date. Because the access lines for these conversions are generally spread throughout the central office, the actual cutovers are then accomplished without technicians interfering in each other's workspace. Finally, large hot cut quantities are project-managed. One of the benefits of project-management is to schedule the central office forces such that both the pre-wiring and the due date work can be accomplished without space constraints.

A.

II. REGIONALITY

Q. IS BELLSOUTH'S HOT CUT PROCESS REGIONAL?

A. Yes. As the FCC confirmed in BellSouth's section 271 applications, BellSouth's network operations are regional. Thus, BellSouth's Network services operations personnel perform the hot cut processes the same way in all nine of BellSouth's states.

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 .

3 A. Yes.

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF ALFRED A. HEARTLEY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 7, 2003
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	A.	My name is Alfred A. Heartley. My business address is 754 Peachtree Street,
12		Atlanta, Georgia 30308. My title is General Manager – Wholesale Performance
13		and Regional Centers for BellSouth.
14		
15	Q.	ARE YOU THE SAME ALFRED HEARTLEY WHO EARLIER FILED DIRECT
16		TESTIMONY IN THIS DOCKET?
17		
18	A.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY BEING FILED
21		TODAY?
22		
23	Α.	I will respond to portions of the direct testimonies of Mr. James D. Webber on
24		behalf of MCI and Mr. Mark David Van de Water on behalf of AT&T regarding the
25		batch hot cut process.

1 Q. PRIOR TO REBUTTING THE CLEC WITNESSES, HAS BELLSOUTH MADE ANY 2 CHANGES TO ITS LOAD AND FORCE PROJECTIONS SINCE IT FILED. 3 DIRECT TESTIMONY ON DECEMBER 4, 2003 ABOUT WHICH YOU WOULD 4 LIKE TO INFORM THE COMMISSION? 5 6 A. Yes, BellSouth recently discovered that the model was incorrectly adding the annual 7 assumed rate of churn of UNEP and UNEL facilities (48%) to each month's 8 activity. The annual rate is based on a monthly churn rate of 4%. Corrections to 9 the model have been made and a revised version of Exhibit AH-1 is attached. 10 The overall force required in Florida is 759 compared to 1080 in the forecast in 11 my direct testimony. 12 13 Q. ON PAGE 22, MR. WEBBER ALLUDES (WITHOUT SUPPORT) TO "REAL-14 WORLD CONSTRAINTS ON THE NUMBER OF TECHNICIANS THAT CAN 15 WORK ON A GIVEN FRAME AT A GIVEN TIME." IS THIS A PROBLEM? 16 No. As explained in my direct testimony, certainly there are limitations on the 17 A. 18 number of technicians that can work on a frame at one time. BellSouth, 19 however, can manage around limitations on the number of technicians who can 20 work on the frame to address even "worst-case" anticipated volumes. For 21 example, on conventional frames, two (2) technicians may work for every 50 22 verticals in length with a maximum of ten (10). These technicians would work 23 together in tandem with one technician laying in the wires on the horizontal side of the frame and the other technician terminating the wires on the vertical side of 24 25 the frame. The maximum number of jumpers being laid in the frame

simultaneously would be five (5). This is known as the pre-wire step in the hot cut process. On modular type frames (sometimes referred to as "COSMIC" frames), a single technician may prewire circuits for every ten (10) modules in length. The hot cut prewiring steps are the most restrictive steps of the conversion process. However, prewiring may be conducted 24 hours per day utilizing three (3), eight-hour shifts. Therefore BellSouth will be able to handle the prewiring for all its central offices without a problem. For example, BellSouth's force model indicates that even in a worst-case scenario BellSouth would have to prewire 4,493 circuits per day in Florida. BellSouth's model indicates that 452 central office technicians would be required for these conversions. These technicians can easily wire an average of 10 circuits in an eight-hour shift.

The actual individual loop cutovers will then take place at a single location on the frame (that is, at the location on the distributing frame where the loop cable pair appears) for each circuit. However, it is possible to cut more circuits in a single eight-hour shift (8 AM to 5 PM) than can be wired in two (2), eight-hour shifts because the hot-cut conversion steps take less time per circuit that the pre-wire steps per circuit.

Q. ON PAGE 23, MR. WEBBER DESCRIBES WHAT HE CALLS "THE POTENTIALLY CHAOTIC SITUATION" THAT COULD RESULT WHEN MULTIPLE TECHNICIANS WORK ON THE MAIN DISTRIBUTING FRAME ("MDF"). IS HIS SPECULATION CREDIBLE?

Α. No. Mr. Webber's baseless speculation of a potentially chaotic situation is not credible because BellSouth will properly and efficiently manage the conversions. That is the reason BellSouth determined the number of technicians that can work simultaneously on a given distributing frame. While BellSouth's technicians are trained to work safely together, too many working in a tight location could become cumbersome. BellSouth routinely prevents such a situation by working the appropriate number of technicians on different shifts. This may require 24-hour scheduling but BellSouth is willing to do such scheduling. BellSouth will not permit a chaotic situation to occur. I would also point out that BellSouth has successfully replaced entire switching systems and has done so with minimal customer disruption.

Q. DO YOU AGREE WITH THE EXTRAPOLATION OF WORK TIMES MR. VAN DE WATER DOES ON PAGE 37-38, LINES 17-14 OF HIS TESTIMONY?

A.

No. Mr. Van de Water's analysis of the time required to cutover a UNEP to a UNEL does not differ substantially from BellSouth's own analysis; however, his conclusion that such work times will preclude BellSouth from handling anticipated volumes is incorrect.

Beginning on page 37, at line 17, Mr. Van de Water uses BellSouth data to argue that any given technician could complete 12-13 UNE-P conversions per day (using a seven-hour day). BellSouth's force model is more conservative, yielding an average of 9.93 conversions per shift (using a 7.5-hour day). Even taking BellSouth's more conservative view, BellSouth will still complete all of the

required conversions within 21 months. BellSouth's analysis takes into consideration the different times required to complete a conversion depending on the type of unbundled loop requested (for example, SL1 or SL2) and the type conversion requested for SL1 orders (for example, Coordinated or Non-Coordinated).

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Beginning on page 38 at line 3, Mr. Van de Water uses BellSouth data in an attempt to prove that there is insufficient space on the MDF in the West Hollywood, FL central office for enough technicians to work simultaneously to complete enough conversions to create "meaningful" UNE competition. Again, while BellSouth's own analysis does not differ substantially, the conclusion that Mr. Van de Water draws is incorrect. Mr. Van de Water alleges that completing 104 hot cuts per day cannot support competition. Notably, he does not put forth a number of cuts that would, in his view, support competition. Moreover, BellSouth's worst-case force model assumes that only 126 cuts per day are required in West Hollywood to handle the UNEP to UNEL migration as well as normal growth within the 21-month timeframe. Based on the information provided above, 126 cuts per day would require approximately 12 technicians to complete. As noted in interrogatory item 45, 8 technicians can work on the West Hollywood frame simultaneously without impacting productivity. Assuming this work is done during the other two (2) available shifts (that is evening and night) to avoid interfering with any other activities, West Hollywood can accommodate up to 16 technicians per day. Therefore, BellSouth can readily handle the required load in its West Hollywood central office as well as in all other BellSouth wire centers.

1	Q.	HOW DO UNMANNED CENTRAL OFFICES AFFECT BELLSOUTH'S ABILITY
2		TO HANDLE ANTICIPATED VOLUMES OF UNE-L ORDERS? (SEE MR. VAN
3		DE WATER'S TESTIMONY AT PAGE 40)?
4		
5	A.	Mr. Van de Water's statements beginning on page 40, line 12, that unmanned
6		Central Offices coupled with the use of Integrated Digital Loop Carrier ("IDLC")
7		will limit BellSouth's capacity to work hot cuts in Florida are incorrect. It is true
8		that Bellsouth does not have employees report to work daily at each and every
9		central office simply for the reason that there are some central offices in which
10		there would be no work required to be performed even if BellSouth were to
11		assign its employees daily to those central offices. Instead, for those offices with
12		a low volume of work, technicians are dispatched as needed to work the pending
13		load, daily if required. However, while not all offices are manned daily at the
14		beginning of the workday, all BellSouth central offices are manned if work is
15		required therein. BellSouth's force model includes hours for working hot cuts at
16		all BellSouth wirecenters. Thus, BellSouth already has taken into account any
17		so-called "unmanned" offices.
18		
19	Q.	MR. VAN DE WATER DISCUSSES THE IMPACT OF IDLC DISPATCHES ON
20		HIS LOAD PRODUCTIONS AT PAGES 40-41 OF HIS TESTIMONY. DID
21		BELLSOUTH FACTOR THOSE DISPATCHES INTO ITS LOAD PROJECTION?
22		
23	A.	Yes. BellSouth's worst-case force model accounts conservatively for dispatching
24		outside technicians to handle conversions involving IDLC. Unlike Mr. Van de
25		Water's analysis, the force model bases the number of field dispatches required

on the %IDLC in each wire center. The force model assumes that every hot cut involving IDLC will require a separate dispatch. In reality, however, a technician would be dispatched to work all of the conversions at a single interface (sometimes referred to as the "remote terminal") at one time. BellSouth's assumption is therefore conservative as it is unknown how many hot cuts will be required at each field interface each day. Based on regional estimates of 4,827 daily outside dispatches, well over 2.2 million dispatches could be required to complete the conversions and handle growth. BellSouth took those dispatches into account in its force model and is confident of its ability to perform those dispatches effectively and efficiently.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

15 A. Yes.

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		SURREBUTTAL TESTIMONY OF ALFRED A. HEARTLEY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 28, 2003
6		
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8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
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10		
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13		and Regional Centers for BellSouth.
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19		
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21		TODAY?
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23	A.	I will respond to portions of the rebuttal testimony of Mr. Mark David Van de
24		Water on behalf of AT&T regarding the batch hot cut process.
25		

Q. MR. VAN DE WATER, ON PAGE 22 OF HIS REBUTTAL TESTIMONY, STATES 1 2 THAT IT IS UNCLEAR IF AND HOW BELLSOUTH ACCOUNTED FOR 3 CERTAIN ITEMS IN ITS FORECAST. CAN YOU ADDRESS THOSE ITEMS? 4 5 Α. Yes. First, Mr. Van de Water claimed that BellSouth did not include travel time to 6 unmanned central offices. He is incorrect – the model did account for work to be 7 performed in so-called "unmanned" central offices. BellSouth does not have 8 employees report to work daily at each and every central office simply for the 9 reason that there are some central offices in which there would be no work to be 10 performed. Instead, for those offices with a low volume of work, technicians are 11 dispatched as needed to work the pending load, daily if required. These tend to 12 be small offices and therefore would not have large numbers of UNE-P lines to 13 convert. Technicians would report to work in those offices when the cutovers are 14 required and in most cases the technician would travel on his own time directly to 15 the office as a first assignment. BellSouth took these scenarios into account in 16 the model. 17 18 Second, Mr. Van de Water claimed BellSouth did not consider the number of 19 shifts worked per day per central office. While BellSouth did not explicitly 20 address this point, it was not necessary to do so because BellSouth 21 demonstrated it had the capability to handle a worst-case scenario load 22 projection. To directly respond to Mr. Van de Water's criticism, however, we 23 have run a different version of our force model to include the number of 24 technicians that can work safely and efficiently on the frame in each of the central

25

offices. These numbers are based on BellSouth's response to Interrogatory -45,

which Mr. Van de Water cites on page 24 of his rebuttal testimony. To fully rebut Mr. Van de Water, BellSouth also increased the cutover load in the model to the 5635 hot cuts per day load that Mr. Van de Water recommended in his direct testimony and again on page 20 of his rebuttal testimony. The results showed that BellSouth would have to work 2 shifts in 21 to 30 of the 198 central offices in Florida to handle the increased load. BellSouth would have to work 3 shifts in only 2 to 6 offices in Florida. The load did not exceed 3 shifts in any central office in Florida. We even considered the load if a central office technician cut 10 lines per day or 12 lines per day. This accounted for Mr. Van de Water's estimate of 12 cuts per day in his direct testimony and our estimate of 10 cuts per day in my rebuttal testimony. Notably, these force/load calculations account for both the pre-wiring and the actual cuts necessary to handle his anticipated load. Finally, BellSouth further considered the impact on the central office force and installation and maintenance force of the higher load. The increase in load to 5635 hot cuts per day increased the number of employees required in Florida from 759 to 952.

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I have included a revised force model, Exhibit AH-2, which shows the available technicians and number of shifts required for all central offices in Florida. We increased the churn in the model to 30.4% per month or 365% per year to reach the 5635 hot cuts required per day that Mr. Van de Water suggested.

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Third, Mr. Van de Water questioned whether BellSouth considered all lines after the first one in the batch as additional lines for purposes of staffing. We considered all hot cuts as if they were the first line to keep the model simple and

1		to demonstrate the worse case scenario. The actual hot cuts will go faster than
2		the model predicts.
3		
4		Fourth, Mr. Van de Water questioned whether the ratio of supervision to
5		employees was applied evenly across BellSouth territory or accounted for the
6		geographic dispersion of the central offices. The ratio of supervision to
7		employees was applied to the total technicians required. The supervision will be
8		dispersed along with the technicians. In large metro areas, we anticipate that
9		technicians will be grouped for this particular project and will gain expertise from
10		the daily hot cut repetition. However, in some dispersed areas, technicians may
11		be added to existing groups. We will staff the areas where the hot cuts are
12		required with the appropriate technicians and supervisors.
13		
14	Q.	ON PAGES 23-25 OF HIS TESTIMONY, MR. VAN DE WATER DISCUSSES A
15		RECENT BELLSOUTH RESPONSE TO AN AT&T INTERROGATORY
16		REGARDING AN EXHIBIT AND CITES APPARENT INCONSISTENCIES. CAN
17		YOU ADDRESS THOSE INCONSISTENCIES?
18		
19	A.	The table on page 24 of Mr. Van de Water's testimony shows a difference in the
20		maximum number of technicians that can work simultaneously on a frame.
21		Since the time BellSouth filed the information with the FCC contained in
22		Interrogatory-44, BellSouth has done an office-by-office analysis upon which it
23		relies, the results of which were set forth in Interrogatory-45.
24		
25	Q.	DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

2 A. Yes.

MS. MAYS: The next BellSouth witness will be Mr. Milner. He has direct, rebuttal and surrebuttal testimony. He does not have an errata. We would ask that it be admitted into the record as though read. We would ask that his exhibits be marked as Number -- be identified as Number 73. CHAIRMAN BAEZ: Without objection, show the direct, rebuttal and surrebuttal testimony of Witness Milner entered into the record as though read. And his accompanying exhibits shall be marked as Composite 73. (Exhibit 73 marked for identification.)

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I		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF W. KEITH MILNER
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		December 4, 2003
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	A.	My name is W. Keith Milner. My business address is 675 West Peachtree Street,
12		Atlanta, Georgia 30375. I am Assistant Vice President - Interconnection
13		Operations for BellSouth. I have served in my present role since February 1996.
14		
15	Q.	PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
16		
17	A.	My career in the telecommunications industry spans over 33 years and includes
18		responsibilities in the areas of network planning, engineering, training,
19		administration, and operations. I have held positions of responsibility with a local
20		exchange telephone company, a long distance company, and a research and
21		development company. I have extensive experience in all phases of
22		telecommunications network planning, deployment, and operations in both the
23		domestic and international arenas.
24		
25		I graduated from Fayetteville Technical Institute in Fayetteville, North Carolina, in

1		1970, with an Associate of Applied Science in Business Administration degree.
2		graduated from Georgia State University in 1992 with a Master of Business
3		Administration degree.
4		
5	Q.	HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC
6		SERVICE COMMISSION, AND IF SO, BRIEFLY DESCRIBE THE SUBJECT OF
7		YOUR TESTIMONY?
8		
9	A.	Yes, I have testified before the state Public Service Commissions in Alabama,
10		Florida, Georgia, Kentucky, Louisiana, Mississippi, and South Carolina, the
11		Tennessee Regulatory Authority, and the North Carolina Utilities Commission on
12		the technical capabilities of the switching and facilities network, introduction of
13		new service offerings, expanded calling areas, unbundling, and network
14		interconnection.
15		
16	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
17		
18	A.	I describe and support the engineering and network architecture assumptions
19		that form the foundation for BellSouth's Analysis of Competitive Entry ("BACE")
20		Model. I will also discuss how an efficient provider of local telecommunications
21		service entering the market as a facilities-based provider would likely develop
22		and grow its network in order to serve mass-market customers. My testimony is
23		offered in support of BellSouth's positions regarding Issues 5 (d) and 5 (e).
24		
25	Q.	GENERALLY, PLEASE DESCRIBE THE BASIS FOR BELLSOUTH'S

1		ENGINEERING AND NETWORK ASSUMPTIONS USED IN THE BACE
2		MODEL.
3		
4	A.	Typically, a Competitive Local Exchange Carrier ("CLEC") deploys a switch to
5		serve a large area (often an entire state), and provides local service to its
6		customers in that area by interconnecting with the incumbent local exchange
7		carrier's ("ILEC's") network at an ILEC tandem.
8		
9		There are three (3) basic network constructs from which an efficient provider
10		entering the telecommunications market would likely choose. Each of these
11		three options can be modeled in BellSouth's BACE Model. Exhibit WKM-1,
12		attached to my testimony, illustrates these three network options. Each of these
13		network options assumes that a CLEC places a switch to serve local customers
14		within a Local Access Transport Area ("LATA"), although, as I said earlier, it is
15		not unusual for a CLEC to use one switch to serve an entire state. Because the
16		BACE Model assumes that a CLEC places a switch in each LATA in which it
17		serves local customers, the results are significantly more conservative than if
18		BellSouth had assumed a CLEC would have only one switch per state.
19		
20	Q.	WHAT IS THE RELATIONSHIP BETWEEN CLEC SWITCHING INVESTMENTS
21		AND TRANSPORT/TRUNKING COSTS?
22		
23	A.	There is an economic tradeoff between the quantity of switches serving a given
24		geography versus the length and accompanying costs of loops or interoffice
25		transport. An efficient facilities-based CLEC entering the local

telecommunications market often finds that it is less expensive to use one switch to serve a large area, even though this network construct results in the CLEC needing to purchase, lease, construct or otherwise obtain transport facilities to carry traffic from its centralized switch to the various central office locations where the CLEC would be able to connect to loops serving its end user customers. Transport facilities are most often built using fiber optic cables and result in high-capacity transmission systems. Thus, the cost of back-hauling traffic is typically less than the cost of placing an additional switch.

Q. PLEASE DESCRIBE THE NETWORK CONSTRUCT SHOWN ON PAGE 1 OF EXHIBIT WKM-1 (Option 1).

Α.

Option 1 shown on page 1 of Exhibit WKM-1 reflects a configuration wherein a CLEC serves an entire LATA with one switch. The CLEC uses Enhanced Extended Links ("EELs"), which are combinations of local loops and interoffice transport, and are used by the CLEC to carry all traffic to the CLEC's sole collocation space in the LATA. At the central office where the CLEC has obtained collocation, the CLEC acquires EELs (for the end users served in central offices other than the central office housing the collocation arrangement) and unbundled loops (for the end users served from that central office). Once the loops are attached to the CLEC's switch, calls originated by the customers served by those loops are handled by the entirely by the CLEC's switch (for example, calls from one of the CLEC's customers to another of the CLEC's customers) or are handled by the CLEC's switch conveying the call using its interconnection facilities between the CLEC switch and BellSouth's tandem

switch (for example, calls from the CLEC's customers to other local service provider's customers).

Q. PLEASE DESCRIBE THE NETWORK CONSTRUCT SHOWN ON PAGE 2 OF EXHIBIT WKM-1 (Option 2).

Α. Option 2 shown on page 2 of Exhibit WKM-1 also reflects a configuration wherein a CLEC serves an entire LATA with one switch. In this configuration, however, it is assumed that the CLEC chooses to have collocation space in each BellSouth end office from which the CLEC needs access to its end user's local loop on an unbundled basis. By choosing this configuration, the CLEC also gives itself access to more loops composed entirely of copper facilities, thus enlarging its Digital Subscriber Line ("DSL") footprint without collocating Digital Subscriber Line Access Multiplexers ("DSLAMs") or other equipment at remote terminal sites. The BACE Model can also be run choosing this network configuration.

Q. PLEASE DESCRIBE THE NETWORK CONSTRUCT SHOWN ON PAGE 3 OF EXHIBIT WKM-1 (Option 3).

A. As with the two configurations I just described, Option 3 shown on page 3 of Exhibit WKM-1 reflects a configuration wherein a CLEC serves an entire LATA with one switch. In this third configuration, however, the assumption is that there will be some situations wherein a CLEC will choose to have collocation arrangements in certain BellSouth end offices, and there will also be some situations wherein the CLEC will choose to use EELs in lieu of collocation. The

BACE Model can be run choosing this option, and the model will calculate and choose the more economical configuration for each portion of the CLEC's network. This network configuration is used in the base case that BellSouth filed with Dr. Aron's testimony. As with Option 2, the more end offices in which a CLEC collocates, the greater the access to so-called "all copper" loops and thus the larger a DSL footprint the CLEC can enjoy without collocation of equipment at Remote Terminal sites. As I stated earlier, the BACE Model can be run choosing this network configuration.

Q. FOR THOSE SITUATIONS WHERE COLLOCATION IS ASSUMED IN THE BACE MODEL, PLEASE DESCRIBE THE COLLOCATION ARRANGEMENT USED.

Α.

Exhibit WKM-2 illustrates a collocation arrangement used in the BACE Model wherein the CLEC collocates within a BellSouth central office. The assumption for this Option is that the CLEC will acquire unbundled two-wire loops and unbundled DS-1 loops. The CLEC acquires unbundled loops and other unbundled network elements, which BellSouth delivers to the collocation arrangement. BellSouth connects the requested unbundled network element (an unbundled loop, for example) to the CLEC's Connecting Facility Assignment ("CFA"), which conveys the requested UNE to the collocation arrangement. The CFA is typically a CLEC-provided tie cable that extends from that CLEC's collocation arrangement to the collocation demarcation point (typically a connector block on a distributing frame). At the CLEC end of the CFA, the requested unbundled network element is often terminated to a Point of

Termination bay ("POT bay") within the collocation arrangement. If provided, the CLEC owns the POT bay and the other equipment within the collocation arrangement. The CLEC may choose to install within the collocation arrangement Digital Loop Carrier ("DLC") equipment for aggregating and concentrating the individual unbundled loops as well as DSLAM equipment for the CLEC's broadband services. This equipment is then attached to multiplexing ("mux") equipment for connection to DS-1 or higher transmission systems to the CLEC's switch located in its own central office.

Exhibit WKM-3 reflects a typical collocation arrangement within a BellSouth tandem central office. Different from Option 1 described earlier, if the CLEC collocates within the BellSouth tandem central office, it is assumed that the CLEC will aggregate its EELs and other transport requirements at that location. The CLEC then conveys those EELs and transport facilities to its own central office over DS-1 or higher level transmission facilities.

Q. PLEASE DESCRIBE THE CLEC'S SWITCHING ARRANGEMENT ASSUMED IN THE BACE MODEL.

Α.

Exhibit WKM-4 illustrates the CLEC switching arrangement that is used in the BACE Model. Earlier in my testimony, I have discussed how loop facilities, EELS and transport facilities are aggregated and concentrated and are then conveyed to the CLEC's central office and then to the CLEC's switch. This Exhibit shows the call routing (once the loop has been connected to the CLEC's switch and the end user begins making and receiving calls) assuming the CLEC sends traffic

originated by its end users via BellSouth's tandem switch for completion. 1 Likewise, this Exhibit shows how a CLEC receives traffic originated by the end 2 users of other Local Exchange Carriers bound for that CLEC's end users. In 3 other words, by interconnecting its switched network at BellSouth's access 4 tandem switch location, the CLEC can send and receive traffic between that 5 CLEC's end users and the end users of all other Local Exchange Carriers 6 including BellSouth plus other carriers such as IXCs and wireless service 7 providers. 8 9 Q. WHY DO CLEC'S ROUTE SOME OR ALL OF THEIR TRAFFIC VIA TANDEM 10 SWITCHES? 11 12 13 Α. CLECs route traffic through tandem switches for most of the same reasons as does BellSouth. Tandem switching systems are used to interconnect end office 14 switches when direct trunk groups are not economically justified, or when the 15 network configuration indicates alternate routing is economically justified. 16 Tandem switches typically provide these functions: 17 Interconnect end offices 18 19 Connect to other tandems Provide access to Interexchange Carriers 20 Provide access to operator positions. 21 22 In other words, tandem switching systems perform trunk-to-trunk switching and 23 generally provide two basic network functions — traffic concentration and 24 centralization of services. As traffic concentrators, tandems allow the traffic of 25

groups of end offices to be economically gathered for delivery between the end 1 offices or to distant points. Also, with tandem switches, call recording, LATA-2 wide access, and operator services functions can be centralized for groups of 3 end offices. 4 5 PLEASE DESCRIBE THE CLEC'S FACILITIES LOCATED AT ITS OWN Q. 6 SWITCHING CENTER. 7 8 9 Α. Exhibit WKM-5 shows the types of equipment within the CLEC's own central office. Aggregated, concentrated loops (including EELs) are conveyed to 10 interface equipment (DSX-1 or DSX-3 panels) then on to the DLC Central Office 11 Terminal in the case of incoming loops or EELS and then to the switch. 12 Equipment for data services such as Asynchronous Transfer Mode ("ATM") 13 packet switches is also housed here. Inbound and outbound calls are received 14 15 and sent over transport systems at DS-1 or higher transmission levels to and from BellSouth's tandem switch. Finally, the CLEC either provides for itself or 16 acquires from other providers ancillary functions such as operator services and 17 access to call-related databases. 18 19 Q. DO YOU HAVE OTHER INFORMATION THAT SUPPORTS YOUR OPINION 20 REGARDING THE MANNER IN WHICH CLEC'S DESIGN AND IMPLEMENT 21 THEIR NETWORKS? 22 23 Α. Yes. I have read the sworn testimony of CLECs' witnesses opining on CLEC 24

network architectural considerations. The CLECs have made it clear that their

networks are not configured like BellSouth's, and they are relying on fewer switches and more transport to serve their customers. For example, in Docket No. 000731-TP, AT&T witness, David Talbott testified that:

"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 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 combination of UNEs purchased from BellSouth)." [*emphasis added*] [Docket Number 000731-TP, November 16, 2000 Direct Testimony of David Talbott, pp. 31-32.]

WorldCom has likewise filed testimony with this Commission regarding its switch coverage in the South Florida and Orlando areas. Regarding the South Florida area, WorldCom witness Don Price stated that:

located in the Miami rate center and one of which is located in the Fort Lauderdale rate center. These switches, combined with the transport network described below, provide local service in eleven rate centers in

"The WorldCom network consists of four switches, three of which are

the South Florida area."

1		with respect to worldCom's local network in the Orlando area, Mr. Price testified
2		that:
3		"the WorldCom network consists of one switch which is configured and
4		equipped to provide local service in fourteen rate centers." [Docket No.
5		000649-TP, August 17, 2000, Prefiled Direct Testimony of Don Price, pp.
6		46-47]
7		
8	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
9		
10	A.	Yes.
11		

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF W. KEITH MILNER
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 7, 2004
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND
8		YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	A.	My name is W. Keith Milner. My business address is 675 West Peachtree
12		Street, Atlanta, Georgia 30375. I am Assistant Vice President -
13		Interconnection Operations for BellSouth.
14		
15	Q.	ARE YOU THE SAME W. KEITH MILNER THAT FILED DIRECT
16		TESTIMONY IN THIS PROCEEDING?
17		
18	A.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY FILED
21		TODAY?
22		
23	A.	My testimony provides rebuttal to the direct testimony of Mr. Jay M.
24		Bradbury and Mr. Steven E. Turner on behalf of AT&T Communications of
25		the Southern States, LLC.

1	<u>Rebu</u>	ittal to Mr. Bradbury
2	Q.	ON PAGE 10 OF HIS TESTIMONY, MR. BRADBURY CONTENDS "THE
3		LEGACY ILEC NETWORK ARCHITECTURE PROVIDES AN
4		INEFFICIENT AND UNECONOMIC MEANS FOR A CLEC THAT TRIES
5		TO CONNECT THOSE SAME LOOPS TO ITS SWITCH THAT IS
6		ALWAYS REMOTELY LOCATED FROM THE ILEC CENTRAL OFFICE
7		WHERE THESE LOOPS TERMINATE." [Emphasis added] CAN YOU
8		ADDRESS THIS CONTENTION?
9		
10	A.	Yes. Despite Mr. Bradbury's characterization to the contrary, there is no
11		requirement that Competitive Local Exchange Carriers ("CLECs") install
12		their local switch at some location other than the Incumbent Local
13		Exchange Carrier's ("ILEC's") central office building. For example, one (1)
14		CLEC in Florida has chosen to install its switches in that CLEC's
15		collocation arrangements within BellSouth's central offices thereby
16		reducing its "backhaul" costs.
17		
18	Q.	ON PAGE 10 OF HIS TESTIMONY, MR. BRADBURY QUOTES THE
19		FEDERAL COMMUNICATIONS COMMISSION ("FCC") AS SAYING
20		"THE NEED TO BACKHAUL THE CIRCUIT DERIVES FROM THE USE
21		OF A SWITCH LOCATED IN A LOCATION RELATIVELY FAR FROM
22		THE END USER'S PREMISES, WHICH EFFECTIVELY REQUIRES
23		COMPETITORS TO DEPLOY MUCH LONGER LOOPS THAN THE
24		INCUMBENT." PLEASE RESPOND.

1 Α. Mr. Bradbury correctly quotes the FCC. However, I disagree with the 2 assertion that a CLEC's switch will be "relatively far" from the end user's premises. The CLEC could, for example, house its switch in a building 3 4 directly across the street from the ILEC's central office. In such a case, 5 the loop would not be "much longer." More importantly, however, I would 6 remind the Commission that during recent proceedings regarding the 7 CLECs' eligibility for reciprocal compensation for tandem switching, 8 CLECs argued that their switches covered very large stretches of 9 geography and that CLECs had chosen an architecture with fewer 10 switches and longer loops compared to incumbents' networks 11 characterized by more switches (including tandem switches) and relatively 12 shorter loops and that their chosen architecture yielded significant 13 benefits. In my direct testimony in this proceeding, I cited the testimony of 14 Mr. David Talbott on behalf of AT&T and Mr. Don Price on behalf of 15 Worldcom in which they explained the long "reach" of their respective 16 switches. I find it somewhat ironic that the network characteristic that 17 these CLECs touted in those earlier proceedings as an advantage over 18 incumbents' respective architectures, those same CLECs now bemoan. 19 20 Q. ON PAGE 11 OF HIS TESTIMONY, MR. BRADBURY STATES "THE 21 CLEC BACKHAUL COSTS INCLUDE THE NON-RECURRING COSTS 22 NECESSARY TO ESTABLISH A COLLOCATION ARRANGEMENT IN 23 EVERY ILEC WIRE CENTER IN WHICH THE CLEC WISHES TO OFFER 24 MASS MARKET SERVICES..." CAN YOU ADDRESS THIS?

3

Α. 1 Yes. Apparently, AT&T has chosen to assume that collocation in each 2 wire center is required, although in AT&T's response to BellSouth's Fourth 3 Set of Interrogatories, No. 154, Mr. Bradbury concedes that options for collocation that I described in my direct testimony are accurate. Moreover, 4 as I noted in my direct testimony in this proceeding, BellSouth's Analysis 5 of Competitive Entry ("BACE") model accommodates the assumption that 6 7 the CLEC may collocate in every ILEC central office in order to serve 8 mass market customers. BellSouth's BACE model also allows the CLEC 9 to collocate in some, but not all, ILEC central offices and use the so-called 10 Enhanced Extended Link ("EEL") to serve those mass market customers 11 whose loops terminate in ILEC central offices in which the CLEC is <u>not</u> 12 collocated. 13 ON PAGE 11 OF HIS TESTIMONY, MR. BRADBURY STATES "THIRD, 14 Q. 15 THE CLEC MUST PAY EXORBITANT CHARGES TO THE ILEC FOR TRANSFERRING LOOPS FROM THE ILEC SWITCH TO A CLEC 16 COLLOCATION FACILITY, OR FROM ONE CLEC TO ANOTHER." TO 17 18 WHAT CHARGES DOES MR. BRADBURY REFER? 19 20 Apparently, Mr. Bradbury refers to the rates set by this Commission for the Α.、 ordering and provisioning of unbundled loops. I disagree with Mr. 21 Bradbury that the charges are "exorbitant" and he does not explain the 22 23 basis for his claim. Indeed, this Commission took extensive testimony in 24 Docket No. 990649-TP before reaching its decision as to what rates are appropriate for the "hot cut" required to disconnect a loop from BellSouth's 25

1		switch and then re-connect that same loop to the CLEC's facilities.
2		
3	Q.	ON PAGE 11 OF HIS TESTIMONY, MR. BRADBURY TAKES ISSUE
4		WITH THE TRANSFER PROCESS, CONTENDING THAT THE
5		PROCESS IS INFERIOR IN COMPARISION TO UNE-P CHANGES OR
6		THE PRIMARY INTEREXCHANGE CARRIER ("PIC") CHANGE
7		PROCESS. ARE THESE COMPARISONS VALID?
8		
9	A.	No. The two (2) processes which Mr. Bradbury prefers (that is, use of
10		UNE-P or the use of PIC change capabilities) are billing changes that are
11		effectuated without the need to make physical changes to the ILEC's
12		network. The hot cut process, on the other hand, requires physical work
13		within the ILEC's network to remove the loop from the ILEC's switch and
14		then to re-connect that loop to the CLEC's facilities including the CLEC's
15		switch. There are profound dissimilarities between the processes Mr.
16		Bradbury apparently wishes could be used for "hot cuts" and the
17		processes that are actually used. Most importantly, he offers no
18		replacement for or improvements to the "hot cut" process that AT&T and
19		BellSouth jointly developed and which is in use daily across BellSouth's
20		nine-state region.
21		
22	Q.	ON PAGE 18 OF HIS TESTIMONY, MR. BRADBURY QUOTES THE
23		FCC AS SAYING "NO PARTY SERIOUSLY ASSERTS THAT
24		COMPETITIVE LECs ARE SELF-DEPLOYING COPPER LOOPS TO
25		PROVIDE TELECOMMUNICATIONS SERVICES TO THE MASS

1		MARKET." PLEASE RESPOND.
2		
3	A.	While Mr. Bradbury accurately quotes the FCC, I would point out that in
4		the referenced passage, the FCC merely pointed out that CLECs were not
5		deploying copper cables over which services are or will be provided.
6		Nonetheless, CLECs are deploying analogous network facilities over
7		which loops are transported, namely fiber optic-based transmission
8		systems.
9		
10	Q.	ON PAGE 23 OF HIS TESTIMONY, MR. BRADBURY STATES "THE
11		FCC's RULES DO NOT PERMIT A CLEC TO PLACE A CIRCUIT
12		SWITCH IN A COLLOCATION." ARE THERE ANY CLEC SWITCHES
13		COLLOCATED WITHIN BELLSOUTH'S CENTRAL OFFICES IN
14		FLORIDA?
15		
16	A.	Yes. Please see BellSouth's response to the Florida Staff's Second Set of
17		Interrogatories, Item No. 17, in this Docket.
18		
19	Q.	ON PAGE 25 OF HIS TESTIMONY, MR. BRADBURY ASSERTS THAT
20		CLECs MUST "INSTALL AND MAINTAIN THE EQUIPMENT
21		NECESSARY TO DIGITIZE AND, USING CONCENTRATION AND
22		MULTIPLEXING TECHNIQUES, AGGREGATE THE TRAFFIC ON
23		THOSE LOOPS TO PERMIT CONNECTIONS TO THE CLEC's SWITCH
24		AT ACCEPTABLE QUALITY LEVELS" CAN YOU ADDRESS THIS?
25		

1 Α. Yes. CLECs need not perform this function for themselves, as Mr. 2 Bradbury apparently believes. To the contrary, BellSouth's Unbundled 3 Loop Concentration ("ULC") offer aggregates and digitizes the loops in a 4 given BellSouth central office for delivery to the CLEC's collocation 5 arrangement. Please see BellSouth's Interconnection website 6 (http://www.interconnection.bellsouth.com/) for details of BellSouth's offer. 7 8 Q. ON PAGE 29 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES A 9 CLEC's USE OF DIGITAL LOOP CARRIER ('DLC") EQUIPMENT WITHIN 10 THE CLEC'S COLLOCATION ARRANGEMENT AND STATES "WHILE 11 THIS DLC EQUIPMENT IS ABSOLUTELY MANDATORY FOR THE 12 CLEC, IT IS NOT REQUIRED FOR THE ILEC WHEN SERVING THE 13 SAME CUSTOMERS." PLEASE RESPOND. 14 15 Α. While I agree that CLECs will use DLC equipment (either self-provided or 16 via BellSouth's ULC offer I discussed earlier), DLC equipment is useful not 17 for differences in transmission quality alluded to by Mr. Bradbury, but 18 rather by the economics achieved by concentrating individual loops for 19 conveyance to the CLEC's switch which, under Mr. Bradbury's 20 assumption, is housed somewhere other than within BellSouth's central 21 office. In other words, DLC equipment is efficiently used to aggregate 22 individual loops and thus economize on facilities investments. Mr. 23 Bradbury's suggestion that DLC equipment is useful only for achieving a 24 certain level of transmission performance and that only CLECs make use 25 of DLC equipment is simply a red herring. ILECs such as BellSouth use

1 DLC equipment routinely.

2

Q. ON PAGE 32 OF HIS TESTIMONY, MR. BRADBURY STATES "DLC
 EQUIPMENT IS NOT DESIGNED TO, AND THEREFORE CANNOT,
 SCALE PRECISELY WITH THE LEVEL OF DEMAND OR NUMBER OF
 LINES) SERVED IN A WIRE CENTER." CAN YOU ELABORATE ON
 THIS POINT?

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Α.

Yes. Mr. Bradbury is correct to a certain point. What he fails to point out, however, is that few, if any, electronic devices used in a modern telecommunications network are smoothly scalable. Instead, to improve the cost efficiency of their products, manufacturers offer devices with stated levels of capacity. Once the devices are installed, the service provider (whether the CLEC or the ILEC) need not augment network capacity simply to provide service to one more customer. Indeed, most products (from a loaf of bread to airplane seats) are offered in capacity units, which the producer believes to be proper increments. Contrary to Mr. Bradbury's assertion that DLC investment is very "lumpy", I would point out that Mr. Bradbury has chosen to support his example with DLC equipment in the very largest increment commercially available (that is, the Alcatel LiteSpan 2000). There are numerous providers of DLC equipment with "start up" levels far smaller than that of the LiteSpan 2000. In fact, the AT&T model allows a choice from three (3) sizes of DLC, the LiteSpan being the largest, but CLECs may also place smaller DLC to scale to offices with smaller demand. See Turner Revised Exhibit SET-2,

1		Section II.B.1.a, page 12 (continuing on page 13).
2		
3	Q.	ON PAGE 33 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES
4		DIGITAL CROSS CONNECTION ("DSX") EQUIPMENT AND
5		ATTRIBUTES IT WITH THE SAME LUMPINESS AS FOR DLC
6		EQUIPMENT. WHAT IS YOUR REACTION?
7		
8	A.	Here again, while I will agree that DSX equipment is available in various
9		capacity increments, Mr. Bradbury supports his example with that piece of
10		equipment (that is, the DSX-3) that provides the greatest amount of
11		capacity rather than choosing some smaller device such as the DSX-1.
12		
13	Q.	BEGINNING AT THE BOTTOM OF PAGE 36 OF HIS TESTIMONY, MR.
14		BRADBURY DESCRIBES THE WORK STEPS IN THE TRANSFER OF A
15		WORKING LOOP FROM THE ILEC'S SWITCH TO THE CLEC'S
16		SWITCH. CAN YOU SPEAK TO THIS?
17		
18	A.	Yes. While Mr. Bradbury has correctly noted the work steps involved, I
19		find it ironic that earlier in his testimony (see page 11 of Mr. Bradbury's
20		testimony) he decries this process as insufficient compared to processes
21		that do not involve these physical work steps (the UNE-P transfer or a PIC
22		change). Further, a "hot cut" process with accompanying physical work
23		steps is likewise required were BellSouth to "win back" a customer that
24		had earlier chosen service from a CLEC. Thus, any acquisition costs
25		related to "hot cuts" should be attributed to both the ILEC's and CLECs'

1		respective costs of doing business.
2		
3	Q.	ON PAGE 41 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES
4		LOOPS SERVED BY INTEGRATED DIGITAL LOOP CARRIER ("IDLC")
5		EQUIPMENT AND STATES "FOR EXAMPLE, IF THE ILEC's DATABASE
6		DOES NOT REVEAL THE PRESENCE OF IDLC BEFORE A
7		CONVERSION DATE IS COMMITTED TO THE CUSTOMER, THE CLEC
8		MUST NEGOTIATE A NEW DATE WITH THAT CUSTOMER, WHICH OF
9		COURSE MAKES A NEGATIVE IMPRESSION." PLEASE RESPOND.
10		
11	A.	BellSouth's database (that is, Loop Facilities Administration and Control
12		System or "LFACS") includes indicators as to whether a given loop is
13		provided via IDLC equipment. Through the loop makeup process, the
14		CLEC can readily determine the presence of IDLC in a given instance and
15		negotiate due dates with the CLEC's customer accordingly. See the
16		testimony of BellSouth witness Ronald Pate for a fuller discussion of this
17		topic.
18		
19	Q.	ON PAGE 43 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES IDLC
20	`	ARRANGEMENTS AND DIGITAL SUBSCRIBER LINE ("DSL") SERVICE.
21		HE STATES "ADDITIONALLY, EXCEPT WHEN THE IDLC SERVED
22		CUSTOMER CAN BE PLACED ON A COPPER LOOP LESS THAN
23		18,000 FEET IN LENGTH, CLECs ARE DENIED THE CAPABILITY OF
24		PROVIDING DSL SERVICES TO THEIR CUSTOMERS." IS THAT A
25		CORRECT STATEMENT?

1 Α. No. As Mr. Bradbury himself points out, even BellSouth must make 2 alternative arrangements to provide DSL service to those of its customers served by DLC. In such a case, BellSouth must place its Digital 3 4 Subscriber Line Access Multiplexer ("DSLAM") in the remote terminal 5 rather than in the central office. A CLEC that sought to provide DSL service to its customers could likewise collocate its DSLAM at the remote 6 7 terminal. 8 9 Q. ON PAGE 42 OF HIS TESTIMONY, MR. BRADBURY STATES 10 "...BECAUSE THE CLEC DOES NOT HAVE THE ECONOMIES OF SCALE TO DIRECT CONNECT ITS SWITCH WITH EFFICIENT 11 INTEROFFICE TRUNK GROUPS TO EACH OF THE ILEC'S LOCAL 12 13 SWITCHES, THE CLEC WILL BE MORE RELIANT ON THE ILEC'S TANDEM NETWORK FOR THE EXCHANGE OF TRAFFIC." WHAT IS 14 15 YOUR RESPONSE? 16 17 Α. Whether or not is economical to have direct trunks between a particular pair of local switches in a local calling area is a function of the amount of 18 19 traffic to be handled and the distance between those two switches. 20 Although Mr. Bradbury's testimony would lead one to believe that CLECs 21 must interconnect at a tandem for all of their local traffic, this simply is not 22 true. BellSouth allows (and some CLECs have elected) interconnection directly between the BellSouth end office switch and the CLEC's switch 23 24 rather than at the tandem. Those same factors affect BellSouth's decision 25 whether to have direct trunking between certain of its end office switches,

and it is not uncommon for the traffic between two BellSouth end offices in 1 a given local calling area to be handled solely via tandem switching 2 connecting the two end offices. Thus, BellSouth faces exactly the same 3 challenges regarding cost efficiency and customer services, as does the 4 5 CLEC in such cases. 6 7 Rebuttal to Mr. Turner 8 Q. ON PAGE 5 OF HIS TESTIMONY, MR. TURNER STATES "...IN THE 9 ABSENCE OF UNBUNDLED LOCAL SWITCHING, CLECs FACE PRACTICALLY INSURMOUNTABLE COST DISADVANTAGES 10 11 RELATIVE TO THE INCUMBENT LOCAL EXCHANGE CARRIERS ("ILECs") IF UNBUNDLED NETWORK ELEMENT LOOPS ("UNE-L's 12 USED IN CONJUNCTION WITH THEIR OWN (OR A THIRD PARTY 13 PROVIDER'S) SWITCHING IS THE SOLE OPTION FOR PROVIDING 14 LOCAL SERVICES TO MASS MARKET CUSTOMERS." DO YOU 15 AGREE WITH MR. TURNER'S CONCLUSION IN THIS REGARD? 16 17 18 Α. No. It is impossible to draw the conclusions that Mr. Turner reaches 19 based on the testimony he has provided because that testimony is based on a number of assumptions that are simply wrong. 20 21 IN WHAT WAYS IS MR. TURNER'S ANALYSIS FLAWED? 22 Q. 23 24 Α. Mr. Turner's analysis hinges on identifying costs that a CLEC would incur 25 in acquiring and servicing a customer that an ILEC would not incur. This

"analysis" is the basis of his determination that an "absolute cost disadvantage" exists. As the following paragraphs will make clear, many of the costs Mr. Turner attributes to CLEC operations but not to ILEC operations, are in fact incurred by ILECs. In addition, he clearly overstates, or fails to consider the possibility of less costly alternatives in his analysis, which lead to conclusions that are not necessarily correct. Briefly, Mr. Turner's analysis is wrong for the following reasons:

- Mr. Turner attributes "hot cut" costs to each and every customer that might choose service from a CLEC. While Mr. Turner is correct that the CLEC will incur costs associated with the hot cut to disconnect the loop serving the customer from BellSouth's switch and then re-connect the loop to the CLEC's switch, he ignores the fact that in cases where a customer chooses to return to the ILEC, those same work steps (disconnection of the serving loop from the CLEC's switch and re-connecting the loop to the ILEC's switch) will likewise be incurred by the ILEC.
- Mr. Turner attributes costs to perform Local Number Porting ("LNP") activities to the CLEC but does not likewise attribute those same costs to ILECs in cases where the customer chooses to return to the ILEC. In other words, the work steps required to "port" the telephone number from BellSouth's network to the CLEC's network are required to "port" the telephone number from the CLEC's network to BellSouth's network.
- Mr. Turner's analysis assumes that an efficient CLEC will

collocate in every ILEC end office in which the CLEC has or will have mass market customers. For reasons Mr. Turner does not explain in his testimony, he assumes that CLECs will not make use of so-called Enhanced Extended Links ("EELS"), which reduce the quantity of collocation arrangements in a given Local Access Transport Area ("LATA") to as few as one. In addition, Mr. Turner evidently completely ignores the fact that there are variations in the types of collocation available, relying instead on only the most expensive type of collocation.

Mr. Turner's Facility Ring Processor ("FRP") tool used in his analysis does not reduce the total facility costs by the amount of the capacity required to handle that portion of the capacity used that is not for "backhauling" loops and is not used "enterprise" customer traffic. This is the capacity that is used to carry interconnection traffic (that is, voice calls between the CLEC's customers and the customers of other local service providers including but not limited to other CLECs and ILECs). Here again, both ILECs and CLECs incur costs of transporting calls between and among the networks of various local service provides. However, Mr. Turner incorrectly leaves those costs in as part of his "absolute disadvantage" calculation.

Q. WHAT WOULD BE THE IMPACT OF CORRECTING THE ERRORS

THAT YOU HAVE POINTED OUT IN THE ASSUMPTIONS MR. TURNER

HAS MADE AND THE ANALYSIS HE HAS PRESENTED?

The obvious conclusion is that he has overstated the supposed "absolute 1 A. cost disadvantage" that he claims to identify. What the actual cost 2 disadvantage would be, assuming that there was one, cannot be 3 4 determined. Of course, as other witnesses have pointed out, even if such 5 a cost advantage exists, the CLECs have ample other advantages, not the 6 least of which is the ability to pick and chose the customers they serve, that would offset such a cost disadvantage. 7 8 9 Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY? 10 11 Α. Yes.

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		SURREBUTTAL TESTIMONY OF W. KEITH MILNER
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5	i	JANUARY 28, 2004
6	1	
7	. Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND
8		YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	A.	My name is W. Keith Milner. My business address is 675 West Peachtree
12		Street, Atlanta, Georgia 30375. I am Assistant Vice President -
13		Interconnection Operations for BellSouth.
14		
15	Q.	ARE YOU THE SAME W. KEITH MILNER THAT FILED DIRECT AND
16		REBUTTAL TESTIMONY IN THIS PROCEEDING?
17		
18	A.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY
21		FILED TODAY?
22		
23	A.	The first part of my surrebuttal testimony responds to criticisms regarding
24		the inputs to BellSouth's BACE model that I provided. In that part of my
25		testimony, I discuss several areas in which the default inputs to the BACE

1		model cause the model to yield financially conservative results. The
2		second part of my testimony provides surrebuttal to the rebuttal
3		testimonies of Mr. David A. Nilson on behalf of Supra Telecommunications
4		and Information Systems, Inc. ("Supra") and Mr. Mark David Van de Water
5	1	on behalf of AT&T Communications of the Southern States, LLC ("AT&T").
6	1	
7	BAC	E Model Assumptions
8	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S BACE MODEL USES
9		CONSERVATIVE INPUTS AND THUS YIELDS CONSERVATIVE
10		OUTPUTS.
11		
12	A.	In my opinion, BellSouth's BACE model yields conservative results
13		based on inputs made for the following elements:
14		1. The quantity of switches a CLEC will operate in a Local Access and
15		Transport Area ("LATA")
16		2. The quantity of trunk groups between a CLEC's switch and the
17		E911 tandems in a LATA
18		3. The use of Special Access transport instead of CLEC-provided
19		transport between the CLEC's central office and the BellSouth
20		access tandem
21		4. The use of Special Access transport instead of CLEC-provided
22		transport between the CLEC's switch and the CLEC's choice of
23		Directory Assistance and Operator Services platforms
24		5. The deployment of a voicemail platform per LATA
25		6. The portion of unbundled loops provisioned as Service Level 2

1		("SL2") loops rather than lower priced Service Level 1 ("SL1") loops
2		7. The use of current "full price" Non-Recurring Charge ("NRC") levels
3		rather than discounted levels for all cutover of unbundled loops
4		
5	1	I discuss each of these issues in greater detail below.
6	1	
7	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING
8		THE QUANTITY OF SWITCHES A CLEC WILL OPERATE IN A LOCAL
9		ACCESS AND TRANSPORT AREA ("LATA") WILL YIELD A
10		CONSERVATIVE RESULT.
11		
12	A.	The default BACE inputs assume a CLEC will deploy at least one switch
13		per LATA. As was discussed in my direct and rebuttal testimony in this
14		proceeding, CLECs can deploy a single switch and provide service to end
15		users over a very large geographic area, perhaps even over an entire
16		state or more. Thus, the default assumption that a CLEC will place at least
17		one switch per LATA results in a higher quantity of switches deployed
18		
19	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING
20		THE QUANTITY OF TRUNK GROUPS BETWEEN A CLEC'S SWITCH
21		AND THE E911 TANDEMS IN A LATA WILL YIELD A CONSERVATIVE
22		RESULT.
23		
24	A.	In developing the default input for the quantity of E911 trunks a CLEC
25		would deploy, I found that the maximum quantity of E911 tandems in a

single LATA in BellSouth's region is six (6). Thus, the BACE default assumption is that a CLEC will equip its switch for six (6) DS-1 transport facilities (one each to the E911 tandem switches) which, if fully equipped, would provide for 144 simultaneous calls to E911 operators from the CLEC's switch. Since most end office switches have only one or two trunk groups to E911 tandem switches, this assumption results in a higher quantity of E911 trunk groups being equipped.

5 .

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING
THE USE OF SPECIAL ACCESS INSTEAD OF CLEC-PROVIDED
FACILITIES BETWEEN THE CLEC'S CENTRAL OFFICE AND THE
BELLSOUTH ACCESS TANDEM WILL YIELD A CONSERVATIVE
RESULT.

Α.

The default assumption in the BACE model is that a CLEC will use Special Access facilities rather than CLEC-provided facilities to connect the CLEC's switch to BellSouth's access tandem. In cases where the CLEC self-provides these facilities and where the resulting costs are less, BACE derives a higher cost that would actually be incurred. Further, BACE determines the quantity of DS-1 or DS-3 equivalents required based on traffic loads. Since BACE does not assume the use of higher transport facilities than DS-3, BACE will, depending on traffic demand, deploy multiple DS-3 circuits rather than OCn circuits which in some situations would be more efficient and thus less costly.

1	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING
2		THE USE OF SPECIAL ACCESS TRANSPORT INSTEAD OF CLEC-
3		PROVIDED TRANSPORT BETWEEN THE CLEC'S SWITCH AND THE
4		CLEC's CHOICE OF DIRECTORY ASSISTANCE AND OPERATOR
5	1	SERVICES PLATFORMS WILL YIELD A CONSERVATIVE RESULT.
6	! i	
7	Α.	The default assumption is that a CLEC will elect the use of Special Access
8		facilities rather than self-provided facilities between the CLEC's switch and
9		the CLEC's choice of director assistance platform. Likewise, BACE
10		assumes the use of Special Access rather than CLEC-provided facilities to
11		transport traffic between the CLEC's switch and the CLEC's choice of
12		operator services platform. In any case where the CLEC self-provides this
13		transport and the resulting cost is less than Special Access charges,
14		BACE will have assumed a higher cost to the CLEC than would actually
15		be incurred.
16		
17	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING
18		THE DEPLOYMENT OF A VOICEMAIL PLATFORM PER LATA WILL
19		YIELD A CONSERVATIVE RESULT.
20		
21	A.	As with switches, voicemail platforms can be equipped to handle demand
22		over a very large geographic area, often over an entire state or even
23		larger. Thus, the default assumption within the BACE model yields a
24		conservative result because the quantity of voicemail platforms assumed
25		to be deployed would be larger than a CLEC would actually probably

1		deploy.
2		•
3	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING
4		THE PORTION OF UNBUNDLED LOOPS PROVISIONED AS SERVICE
5	1	LEVEL 2 ("SL2") LOOPS RATHER THAN LOWER PRICED SERVICE
6	i	LEVEL 1 ("SL1") LOOPS WILL YIELD A CONSERVATIVE RESULT.
7	;	
8	A.	The model assumes a high proportion (45% of non-DSL customers) of
9		mass market unbundled loops will be purchased as SL-2 loops. This level
10		was chosen assuming that CLECs would continue to order the higher-
11		priced SL2 loops as they have in the recent past. SL2 loops are designed
12		loops that are provisioned with test points that allow automated testing.
13		The CLEC also receives a Detailed Layout Record ("DLR") depicting the
14		loop makeup. Providing the test points and DLRs adds cost over those
15		incurred in the provisioning of SL1 loops that are not equipped with test
16		points and do not come with a DLR. In my opinion, CLECs will not choose
17		SL2 loops for residential end users. For small business customers, the
18		CLECs may sometimes choose SL2 loops over SL1 loops. Since the
19		existing UNE-P base is predominantly residential customers, the default
20		assumption in the BACE model that 45% of all unbundled loops will be
21		provided as SL2 loops is probably overstated and thus results in the
22		model deriving higher CLEC costs.
23		
24	Q.	PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION THAT ALL
25		CUTOVER OF UNBUNDLED LOOPS WILL BE PRICED AT THE

1		CURRENT NON-RECORRING CHARGE (NRC) LEVELS RATHER
2		THAN DISCOUNTED LEVELS WILL YIELD A CONSERVATIVE
3		RESULT.
4		
5	. A.	The BACE model assumes that all NRCs for unbundled loop provisioning
6	i i	are the current NRCs. BellSouth has announced discounts off the NRC
7	;	for CLECs using the Batch Hot Cut method of 10%. For CLECs using the
8		Mass Migration method described in the surrebuttal testimony of BellSouth
9		witness Milton McElroy, the discounts are even steeper. Thus, the BACE
10		model calculates NRCs higher than will be experienced by CLECs using
11		the Batch Hot Cut method or the Mass Migration method.
12		
13	Rebu	ttal to Mr. Nilson
14	Q.	ON PAGE 5 OF HIS TESTIMONY, MR. NILSON DESCRIBES SUPRA'S
15		NETWORK ARCHITECTURE AS BEING COMPOSED OF A HOST
16		SWITCH, A REMOTE SWITCH AND SIXTEEN OUTLYING LOCATIONS
17		WHERE SUPRA HAS INSTALLED DIGITAL LOOP CARRIER ("DLC")
18		EQUIPMENT IN ORDER TO SERVE ITS CUSTOMERS. WHAT IS
19		YOUR UNDERSTANDING OF SUPRA'S NETWORK ARCHITECTURE?
20		
21	A.	My understanding of Supra's network architecture generally agrees with
22		Mr. Nilson's description. Instead of a total of 18 collocation arrangements
23		in place (that is, the two (2) switch locations plus the 16 DLC equipment
24		locations), BellSouth's records indicate that BellSouth has provided a total
25		of ****** collocation arrangements in Florida which are geographically

1		dispersed. ***
1		
2		
3		*** The two (2) switches to which Mr. Nilson refers and
4		that Supra operates are collocated in two (2) different BellSouth central
5		offices in Florida. The host switch is collocated in BellSouth's North Dade
6	}	Golden Glades central office and the remote switch is collocated in
7	1	BellSouth's Miami Red Road central office. The 16 locations wherein Mr.
8		Nilson states Supra has collocated DLC equipment for aggregating
9		unbundled loops for delivery to either the Golden Glades or Red Road
10		switch are likewise collocated within BellSouth central offices. Thus,
11		Supra has at present access to the loops in at least 18 (by Supra's count)
12		and as many as ****** (by BellSouth's count) of BellSouth's central
13		offices, all of which are in Florida.
14		
15	Q.	WHAT IS THE GEOGRAPHIC DISPERSION OF SUPRA'S
16		COLLOCATION ARRANGEMENTS?
17		
18	Α.	While most of the collocation arrangements are ***
19		,*** Supra also has collocation in ***
20		*** Thus, even with its existing
21		collocation arrangements, Supra has a large geographic "footprint" that
22		reaches many consumers in the state.
23		
24	Q.	HOW COULD SUPRA EXTEND THE REACH OF ITS NETWORK EVEN
25		FURTHER?
		1 41 21 1 1994 21

Α. 1 Supra (as well as all other facilities based Competitive Local Exchange 2 Carriers ("CLECs") have different options as I described in my direct 3 testimony in this proceeding. Supra has chosen one of the options I 4 described, namely establishing collocation arrangements in each central 5 office in which it acquires customers. Supra then uses its DLC equipment 6 to aggregate the loops in a given central office for transport to one of its 7 switches. Supra (and other CLECs) could also make use of so-called 8 Enhanced Extended Links ("EELs") wherein Supra would establish 9 collocation in a single central office and BellSouth would deliver the loops 10 from outlying central offices to that single office. 11 ON PAGE 5 OF HIS TESTIMONY, MR. NILSON STATES THAT SUPRA 12 Q. 13 IS ACTUALLY SERVING 6,000 LINES OVER ITS OWN SWITCHES AT 14 PRESENT. PLEASE COMMENT. 15 16 Α. BellSouth's records indicate that it had performed ***-----*** "hot cuts" at 17 Supra's request. This number is not reduced for any unbundled loop disconnects that Supra may have requested so Supra's number and 18 BellSouth's number are probably both reasonably accurate. More 19 20 importantly than the actual quantity of unbundled loops in service at 21 present, is the fact that Supra has only recently begun ordering unbundled 22 loops in significant quantities. Supra ordered its first unbundled loops about ***----, *** so I am not surprised that, compared to Supra's 23

entire customer base of about 300,000 lines (that is, the volume of

customers Mr. Nilson claims Supra serves), the portion actually connected

24

25

1		to Supra's switches is relatively small. However, even in the short period
2		that Supra has begun using unbundled loops connected to its switches,
3		Supra and BellSouth have provisioned over ****** unbundled loops
4		in a single BellSouth central office ****** Proprietary
5		Exhibit WKM-5, attached to this testimony, shows each of Supra's ******
6	1	collocation arrangements in place and the quantity of unbundled loops
7	;	which BellSouth has provisioned via the "hot cut" process. Thus,
8		BellSouth has already provided unbundled loops in ****** different
9		central offices in Florida and stands ready to provide unbundled loops in
10		the remaining ****** central offices where Supra has established
11		collocation. Finally, Supra is free to acquire collocation in other BellSouth
12		central offices in Florida. BellSouth's witness Wayne Gray discusses the
13		topic of collocation availability.
14		
15	Q.	ON PAGE 10 OF HIS TESTIMONY, MR. NILSON SUGGESTS THAT IN
16		EXCESS OF 20,000 "HOT CUTS" PER MONTH ARE REQUIRED IN THE
17	,	MASS MARKET. CAN BELLSOUTH HANDLE THAT MANY "HOT CUTS"
18		PER MONTH?
19		
20	A.	Yes. Let's look at the daily volumes that would be required at the central
21		office level. Given 23 business days per month, a total volume of 20,000
22		would equate to 870 "hot cuts" per day (that is, 20,000 / 23). Assuming
23		that all of that daily "hot cut" volume is focused in the ****** central
24		offices within which Supra already has collocation, the daily volume on
25		average per central office is only slightly more than ***

1		*** As BellSouth's witnesses Ainsworth, Heartley and McElroy
2		demonstrate in their respective testimony, BellSouth's "hot cut" capability
3		per central office per day is at least several times greater than Mr. Nilson
4		speculates may be the extreme volume.
5	i	
6	Q .	ON PAGE 15 OF HIS TESTIMONY, MR. NILSON STATES THAT SUPRA
7	:	SERVES 20,000 CUSTOMERS IN THE PEMBROKE PINES CENTRAL
8		OFFICE BUT SERVES "LESS THAN ONE SIXTH" THAT NUMBER IN
9		THE WESTON CENTRAL OFFICE. WHAT ARE THE RELATIVE SIZES
10		OF BELLSOUTH'S PEMBROKE PINES AND WESTON CENTRAL
11		OFFICES IN TERMS OF THE TOTAL QUANTITY OF LINES SERVED?
12		
13	A.	BellSouth's Pembroke Pines central office serves a total of about 144,000
14		lines. Thus, Supra serves about 14% of the total lines in that central
15		office. While I cannot determine with precision from Mr. Nilson's testimony
16		the quantity of customer lines Supra claims to serve from the Weston
17		central office, assume Supra has one seventh the quantity of customer
18		lines in Weston than it has in Pembroke Pines. I used one seventh
19		inasmuch as Mr. Nilson stated that Supra had less than one sixth as many
20		customers in Weston as in Pembroke Pines. Thus, Supra would have
21		about 2,857 customer lines in the Weston central office (20,000 / 7).
22		Since the Weston central office serves a total of about 40,000 customer
23		lines, even in the Weston central office, Supra has won about 7% of the
24		market and thus has a significant customer base to work with.
25		

1	Q.	ON PAGE 17 OF HIS TESTIMONY, MR. NILSON DISCUSSES THE
2		ISSUE OF UNBUNDLED LOOPS AND INTEGRATED DIGITAL LOOP
3		CARRIER ("IDLC") EQUIPMENT. HE SUGGESTS THAT
4		PROVISIONING UNBUNDLED LOOPS SERVED BY IDLC IS
5	}	PROBLEMATIC IN THAT "THE FACILITIES [THAT IS, UNIVERSAL
6	1	DIGITAL LOOP CARRIER ("UDLC") AND COPPER LOOPS] "DOE NOT
7		EXIST IN ANY LARGE NUMBER AND THOSE THAT DOE ARE
8		ALREADY PARTIALLY OR FULLY USED BY BELLSOUTH ITSELF." [sic]
9		DO YOU AGREE THAT BELLSOUTH DOES NOT HAVE SUFFICIENT
10		UDLC OR COPPER FACILITIES CAPACITY?
11		
12	A.	No. The direct testimony of BellSouth witness Ainsworth discussed the
13		various alternatives that BellSouth can exercise to provide loops served by
14		IDLC on an unbundled basis. Further, instances where a given carrier
15		serving area is composed of IDLC-derived loops is fairly uncommon given
16		that IDLC technology was introduced relatively recently compared to
17		copper loops and older forms of Digital Loop Carrier ("DLC"). This means
18		that in most cases UDLC facilities and copper loop facilities are available
19		and can be used. In addition to moving a particular loop from IDLC to
20		UDLC or to copper loop facilities, additional alternatives such as the use of
21		"side door" or "hairpin" solutions can also be called upon. While each of
22		the eight alternatives Mr. Ainsworth discusses in his direct testimony is not
23		always available at every DLC remote terminal, BellSouth successfully
24		handles unbundled loops served by IDLC on a daily basis.
25		

1	Q.	BEGINNING ON PAGE 18 OF HIS TESTIMONY, MR. NILSON
2		DISCUSSES THE AVAILABILITY OF ENHANCED EXTENDED LINKS
3		("EELs") AS AN ALTERNATIVE TO COLLOCATION IN EVERY
4		BELLSOUTH WIRE CENTER. ON PAGE 19 HE STATES "BELLSOUTH
5		SIMPLY CANNOT PROVIDE 290,000 POTS EELs TO REPLACE THE
6		UNE-P SERVICE BEING PROVIDED TO SUPRA CUSTOMERS
7		TODAY." WHAT IS YOUR UNDERSTANDING OF THE BASIS FOR MR
8		NILSON'S STATEMENT?
9		
10	A.	I do not know and he does not explain why he believes EELs are
11		unavailable. While I would agree with Mr. Nilson that CLECs in general
12		have not availed themselves of large quantities of DS0 EELs, I believe
13		that is because in many instances CLECs have simply served their
14		customers via UNE-P arrangements rather than over their own switches.
15		In Supra's case, it elected collocation of its DLC equipment to aggregate
16		loops in a given central office for transport to its switches and, in my
17		opinion, has done so successfully. I am not aware of any intention
18		expressed by Supra to change its strategy of using collocation to serve its
19		customers.
20		
21	Q.	ON PAGE 23 OF HIS TESTIMONY, MR. NILSON DISCUSSES CLECs'
22		COSTS FOR UNBUNDLED LOOPS AND COLLOCATION AND STATES
23		"ON TOP OF THESE COSTS, THE CLEC MUST PAY ENORMOUS
24		NONRECURRING CHARGES TO THE ILEC TO CONVERT A
25		CUSTOMER'S SERVICE FROM UNE-P TO UNE-L CUSTOMER'S

1		SERVICE." [Footnote omitted] DO YOU AGREE WITH MR. NILSON
2		REGARDING NONRECURRING CHARGES FOR UNBUNDLED
3		LOOPS?
4		
5	Α.	No. The nonrecurring rates BellSouth is allowed to charge CLECs in
6	1	Florida was set by this Commission in its Docket 990649-TP. The
7	•	Commission set those rates after hearing extensive testimony from
8		BellSouth and from interested CLECs. Mr. Nilson claims that it would take
9		Supra months to recover the nonrecurring cost for the unbundled loop
10		compared to the nonrecurring cost were that same customer served by
11		UNE-P. Mr. Nilson misses the point. If Mr. Nilson is concerned about the
12		nonrecurring cost, Supra could elect to use BellSouth's bulk migration
13		process (BellSouth's witnesses Ken Ainsworth and Milton McElroy discuss
14		this process in their respective testimony in this proceeding) and thus gain
15		a 10% discount. More importantly, however, there is physical work
16		required to move the loop serving an end user from BellSouth's switch to
17		the CLEC's switch. For an end user transferring its service from
18		BellSouth's retail operation to a CLEC using UNE-P, there is no
19		corresponding physical work in the central office. BellSouth should be
20		compensated for the work it performs on behalf of a CLEC who uses its
21		own switches (or a third party's switches) rather than BellSouth's switches.
22		Instead, Mr. Nilson appears to "wish away" that physical work and the
23		costs accompanying that work.
24		
25	Q.	ON PAGE 27 OF HIS TESTIMONY, MR. NILSON SUGGESTS THAT

1		THE COMMISSION GIVE NO CONSIDERATION TO ELIMINATING UNE
2		P WHEN THE CLEC's SWITCH IS PHYSICALLY LOCATED OUTSIDE
3		THE RATE CENTER. DO YOU AGREE?
4		
5	A.	In my direct testimony in this proceeding I quoted testimony filed in other
6		dockets by witnesses representing AT&T and MCI who claimed their
7		respective switches could serve very large geographic areas. Most or all
8		modern switching systems are capable of serving end users in more than
9		a single rate center. Indeed it is not at all uncommon to find switches that
10		serve end users in more than one state. Even in BellSouth's network, it is
11		common to find single switches located physically close to the state
12		boundary serving end users in the state in which the switch is located as
13		well as end users in the neighboring state. Thus, the Commission should
14		not infer from Mr. Nilson's suggestion that modern switches (including
15		Supra's switches) are incapable of providing service to end users in
16		multiple rates centers or even in multiple states. Indeed, Mr. Nilson's owr
17		testimony on pages 46-47 shows that Supra's two switches provide
18		service to end users in eight different rate centers in LATA 460 and six
19		other rate centers from Orlando to Pensacola.
20		
21	Q.	ON PAGE 48 OF HIS TESTIMONY, MR. NILSON STATES "SUPRA IS
22		COMMITTED TO THE PROCESS OF CONVERTING ITS 300,000 PLUS
23		UNE-P CUSTOMERS TO UNE-L, AND WILL GROW ITS NETWORK
24		DEPLOYMENT BEYOND THE 28,000 LINE CURRENT CAPACITY IF
25		GIVEN THE CHANCE TO DO SO." IN YOUR OPINION, ARE SUPRA'S

1		TWO (2) SWITCHES CAPABLE OF HANDLING 300,000 CUSTOMER
2		LINES?
3		
4	A.	Possibly. The actual line capacity of a switch is a function of several
5	† 1	factors including physical line capacity as well as call-handling capability
6	`	of the call processors. Further, the various equipment components
7	•	comprising a given switch are modular in nature and manufacturers
8		design their switching equipment to capacity break points. In my
9		experience it is rare that a service provider equips its switches at the
10		outset for the ultimate capacity of the switch. Instead, rational firms
11		determine forecasts of switching capacity required and then, using
12		common economic techniques, determine the amount of capacity that is
13		sufficient to handle expected growth while still yielding the best economic
14		rate of return. As a result, telephone service providers periodically
15		augment existing switching capacity in response to anticipated demands.
16		I will note, however, that on its website
17		(http://www.lucent.com/livelink/090094038004f536_Brochure_datasheet.p
18		df), Lucent Technologies claims that its 5E-XC switch (which is an
19		expansion to Lucent's 5ESS product line which Supra purchased and
20		installed) will handle up to one (1) million customer lines and four (4)
21		million busy hour calls. Thus, in my opinion, Supra can augment the
22		capacity of its two switches significantly were it to choose to do so.
23		
24		
25		

1	Reb	<u>uttal to Mr. Van de Water</u>
2	Q.	ON PAGE 31 OF HIS TESTIMONY, MR. VAN DE WATER CONTENDS
3		THAT THE SPECIFIC ISSUES HE IS CONCERNED ABOUT ARE
4		COLLOCATION SPACE AND TRUNK BLOCKING. MR. VAN DE WATER
5		CONTENDS THAT IF UNBUNDLED LOCAL SWITCHING IS NO
6		LONGER AVAILABLE AT COST-BASED RATES TO CLECS,
7		CUSTOMER SERVICE WILL BE NEGATIVELY IMPACTED. DO YOU
8		AGREE?
9		
10	A.	No. I will address Mr. Van de Water's concerns regarding the adequacy of
11		BellSouth's trunking facilities and BellSouth's witness Mr. Wayne Gray will
12		address Mr. Van de Water's concerns regarding collocation space.
13		e de la companya de La companya de la co
14	Q.	PLEASE BRIEFLY DESCRIBE THE CONSIDERATIONS TAKEN INTO
15		ACCOUNT WHEN DESIGNING AND DEPLOYING TRUNKING
16		FACILITIES.
17		
18	A.	Traffic volumes (that is, levels of simultaneous customer calling) reach
19		peaks during certain hours of the day or week. Trunks connecting the
20		various switches in a local calling area are usually engineered to
21		accommodate a verage time-consistent busy-hour loads in the busy
22		season of the year, typically the three highest months in a year for traffic
23		volumes. Switching systems in a LATA are interconnected by a network
24		of trunks. These interconnections provide for both intraLATA and
25		interLATA services. For interLATA services, trunks connect most LEC

networks to the networks of the Interexchange Carriers ("IXCs"). For intraLATA services, trunks connect the various end office switches (both incumbents' switches and CLECs' switches) and, if used, the tandem switches. Trunks between switching systems are most commonly carried on channels of digital carrier systems (Digital Signal level 1 or "DS-1" and higher-order systems). The successful completion of traffic dialed by customers and operators depends upon a trunking network in which blocked call conditions are rarely encountered under expected conditions.

Q. PLEASE BRIEFLY DESCRIBE MR. VAN DE WATER'S CONCERN REGARDING TRUNKING FACILTIES.

Α.

Mr. Van de Water suggests that once CLECs serve their customers from the CLECs' switches rather than from the incumbent's switches, traffic congestion and call blockage will occur due to traffic displacement. Let me give an example of how traffic displacement might occur. Let us assume that in a given local calling area there are at present only three (3) switches (Switches A, B, and C) handling all the customers. Assume that each switch handles 10,000 customers and that all customers have similar calling habits. A CLEC has won 25% of the customers and serves those customers via UNE-P arrangements acquired from the switch owner. Further assume that within a given switch the 10,000 customers each make three calls and that 50% of those calls are to customers to other customers served by that same switch and that the remaining 50% of the calls area split evenly to the customers served by the other two (2)

1		switches. Lastly, to simplify, assume the use of one-way rather than two-
2		way trunking.
3		
4		Thus, in my hypothetical example, Switch A handles 30,000 calls in the
5		busy hour. Half (50%) of those calls are intra-switch calls so no external
6		trunking is needed for those calls to be completed. Trunking facilities to
7		the other two (2) switches (Switches B and C) must be sized to handle
8		15,000 simultaneous calls in the busy hour. In this simple example, each
9		of the three (3) switches would have two (2) outgoing trunk groups (one
10		trunk to each of the other two switches) and two (2) incoming trunk groups
11		(one trunk from each of the other two switches).
12		
13		If a fourth switch (let us assume that the new switch is the CLEC's switch
14		referred to as Switch D) is introduced into the local calling area and if the
15		CLEC moves all of its 7,500 customers to that switch (30,000 * 0.25) then
16		traffic is displaced from the existing trunk groups connecting Switches A,
17		B, and C onto new trunk groups connecting Switches A and D, Switches B
18		and D, and Switches C and D. Even though the total traffic load is
19		precisely the same before and after the CLEC moved its own customers to
20		its own switches, the "old trunk groups" are over-sized in that they were
21		sized for larger loads than they will now be required to carry. The traffic
22		volume that was displaced from these trunk groups is displaced to new
23		trunk groups from Switches A, B, and C respectively to new Switch D.
24		
25	Q.	HOW DO TRUNKING ENGINEERS HANDLE TRAFFIC DISPLACEMENT

1		ISSUES?
2		
3	A.	In my simple example above, the situation calls for building new trunk
4		groups between Switches A, B, and C respectively to the new Switch D.
5	1	Once those trunk groups are operational and the traffic displacement has
6		occurred (that is, the CLEC has moved its customers to its own switches)
7		the "old trunk groups" may be re-sized (decremented) in response to the
8		smaller loads on them or they can be left alone if the excess capacity is
9		expected to be consumed (due to overall customer growth) in a
0		reasonable period.
1		
12	Q.	IS TRAFFIC DISPLACEMENT AN ARTIFACT OF CLECs DEPLOYING
3		THEIR OWN SWITCHES?
4		
15	A.	Certainly not. For many years, telecommunications engineers have
6		confronted and successfully handled traffic displacement. Just a few
17		examples include the following:
8		The introduction of new wire centers (central offices) and thus
9		additional switching systems
20		The replacement of older switching system technology with
21		newer switching system technology
22		The introduction or expansion of so-called Extended Area
23		Service ("EAS") toll-free calling areas
24		
25		

1	Q.	DO YOU BELIEVE IT IS A REASONABLE EXPECTATION THAT CALL
2		BLOCKING WILL OCCUR ONCE CUSTOMERS ARE MOVED FROM
3		INCUMBENTS' SWITCHES TO CLECs' SWITCHES?
4		
5	A.	No. Just as trunking engineers have successfully planned for large-scale
6		traffic displacement in the past, they will do so in the situation where
7		CLECs begin using their own switches. I expect the trunking engineers
8		will create new trunk groups in response to CLEC requests and that those
9		trunk groups will be of sufficient size so as to not cause traffic congestion
10		or call blockage. Once the customers are moved, trunking engineers will
11		use the extensive traffic reporting capabilities already available to them to
12		ensure that trunking facilities are adequately sized.
13		* - **A _C ;
14	Q.	MR. VAN DE WATER, ON PAGE 33 OF HIS TESTIMONY, EXPRESSES
15		CONCERN ABOUT THE MOVEMENT OF TRAFFIC FROM
16		BELLSOUTH'S EXISTING LOCAL SWITCH NETWORK ONTO ITS
17		TANDEM TRANSPORT NETWORK NECESSITATED BY THE
18		CONVERSION OF THE EMBEDDED BASE OF UNE-P CUSTOMERS TO
19		CLECs' SWITCHES. DO YOU CONCUR?
20		
21	A.	No. This is essentially the same concern as Mr. Van de Water expresses
22		for individual trunk groups. Here, he opines that the tandem switches and
23		the trunk groups connecting end office switches and tandem switches are
24		insufficiently sized and that call blockage will occur. I disagree with his
25		conclusions regarding tandem switching capacities for the same reasons

as I set out in response to his concerns regarding trunk group adequacy.

Essentially, the same call volumes will be present whether the calls are handled over the incumbents' switches (that is, their own customers' calling plus the CLECs' customers' calling) or in the case where CLECs move their customers to their own switches. While I agree that traffic displacement will occur, that situation has occurred countless times in the past and trunking engineers and switching engineers have successfully handled those transitions. I fully expect that this situation will be no different in that respect.

Q. ON PAGE 35 OF HIS TESTIMONY, MR. VAN DE WATER EXPRESSES

CONCERN OVER WHETHER BELLSOUTH'S TANDEM SWITCHES

CAN HANDLE THE INCREASED TRAFFIC LOAD RESULTING FROM

UNE-P TO UNE-L CONVERSION. PLEASE COMMENT.

Α.

There is no increased call volume as a result of CLECs moving their customers to their own switches. Instead, the same amount of calling must be handled in a different way. Just as has happened in the past, certain trunk groups will be added (or augmented) to handle traffic that was handled differently before the traffic displacement while after the transition certain trunk groups can de decremented. While there may be a need to augment tandem switching capacity should CLECs initially route their traffic exclusively through the tandem switches to reach all other local switches, over time I expect that CLECs will elect direct trunking between their switches and certain other switches in a given local calling area thus

diminishing the total traffic load handled by the tandem switches.

Q. DOES THAT CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

1	MS. MAYS: The next BellSouth witness will be
2	Mr. Pate. He has direct, rebuttal and surrebuttal testimony.
3	He does not have an errata. We would ask that his testimony be
4	admitted into the record as though read, and we would ask that
5	his exhibits be identified as Number 74.
6	CHAIRMAN BAEZ: I'm sorry. Did you say Witness Pate
7	had direct and surrebuttal only?
8	MS. MAYS: Direct, rebuttal and surrebuttal,
9	Mr. Chair.
10	CHAIRMAN BAEZ: Okay. Show the testimony of Witness
11	Pate, direct, rebuttal and surrebuttal, without objection,
12	entered into the record as though read. Show his accompanying
13	exhibits as Composite 74.
14	(Exhibit 74 marked for identification.)
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF RONALD M. PATE
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		December 4, 2003
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8		TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.
9		
0	A.	My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc.
l 1		("BellSouth") as a Director - Interconnection Operations. In this position, I handle
12		certain issues related to local interconnection matters, primarily operations support
13		systems ("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia
14		30375.
15		
16	Q.	PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
17		
18	A.	I graduated from the Georgia Institute of Technology in 1973, with a Bachelor of Science
19		degree. In 1984, I received a Masters of Business Administration degree from Georgia
20		State University. My professional career spans over 30 years of general management
21		experience in operations, logistics management, human resources, sales and marketing. I
22		joined BellSouth in 1987, and have held various positions of increasing responsibility
23		since that time.

1	Q.	HAVE YOU TESTIFIED PREVIOUSLY?
2		
3	A.	Yes. I have testified before the Public Service Commissions in Alabama, Florida,
4		Georgia, Louisiana, South Carolina and Kentucky, the Tennessee Regulatory Authority,
5		and the North Carolina Utilities Commission.
6		
7	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
8		
9	A.	The purpose of my testimony is to describe BellSouth's ordering process used when the
10		CLEC migrates existing multiple non-complex Unbundled Network Element – Port/Loop
11		Combinations (UNE-P) Services to an Unbundled Network Element - Loop (UNE-L)
12		batch migration offering, including UNE-L plus local number portability (LNP).
13		BellSouth's "UNE-to-UNE bulk migration ordering process," as it has been labeled by
14		BellSouth, is the ordering mechanism for the batch hot cut process that is discussed at
15		length in the testimony of BellSouth's witness, Mr. Ken Ainsworth. Throughout this
16		testimony, I will use the terms "batch" and "bulk" interchangeably when referring to the
17		process of migrating UNE-P to UNE-L in batches.
18		
19		I also will discuss the scalability of BellSouth's OSS.
20		
21	Q.	WHAT ISSUES ON THE FLORIDA PUBLIC SERVICE COMMISSION'S ISSUES
22		LIST DOES YOUR TESTIMONY ADDRESS?
23		
24	A.	My testimony addresses issues 3(a) and 3(c).
25		

1	ORL	ERING UNE-10-UNE BATCH MIGRATIONS
2	Q.	PLEASE DESCRIBE THE ORDERING PROCESS FOR BELLSOUTH'S BATCH
3		MIGRATION PROCESS.
4		
5	A.	The ordering mechanism for the batch migration process is the UNE-to-UNE batch
6		migration request. The purpose of this ordering mechanism is to allow CLECs to submit
7		multiple UNE-P to UNE-L conversion requests in a streamlined and efficient manner. In
8		other words, the UNE-to-UNE batch migration ordering process allows a CLEC to
9		migrate multiple UNE-P end-users to a UNE-L offering without submitting multiple
10		individual local service requests ("LSRs").
11		
12	Q.	WHAT ARE SOME OF THE BENEFITS OF THE UNE-TO-UNE BATCH
13		MIGRATION PROCESS?
14		
15	A.	With this electronic process, a CLEC can migrate two to 99 UNE-P accounts to UNE-L
16		on a single submission. Depending on the conditions, CLECs may submit UNE-to-UNE
17		batch migration orders for up to 2,475 end users. I will discuss this in more detail below.
18		
19	Q.	WHEN DID BELLSOUTH IMPLEMENT ELECTRONIC ORDERING OF UNE-TO-
20		UNE BATCH MIGRATION?
21		
22	A.	BellSouth implemented a fully-mechanized, electronic UNE-to-UNE batch migration
23		ordering process on March 29, 2003 with Release 12.0, as a result of change request
24		CR0215.
25		

1		Before implementation of the electronic process, BellSouth implemented a manual batch
2		ordering process on December 4, 2002.
3		
4	Q.	DID A CLEC SUBMIT CHANGE REQUEST CR0215?
5		
6	A.	Yes, on November 11, 2000, AT&T submitted CR0215 to the Change Control Process
7		("CCP"). This change request asked BellSouth to develop a process for migrating
8		customers from UNE-P to UNE-L in batches. Below is an excerpt from AT&T's change
9		request:
10		
11		AT&T would like BellSouth to implement the ability to migrate UNE to UNE
12		orders in bulk. For example, AT&T is providing service to customers with
13		port/loop combinations (UNE-P) and wants to migrate a group of customers from
14		UNE-P to UNE-L (BellSouth UNE loop/LNP with AT&T switch). AT&T would
15		then send a spreadsheet/bulk migration order to BellSouth containing pertinent
16		customer specific information. (Emphasis added.)
17		
18		Attached as Exhibit RMP-1 is the change request. The change request is also posted at
19		BellSouth's Interconnection web site. ¹
20		
21	Q.	WAS CHANGE REQUEST CR0215 IMPLEMENTED ACCORDING TO THE
22		PROCEDURES OF THE CHANGE CONTROL PROCESS ("CCP")?
23		

 $^{^1\} http://www.interconnection.bellsouth.com/markets/lec/ccp_live/docs/statuses/change_requests/cr0215.pdf$

1 A. Yes. Change request CR0215 was handled by the CCP from its inception through its
2 implementation in March 2003. Let me provide a chronology of the events leading to the
3 implementation of CR0215.

į	1	t	
		L	
		4	4

Y
AT&T submitted CR0215.
The CCP placed CR0215 in pending status.
The CLECs prioritized CR0215 as 7 th of 14 pre-
ordering and ordering change requests.
The CLECs re-prioritized CR0215 as 8 th of 36 pre-
ordering and ordering change requests.
CR0215 was scheduled for Release 11.0.
BellSouth distributed draft user requirements to
the CLECs.
BellSouth distributed updated draft user
requirements to the CLECs.
BellSouth and the CLECs held a meeting to
discuss the user requirements.
BellSouth distributed updated user requirements to
the CLECs.
BellSouth and the CLECs held a meeting to
discuss the user requirements.
BellSouth and AT&T discussed BellSouth's ability
to support 99 LSRs per bulk order rather than 100.
BellSouth distributed updated user requirements.
CR0215 was moved to Release 12.0

Mare	ch 29, 2003	CR0215 was implemented with Release 12.0

2 Q. WHICH COMPANIES PARTICIPATED IN THE USER REQUIREMENTS

3 MEETINGS?

4

At the user requirements meeting that occurred on April 23, 2002, representatives of Network Telephone, BTI, Telcordia, AT&T, and Accenture participated, in addition to representatives of BellSouth.

8

At the meeting on July 9, 2002, representatives of BellSouth, Allegiance, Network

Telephone, AT&T, and Nuvox were in attendance. Every CLEC had the opportunity to

participate in the development of this electronic ordering process and AT&T, in

particular, was actively involved.

13

14 Q. DOES BELLSOUTH PROVIDE INFORMATION FOR CLECS THAT ARE
15 INTERESTED IN LEARNING ABOUT AND IMPLEMENTING THE ELECTRONIC
16 ORDERING OF UNE-TO-UNE BATCH MIGRATIONS?

17

A. Certainly. The business rules for ordering UNE-to-UNE batch migrations are contained in the Local Ordering Handbook ("LOH"), which is available at BellSouth's interconnection web site. BellSouth has also provided CLECs with the UNE-Port/Loop Combination (UNE-P) to UNE-Loop (UNE-L) Bulk Migration CLEC Information

Package ('CLEC information package"). This document is attached as Exhibit RMP-2,

² http://www.interconnection.bellsouth.com/guides/html/leo.html

1		and also is available at the interconnection web site. The CLEC information package is
2		intended to provide CLECs with general ordering information specific to the UNE-to-
3		UNE batch migration process. In addition, the Local Exchange Navigation System
4		Guide ("LENS Guide") contains ordering instructions for those CLECs that use the
5		LENS ordering interface. The LENS Guide is posted at the Interconnection web site. ⁴
6		
7	Q.	WHAT ARE THE CRITERIA THAT CLECS SHOULD CONSIDER WHEN USING
8		THE UNE-TO-UNE BATCH MIGRATION PROCESS?
9		
10	A.	The batch migration ordering process must meet the same requirements as the batch hot
11		cut process as a whole. These requirements are described in full in the LOH and
12		summarized in the CLEC information package. Some of the requirements are: the batch
13		migration request must be project managed; the batch migration request must contain a
14		minimum of two LSRs; the batch migration request may contain up to and including 99
15		LSRs; the batch migration request must be for the same loop type; the existing UNE-P
16		combinations must be non-complex, and the loops must all be in the same wire center. ⁵
17		
18	Q.	PLEASE DESCRIBE HOW THE CLEC USES THE UNE-TO-UNE BATCH
19		MIGRATION PROCESS.
20		
21	A.	As Mr. Ainsworth responded to AT&T's First Interrogatories in this docket (Item 2),
22		BellSouth's process is as follows:

http://www.interconnection.bellsouth.com/guides/html/unes.html
http://www.interconnection.bellsouth.com/guides/html/lens_tafi.html
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).

1	1.	A Bulk Notification form is sent from the CLEC to the BellSouth Project
2		Manager (PM) to identify those UNE-P accounts to be converted to a UNE-
3		Loop.
4	2.	The PM reviews the form to determine if the accounts qualify for handling by
5		the Bulk migration process and if the form entries are complete and appear
6		accurate.
7	3.	The PM sends the form to the Network Single Point of Contact (SPOC) to
8		determine load variations, personnel availability and due date schedule to be
9		applied to each of the Earning Account Telephone Numbers (EATN)
10		accounts. The PM will return the Bulk Notification form to the CLEC within
11		the following time period based on the number of telephone number (TN)
12		requests: 7 business days to return to the CLEC a form with up to 99 TNs and
13		10 business days to return a form with between 100 to 199 TNs. The Project
14		Manager will negotiate the return interval for requests of 200+ TNs.
15	4.	The Bulk Notification form that has now been updated to include due dates
16		for each of the accounts will be returned to the CLEC via the PM.
17	5.	The CLEC has three (3) business days to submit an accurate Mechanized Bulk
18		Local Service Request (LSR) containing the accounts and due dates to
19		BellSouth's Local Carrier Service Center (LCSC). The mechanized system
20		will create individual service orders for each of the accounts that will be
21		provisioned and completed.
22	6.	The BellSouth Customer Wholesale Interconnection Network Services
23		(CWINS) Center will advise the PM of any service orders that will not be
24		completed on the due date.
25	7.	The PM will advise the CLEC on current order status.

1	Q.	IN STEP 5 ABOVE, YOU MENTIONED THAT THE CLEC MUST SUBMIT A
2		BATCH MIGRATION REQUEST CONTAINING THE ACCOUNTS AND DUE
3		DATES. COULD YOU DISCUSS THIS PROCESS IN MORE DETAIL?
4		
5	A.	Yes. CLECs can use either the EDI, TAG, or LENS ordering interfaces to place a batch
6		migration request. The CLEC first completes information for the entire batch migration
7		package. The LOH refers to this as the "global level." This information includes the
8		Bulk Order Package Identifier ("BOPI") and information about the wire center. The
9		CLEC also completes information about the CLEC initiator and the implementation
10		contact person. If the migration involves designed loops, the CLEC must include contact
11		information, including an address, for the design contact person. ⁷ The CLEC only enters
12		this global level information once for the entire package.
13		
14		Next, the CLEC completes the information needed for each account of the two to 99
15		accounts that will be migrated. The LOH refers to this as "account level" and "line level"
16		activity. When writing the user requirements, BellSouth developed this functionality so
17		that the CLECs would only fill out a minimum number of fields. Some of the fields that
18		the CLECs are required to complete include the purchase order number ("PON"), the end
19		user's name, the billing account number ("BAN1"), the Earning Account Telephone
20		Number ("EATN"), and the line number ("LNUM"). The complete list of fields is
21		described in the LOH. ⁸

 ⁶ The LENS Guide refers to this level as the "Package Level."
 ⁷ Designed loops require BellSouth to perform design engineering activities.

⁸ The LENS Guide also contains similar information for users of the LENS interfaces. The "account level" and "line level" fields are referred to as the "PON level" in the LENS Guide.

1	Q.	MUST THE CLECS PROVIDE AN ADDRESS FOR EACH ACCOUNT THAT THEY
2		ARE MIGRATING?
3		
4	A.	No, CLECs do not include an address for each account. Only if the migration involves
5		designed loops must the CLEC include address information for the design contact person
6		and only at the "global level" of the batch migration request.
7		
8		BellSouth has simplified the number of fields that the CLECs must complete at the
9		"account level" and "line level" for each end user on the batch migration request.
10		BellSouth was able to reduce the required information to the minimal amount necessary
11		for conversions from UNE-P to UNE loops. To create the individual LSRs for UNE
12		loops, BellSouth needs information that the CLEC has, such as the cable and pair
13		information, the cable ID, and, when necessary, the reservation number for the facility
14		(the Facility Reservation Number or "FRN"). BellSouth could not reduce the number of
15		required fields for UNE-P to UNE-L migration to the number used when the CLECs
16		submit a "TN migration" or "Telephone Migration" LSR. When the CLEC converts a
17		retail or resale or UNE-P end user to its UNE-P, the CLEC can submit an LSR with just
18		the end user's telephone number (in addition to information about the gaining CLEC),
19		hence the name "TN migration."
20		
21	Q.	PLEASE DESCRIBE WHAT HAPPENS WHEN THE CLEC SUBMITS THE BATCH
22		MIGRATION REQUEST VIA THE EDI, TAG, OR LENS ORDERING INTERFACES
23		
24	A.	After BellSouth's systems receive the batch migration request, the first level edits are
25		applied in order to check the request for errors. If there are no first level errors in the

batch migration request, BellSouth's systems will accept the batch migration request and break the accounts into individual parts. BellSouth's systems then generate the individual LSRs, using the information provided by the CLEC at the account and line levels of the batch migration. For example, the systems take the telephone number that the CLEC provided for an individual PON and retrieve an address from the address database (the Regional Street Address Guide or RSAG). The individual LSRs are checked against the second and third level edits to determine if the data on the LSR is correct. Accurate and complete LSRs flow-through BellSouth's OSS to the service order generator (Service Order Communications System or "SOCS"), where a service order is generated from each LSR. BellSouth then sends a firm order confirmation ("FOC") to the CLEC for each LSR. The service orders then move downstream for provisioning, including updating E911 databases and directory listing information, just as they would for service orders created from LSRs submitted individually.

Q. WHAT HAPPENS WHEN A BATCH MIGRATION REQUEST CONTAINS AN ERROR?

A.

After BellSouth's systems receive the batch migration request, they check the request for errors. BellSouth's systems perform these checks by applying first level edits to the batch migration request. The first level edits are straightforward and basic — they are related to field length, allowable characters, required, optional, and "not allowed" fields, and the relationships between fields. BellSouth checks the entire batch migration request for these types of errors before returning it to the CLECs. If a batch migration request contains a first level error or errors, BellSouth returns it to the CLEC. The CLEC may

1		then correct the error or errors and submit a supplemental batch migration request to
2		BellSouth.
3		
4	Q.	WHY DOES BELLSOUTH RETURN THE ENTIRE BATCH REQUEST TO THE
5		CLEC?
6		
7	A.	The first level edits simply determine if the CLEC provided enough information so that
8		BellSouth's systems can create the individual LSRs. If the CLEC has not provided the
9		correct information in those fields, then BellSouth cannot generate the individual LSRs.
10		Also consider that, if the CLEC makes an error or errors in the "global" section of the
11		request, all the potential LSRs in the request would be affected. At this stage of the
12		process, returning the incorrect batch migration request to the CLEC is equivalent to
13		rejecting and returning an incorrect LSR that a CLEC has submitted individually.
14		
15	Q.	AFTER BELLSOUTH'S SYSTEMS HAVE CREATED INDIVIDUAL LSRS FROM
16		THE BATCH MIGRATION REQUEST, WHAT HAPPENS IF AN ERROR IS
17		DETECTED IN AN INDIVIDUAL LSR?
18		
19	A.	After BellSouth's systems have created the individual LSRs from the batch migration
20		request and information in BellSouth's systems, BellSouth will clarify any mistakes that
21		are found in the individual LSRs on an individual basis. Thus, if one LSR out of 99 has
22		an error, the 98 error-free LSRs will continue to process. BellSouth finds these errors
23		when its systems apply the second and third level edits. Level 2 data edits verify that the
24		fields in the LSR contain the correct information, such as whether the telephone number
25		supplied by the CLEC is known by BellSouth's systems. Third level edits continue the

1		evaluation of the data in the fields of the LSR, such as comparing a given Universal
2		Service Order Code ("USOC") and any associated Field Identifiers ("FIDs") in a service
3		order to ensure that the FIDs are allowed and in the proper order.
4		
5		Therefore, if any data errors are found in any of the LSRs, BellSouth then clarifies the
6		LSR individually with the CLEC, just as it would with any LSR submitted individually.
7		
8	Q.	EARLIER YOU STATED THAT A CLEC MAY REQUEST A MAXIMUM OF 99
9		ACCOUNTS IN A BATCH MIGRATION. PLEASE PROVIDE MORE DETAIL.
10		
11	A.	Each UNE-to-UNE batch migration request may contain a maximum of 99 accounts,
12		each identified by a PON and an Earning Account Telephone Number ("EATN").
13		However, a CLEC can include a maximum of 25 end-user telephone numbers per EATN
14		If a CLEC has accounts of this nature in the same wire center, the CLEC could
15		conceivably migrate as many as 2,475 end users (99 EATN X 25 TN) per batch
16		migration.
17		
18	<u>OSS</u>	SCALABILITY
19	Q.	ARE BELLSOUTH'S OSS SCALABLE?
20		
21	A.	Yes, BellSouth's existing ordering OSS are scalable, and are designed to accommodate
22		both current and projected volumes of LSRs.
23		
24		The Florida KPMG Third Party Test, at Section TVV2, provided confirmation that
25		BellSouth's ordering OSS responded effectively to normal, peak and stress volume

1 testing. "Normal" volume was defined as 100% of projected LSR submissions, and 2 "peak" and "stress" volumes were defined as 150% and 250% of "normal," respectively. 3 BellSouth passed all of these test criteria. 4 5 BellSouth's commercial usage further confirms the ability of BellSouth's OSS to handle 6 high volumes. For the three month period July through September, 2003, an average of 7 785,155 LSRs were submitted via the electronic ordering OSS applications. Moreover, it 8 is important to remember, even if all UNE-P orders changed to UNE-L, that does not 9 change the total ordering volume that BellSouth is handling very capably today. 10 DOES THIS CONCLUDE YOUR TESTIMONY? 11 Q. 12 A. Yes. 13 14

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF RONALD M. PATE
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		January 7, 2004
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8		TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.
9		
10	A.	My name is Ronald M. Pate. I am employed by BellSouth Telecommunications,
11		Inc. ("BellSouth") as a Director, Interconnection Services. In this position, I
12		handle certain issues related to local interconnection matters, primarily operations
13		support systems ("OSS"). My business address is 675 West Peachtree Street,
14		Atlanta, Georgia 30375.
15		
16	Q.	ARE YOU THE SAME RONALD M. PATE WHO PREVIOUSLY FILED
17		TESTIMONY IN THIS DOCKET?
18		
19	A.	Yes.
20		
21	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
22		
23	A.	The purpose of my testimony is to respond to certain issues raised in the
24		testimony of Mark David Van de Water of AT&T Communications of the
25		Southern States, LLC ("AT&T"), Sherry Lichtenberg of MCI WorldCom and

1 MCI Metro ("MCI"), and David E. Stahly of Supra Telecommunications and 2 Information Systems, Inc. ("Supra"). The issues I will respond to are related to 3 the ordering of batch migrations, flow-through, the LFACS database, local 4 number portability, and CLEC-to-CLEC migrations. 5 6 Throughout this testimony, I will use the terms "batch" and "bulk" 7 interchangeably when referring to the process of migrating UNE-P to UNE-L in 8 batches. 9 10 ORDERING UNE-TO-UNE BATCH MIGRATIONS 11 SUPRA'S MR. STAHLY, ON PAGES 19-20 OF HIS TESTIMONY, Q. 12 DISPARAGES "BELLSOUTH'S BATCH ORDER" PROCESS, AND CLAIMS 13 IT IS NOTHING MORE THAN A "BATCH PRE-ORDERING PROCESS." 14 PLEASE RESPOND. 15 16 Mr. Stahly is incorrect in both his characterization of the process and in his A. 17 explanation of how it works. BellSouth's Mr. Ainsworth has responded in his 18 rebuttal testimony to Mr. Stahly's unsubstantiated discussion of the provisioning 19 aspects of this process. 20 21 In my direct testimony on pages 3-13, I provided extensive information regarding 22 the operation and benefits of BellSouth's batch (or bulk) ordering process. I 23 reiterate that BellSouth's process is, in fact, an ordering process that allows CLECs to submit the equivalent of multiple LSRs in a single transaction. As I 24 explained in my direct testimony, and despite Mr. Stahly's claim to the contrary, 25

1 the process benefits the CLEC by reducing – by far – the amount of required 2 CLEC data inputs, thus saving personnel and processing time, and allowing both 3 the CLECs and BellSouth to reap the benefits of better planning. 4 5 Further, Mr. Stahly's claim that "we [Supra] still have to enter all the LSRs and process them for conversion as if they were individual orders" is incorrect. 6 7 BellSouth streamlined the inputs to reduce the amount of information that the 8 CLECs must provide. Obviously, the CLECs need to provide certain information 9 about each individual account in the batch so that BellSouth knows what to do on 10 each account, and whom to bill. It would be impossible to process the orders if 11 the CLEC were relieved of that obligation. 12 13 Q. AT&T'S MR. VAN DE WATER, ON PAGE 21 OF HIS TESTIMONY, 14 CLAIMS THAT BELLSOUTH'S IMPLEMENTATION OF ITS BULK 15 ORDERING PROCESS "DID NOT MEET AT&T'S NEEDS AS DESCRIBED 16 IN THE CHANGE REQUEST." IS HE RIGHT? 17 No. In my direct testimony on pages 3-6, I described in detail the development 18 A. 19 and implementation of AT&T's change request CR0215 through BellSouth's 20 Change Control Process. That discussion included an overview of the requirements meetings held by BellSouth and the CLECs – including AT&T – to 21 review the parameters of the change request. Neither the wording of the change 22 23 request, nor that of the requirements document for the change request, would lead any reasonable reader to conclude that the change request comprised anything 24 25 other than a bulk ordering process with project-managed provisioning. Notably,

1		Mr. Van de Water does not cite to any specific way in which the change request
2		fails to meet AT&T's needs.
3		
4	Q.	ON PAGE 49 OF HER TESTIMONY, MCI'S MS. LICHTENBERG CITES TO
5		A CCP E-MAIL AS EVIDENCE THAT BELLSOUTH IS NOT WILLING TO
6		IMPROVE ITS HOT-CUT PROCESS. PLEASE ADDRESS THIS
7		ALLEGATION.
8		
9	A.	As Ms. Lichtenberg's own exhibit demonstrates, BellSouth simply replied to a
10		CCP action item request from another party (NeuStar) in the November 19, 2003
11		meeting that BellSouth "has no [current] plans to establish a Bulk Migration
12		collaborative at this time." For Ms. Lichtenberg to infer from that response that
13		there is an unwillingness on BellSouth's part to improve its hot-cut process is a
14		very large leap.
15		
16		BellSouth also responded to NeuStar that there currently is "an effective, seamless
17		Bulk Migration process in place." During the December 10, 2003 meeting of the
18		CCP, BellSouth attempted to close the action item based upon the response
19		previously provided to NeuStar. There was further clarification from the CLECs
20		that the subject of the request was related to improvement of the provisioning
21		aspect of the hot-cut process more so than improvement of the currently
22		established ordering process. BellSouth has an effective, seamless bulk
23		provisioning process in place.
24		

1		It is also important to note that given the CLECs' position in this case, their
2		demands that BellSouth collaborate on improvements to the manual processes are
3		a red herring and an attempt by the CLECs to divert BellSouth's resources from
4		this case. The CLECs have been very clear that they will never support any
5		manual hot cut process, and that they will be impaired without unbundled local
6		switching so long as BellSouth refuses to implement an 8 billion dollar retrofit of
7		its network for electronic loop provisioning. Given their position, there is not a
8		great deal of incentive for BellSouth to collaborate.
9		
10		That being said, specific proposals for changes and improvements to this or any
11		other process that benefit the CLECs and BellSouth are certainly welcome, and
12		can be entertained via the CCP. BellSouth agreed to keep the action item open for
13		a further clarification of its response.
14		
15	FLOV	V-THROUGH
16	Q.	DID THE FCC FIND BELLSOUTH'S FLOW-THROUGH PERFORMANCE
17		TO BE SATISFACTORY?
18		
19	A.	Yes. In its Order approving BellSouth's long-distance application for Florida and
20		Tennessee, the FCC concluded that "BellSouth's OSS are capable of flowing
21		through UNE and resale orders in a manner that affords competing carriers a
22		meaningful opportunity to compete." 1
23		

¹ Order No. 02-331 (BellSouth Florida/Tennessee Order) in FCC WC Docket 02-307, dated December 20, 2002, at paragraph 93 (footnote omitted).

1	Q.	DID BELLSOU	TH MEET ESTA	BLISHED FLO	W-THROUGH	
2		BENCHMARKS	S FOR ALL SEGN	MENTS AT THE	E TIME OF ITS	
3		FLORIDA/TEN	NESSEE APPLIO	CATION?		
4						
5	A.	No. The FCC re	cognized in its O	rder that BellSo	uth had missed th	ne flow-through
6		benchmark for residence and business resale orders, but nonetheless found				
7		BellSouth to be compliant with the checklist. ²				
8						
9		BellSouth's appl	ication provided I	PMAP flow-thro	ugh results for M	lay through
10		July 2002, which	were as follows:	:		
11		,				
		Month	Residence	Business	UNE	LNP

Month	Residence	Business	UNE	LNP
	Resale	Resale		
May 2002	86.74%	69.54%	82.57%	89.75%
June 2002	88.58%	73.74%	83.84%	83.63%
July 2002	87.70%	73.23%	88.50%	88.50%
Benchmark	95%	90%	85%	85%

13

Q. HOW DOES BELLSOUTH'S CURRENT FLOW-THROUGH

14 PERFORMANCE COMPARE TO ITS PERFORMANCE AT THE TIME OF

15 ITS FLORIDA/TENNESSEE APPLICATION?

16

17 A. As it has over time, BellSouth's performance continues to improve, and current

results show strong overall flow-through improvement since the FCC's

² *Id*.

1	Florida/Tennessee Order. ³ Using the same August 2003 timeframe that Mr. Van
2	de Water cites, BellSouth's SQM Flow-through Report showed the following
3	results ⁴ :

Segment	Result	Benchmark
Residence Resale	97.31%	95%
Business Resale	88.67%	90%
UNE Loops	86.19%	85%
UNE-P	96.40%	90%
LNP	84.64%	85%

5

6

Q. ACCORDING TO THE TABLE ABOVE, BELLSOUTH'S BEST FLOW-

7 THROUGH PERFORMANCE OCCURRED IN THE RESIDENCE RESALE

8 AND UNE-P SEGMENTS. PLEASE COMMENT.

9

11

10 A. That is due to BellSouth's conscious efforts to improve flow-through performance in the segments in which the CLECs submitted the vast majority of their LSRs. 12 As an example, the following chart – also from the August 2003 Flow-through 13 Report – supports my point, and is similar to activity for a number of months 14 previous to, and since, August 2003.

15

³ In its Order, at paragraph 93, the FCC recognized that "BellSouth's flow-through performance has improved since the BellSouth Georgia/Louisiana and Multistate applications."

⁴ It is worthwhile to note that BellSouth began reporting in January 2003, at the direction of this Commission, further disaggregation of the UNE segment to the UNE-P and UNE-L level. As a truer comparison to the numbers reported by BellSouth in its Florida/Tennessee application, the combined UNE segment for August 2003 was 96.13% - well above the previous combined UNE benchmark of 85% existing at the time of BellSouth's application.

Segment	Total Mech LSRs	% of Total Electronic LSRs
Residence Resale	129,682	16.4%
Business Resale	8,744	1.1%
UNE Loops	17,943	2.3%
UNE-P	621,101	78.6%
LNP	12,622	1.6%
Total	790,092	100.0%

As the chart demonstrates, the combined Residence and UNE-P segments account for 95% of all CLEC electronic LSR submissions. Based upon the market direction – as dictated by the CLECs' business activities – it is appropriate and logical that BellSouth has concentrated its efforts as it has.

Q. DOES THAT MEAN THAT BELLSOUTH HAS NOT DEVOTED

RESOURCES FOR FLOW-THROUGH IMPROVEMENTS TO THE OTHER

SEGMENTS?

A.

Absolutely not. In fact, BellSouth has initiatives underway to improve flow-through such that all segments consistently meet the flow-through benchmarks. A quarterly flow-through improvement report is filed with this Commission that details those efforts, and provides projections as to when BellSouth will achieve the benchmarks in the segments currently not doing so. BellSouth's most recent Quarterly Report (filed December 12, 2003) is attached as Exhibit RMP-3.

1	Q.	WHEN WILL BELLSOUTH MEET THE FLOW-THROUGH BENCHMARK
2		FOR LNP?
3		
4	A.	As indicated in its most recent flow-through improvement report to this
5		Commission, BellSouth expects to meet the benchmark in April 2004, after the
6		March implementation of Release 15.0 containing some LNP flow-through
7		improvement items.
8		
9	Q.	ON PAGE 44 OF HIS TESTIMONY, MR. VAN DE WATER ALLEGES THAT
10		THE FLOW-THROUGH OF UNE LOOP ORDERS IS A CONSTRAINT ON
11		BELLSOUTH'S CAPACITY TO HANDLE UNE-L ORDERS. MCI'S MS.
12		LICHTENBERG ALLUDES TO THE SAME ON PAGE 25 OF HER
13		TESTIMONY. IS THERE ANY MERIT TO THEIR CLAIMS?
14		
15	A.	Not at all, and it is incorrect for them to suggest that the flow-through rate of the
16		UNE-L segment itself, or as compared to that of another ordering segment (UNE-
17		P), should be the sole basis for the Commission to determine a finding of
18		impairment. In the first place, flow-through for UNE-L has been thoroughly
19		evaluated in a performance measurement docket, and this Commission has
20		recognized that the complexity of UNE-L orders justified a lower benchmark than
21		that for UNE-P. In the second place, and as I demonstrated earlier, BellSouth
22		currently is meeting the benchmark for UNE-L.
23		
24		Further, other factors combine with flow-through to suggest that BellSouth does
25		not now (nor will it in the future) impair CLECs in their ability to order UNE

	loops. This Commission (as did the FCC) should also consider Firm Order
	Confirmation (FOC) and Reject Timeliness, the accuracy of manual service order
	processing and the scalability of associated manual processes. I refer the
	Commission to the testimonies of BellSouth's witnesses Varner and Ainsworth for
	more in-depth discussions on these other factors.
Q.	CAN BELLSOUTH'S ELECTRONIC OSS SUPPORT CONTEMPLATED
	ORDERING VOLUMES IF THERE IS A SHIFT FROM PREDOMINANTLY
	UNE-P ORDERING TO THAT OF UNE-L AS A RESULT OF STATE
	COMMISSION ORDERS ELIMINATING BELLSOUTH'S UNE-P
	OBLIGATIONS?
A.	Yes. Commercial volume demonstrates that BellSouth has scaled its electronic
	ordering OSS to meet projected demands. As noted earlier, there were 790,092
	electronic LSRs submitted in August 2003. That same month, 26,762 LSRs were
	submitted manually, resulting in a total submission volume of 816,854 LSRs.
	Electronic submissions comprised 96.7%.
	It is interesting to note how the electronic LSR volume has grown. For August
	2002, the number of electronic submissions was 607,211. The total for August
	2003 represents a 30.1% increase in just one year. Going back to the total
	electronic submissions for August 2001 (397,640), current volumes represent a
	98.7% increase in two years. This clearly demonstrates BellSouth's ability to

1		scale its electronic ordering USS to meet demands, and BellSouth will continue to
2		do so. ⁵
3		
4	Q.	ON PAGE 11 OF HIS TESTIMONY AND IN HIS CHART ON PAGE 17,
5		AT&T'S MR. VAN DE WATER STATES THAT BELLSOUTH HAD A 23.7%
6		FLOW-THROUGH RATE FOR MIGRATIONS TO UNE-L IN FLORIDA IN
7		AUGUST 2003, AND A 84.4% FLOW-THROUGH RATE FOR MIGRATIONS
8		TO UNE-P FOR THE SAME PERIOD, BASED ON BELLSOUTH'S
9		RESPONSE TO AT&T DISCOVERY. IS HE CORRECT?
10		
11	A.	No. Mr. Van de Water has mischaracterized the data provided by BellSouth in
12		those responses. The numbers he cited were correct, but those numbers do not
13		represent flow-through percentages, nor did BellSouth purport that those numbers
14		represented flow-through percentages.
15		
16		BellSouth's responses to AT&T's Interrogatories 28 and 32 were thorough
17		responses to AT&T's requests to provide the percent of migration orders (Local
18		Service Requests, or LSRs, converting service to UNE-L and UNE-P) that were
19		fully mechanized as compared to the total number of LSRs submitted - including
20		both electronic and manual submissions. AT&T did not ask for flow-through
21		percentages, and BellSouth was very clear in its responses as to what the numbers
22		did and did not represent.
23		

⁵ This comports with the FCC's findings in its *BellSouth Florida/Tennessee Order*. The FCC stated, at paragraph 93, "Further, we find, as we have in previous BellSouth 271 orders, that BellSouth scales its system as volumes increase, and has demonstrated its ability to continue to do so..."

1	Q.	HOW DID BELLSOUTH DERIVE THE PERCENTAGES THAT WERE
2		PROVIDED TO AT&T?
3		
4	A.	The percentages provided by BellSouth in response to AT&T Interrogatories 28
5		and 32 were developed using disaggregated data that is the underlying data used
6		to develop the BellSouth flow-through SQM metric. Added to that was data
7		related to manually submitted LSRs, which is not part of the SQM flow-through
8		calculation.
9		
0		BellSouth went to great lengths to develop this information, as there was no
l 1		existing report to provide it in a manner that was responsive to the interrogatories.
12		BellSouth simply does not retain data in its Performance Measurement and
13		Analysis Platform (PMAP) at that level of disaggregation. ⁶ BellSouth was able to
14		derive from the total number of submitted LSRs a subset of those LSRs submitted
15		only for migration to either UNE-P or UNE-L, and then developed the
16		percentages requested by AT&T.
17		
18	THE	LFACS DATABASE
19	Q.	ON PAGE 36 OF HIS TESTIMONY, MR. STAHLY STATES "BELLSOUTH'S
20		PLANT RECORDS ARE FULL OF ERRORS." LIKEWISE, ON PAGE 34 OF
21		

⁶ The flow-through SQM is a regional measure. The Florida Commission developed benchmarks that require BellSouth to track flow-through for the following segments: Residence Resale, Business Resale, UNE-P, UNE-L and Local Number Portability (LNP). The flow-through SQM for each of the segments includes performance of all electronic LSRs submitted for *all* activity types within the segment for the given month.

1 HER TESTIMONY, MS. LICHTENBERG CLAIMS THAT "LFACS DOES 2 NOT CONTAIN ACCURATE DATA." DO YOU AGREE? 3 4 A. No. CLECs have repeatedly complained of inaccuracies in BellSouth's Loop 5 Facilities Assignment and Control System ("LFACS") database, and such 6 complaints have been repeatedly rejected. This issue was raised in all three of the 7 BellSouth 271 filings (Georgia/Louisiana, Five-State, and Florida/Tennessee) and 8 all three times, the FCC rejected this complaint on the grounds that BellSouth 9 provides CLECs with the same information it provides to itself. BellSouth offers 10 CLECs access to loop makeup data in LFACS via LENS, EDI, and TAG. 11 LFACS is the same database that is used by BellSouth's retail operations. The 12 FCC and this commission have recognized that both competing carriers and the 13 incumbent LEC use the LFACS system. Thus, any inaccuracies in the ILEC's 14 database are not discriminatory, because they affect the ILEC in the same fashion 15 as competing carriers. See Kansas/Oklahoma Order ¶ 126. BellSouth disagrees 16 with Mr. Stahly's allegations of widespread inaccurate data in BellSouth's loop 17 makeup databases. Although BellSouth's LFACS database is not perfect, it is 18 very accurate. 19 20 LFACS is the primary source of BellSouth's loop data, and contains certain 21 minimum information about each pair, including assignment data (cable and pair 22 assignments and the serving terminal information), as well as whether the loop is 23 served by copper or digital loop carrier ("DLC") and whether the loop contains 24 load coils. This information is rarely inaccurate. The inaccuracies referred to by 25 the CLECs are typically associated with detailed loop makeup data (cable makeup

1		and/or loading discrepancies), not assignment data (cable and pair and
2		transmission medium information).
3		
4	Q.	MS. LICHTENBERG SUGGESTS THAT "LFACS SHOULD BE AUDITED
5		FOR ACCURACY AND THAT A PROCESS [SHOULD] BE DEVELOPED TO
6		ENSURE THAT IT IS ACCURATELY MAINTAINED IN REAL TIME WHEN
7		THE ILEC ALTERS OR CHANGES ITS LOOP PLANT." IS THIS
8		NECESSARY?
9		
10	A.	Absolutely not. Ms. Lichtenberg mistakenly believes that BellSouth does not have
11		a process to maintain the data in its LFACS database. This is not true. In the
12		summer of 2001, BellSouth made modifications to its systems that compiled all
13		relevant LMU data in the Corporate Facilities Database ("CFD"), by wire center,
14		on a bulk basis for automatic update to the LFACS database. All LMU data that
15		could be mechanically generated in the CFD was automatically populated in
16		LFACS at that time.
17		
18		Further, in September 2001, BellSouth implemented an enhancement to its
19		mechanized loop makeup process that provides for an electronic query from
20		LFACS to the CFD for loop qualification information. As a result of this
21		enhancement, when a CLEC sends an electronic query to LFACS for loop
22		qualification information and all of the necessary information is not resident in
23		LFACS, an electronic query is automatically launched to the CFD to generate the
24		required additional information. This additional loop qualification information
25		resulting from the queried CFD is automatically combined with the LFACS

1		information and provided to the CLEC. Also, the information obtained from the
2		query to the CFD is populated in the LFACS database and thus, is available going
3		forward for future electronic loop qualification information queries.
4		
5		BellSouth is continuously updating and/or populating LMU data in LFACS as
6		Engineering Work Orders are issued. Additionally, each time the manual Loop
7		Makeup service inquiry process is used, BellSouth loads the resulting LMU
8		information into LFACS for future queries. Thus, the LFACS database improves
9		on a daily basis, and will continue to do so.
10		
11		An "accuracy audit" is unnecessary. BellSouth admits that its LFACS database is
12		not perfect, but disagrees that it is discriminatory in any way, as inaccuracies
13		negatively affect BellSouth just as they negatively impact CLECs. It is in
14		BellSouth's best interest to ensure that LFACS remains very accurate, and
15		BellSouth already does this, as I have described above.
16		
17	Q.	ON PAGE 34 OF HER TESTIMONY, MS. LICHTENBERG STATES "CLECS
18		MUST BE ABLE TO 'RESERVE' A SPARE COPPER FACILITY WHEN A
19		CUSTOMER IS MIGRATING TO ENSURE THAT THAT MIGRATION CAN
20		TAKE PLACE." DO YOU AGREE?
21		
22	A.	Yes, and, in fact, BellSouth already offers this functionality. Using the manual or
23		mechanized loop makeup process, CLECs may perform a query for spare pairs at
24		a customer's location. CLECs have the option to search for loops without
25		reserving them or to search for loops and simultaneously reserve the facilities, if

available. This functionality has been available since 2000. In the mechanized 1 2 loop makeup functionality, the CLEC also has the option of specifying the spare pair selection criteria during the search. For example, the CLEC may specify the 3 4 order that LFACS search for spare pairs, such as first for copper facilities, then 5 universal DLC, then finally integrated DLC. CLECs may reserve pairs for 96 6 hours, or four days. A facility reservation number ("FRN") is returned during the 7 loop makeup transaction. When the FRN is placed on the LSR in the Reservation 8 Identifier ("RESID") field and the LSR is issued within 96 hours of making the 9 reservation, the subsequent service order is issued with the FRN on the order and the reserved facilities are used for the order (when compatible). Thus, CLECs are 10 11 able to determine not only that spare facilities exist, but that spare qualified facilities exist, prior to issuing the LSR. And, they may reserve these pairs for up 12 13 to four days. 14 Currently, reserved pairs may be specified on firm order requests for xDSL 15 (ADSL, HDSL, UCL, UCL-ND), Shared Loop (Line Sharing and Line Splitting), 16 17 and SL-1 loops. If additional products need to allow reservations, the CLEC may 18 request this enhancement by submitting a change request via the Change Control Process ("CCP"). As of December 2003, there are no outstanding requests to 19 20 allow reservations on any other product types. 21 22 Q. ON PAGE 36 OF HIS TESTIMONY, MR. STAHLY RETURNS TO THE TOPIC OF IDLC AND STATES "IDEALLY, BELLSOUTH SHOULD TELL 23 CLECS AHEAD OF TIME WHICH CUSTOMERS ARE SERVED VIA IDLC. 24 IF SUPRA RECEIVED THIS INFORMATION, IT MIGHT BE REASONABLE 25

1		AND FINANCIALLY POSSIBLE TO USE A COORDINATED CONVERSION
2		TO MAKE SURE THE CUT IS SUCCESSFUL." IS THE INFORMATION ME
3		STAHLY SEEKS (THAT IS, WHETHER A GIVEN CUSTOMER IS SERVED
4		VIA IDLC) AVAILABLE TO SUPRA AND OTHER CLECs?
5		
6	A.	Yes. CLECs, including Supra, have been able to access this information
7		electronically since the summer of 2000. Supra can simply go online and
8		perform a loop makeup and readily determine whether working or spare pairs at a
9		customer address are served via IDLC. 100% of BellSouth's loops are populated
10		in LFACS with certain basic information, although not all will have the detailed
11		loop makeup information necessary to qualify a loop. The "basic information"
12		includes the cable and pair, serving terminal, resistance zone, and transmission
13		media. The transmission media (the TRMED field in the LFACS response)
14		identifies whether the loop is served by copper facilities or DLC and reflects the
15		system type (including whether it is an integrated system or a universal system).
16		This field is always populated and is rarely inaccurate. This information is
17		explained in detail in the D/CLEC Pre-Ordering and Ordering Guide for
18		Electronic Loop Makeup (LMU) and may be obtained on the Interconnection
19		website at http://www.interconnection.bellsouth.com/guides/html/bpobr.html .
20		Thus, the capability Supra says it needs has been available to Supra and the other
21		CLECs for over three years.
22		
23		
24		

 $^{^7}$ Electronic LMU has been available in LENS and TAG since the summer of 2000; since June 2003, this functionality has also been available via EDI.

1	LOCA	AL NUMBER PORTABILITY ISSUES
2	Q.	ON PAGE 41 OF HER TESTIMONY, MCI'S MS. LICHTENBERG
3		SPECULATES, WITHOUT PROVIDING ANY EVIDENCE, THAT "IT IS
4		UNCLEAR WHETHER NPAC WILL BE ABLE TO HANDLE THE
5		VOLUMES OF TRANSACTIONS THAT WOULD OCCUR IN A UNE-L
6		ENVIRONMENT." DOES THAT MAKE SENSE?
7		
8	A.	No, it does not. Similarly, Ms. Lichtenberg states on page 7 of her testimony that
9		"outside systems, such as the NPAC, have not had to deal with mass markets
10		customer migrations," and, therefore, she suggests that an "untested and
11		potentially unready" NPAC will not be able to respond under the new UNE-L
12		environment.
13		
14		Although NeuStar (not BellSouth) is the NPAC administrator, BellSouth's
15		positive experience with NeuStar renders Ms. Lichtenberg's speculative concerns
16		on both points unfounded. First and foremost, NeuStar is obligated by its
17		contracts with service providers to handle industry-wide portability volumes
18		regardless of the product (in this case, UNE-L). Second, BellSouth, among other
19		service providers in the Southeast region, supports NeuStar by providing forecast
20		information (via the NPAC Forecasting Group, or NFG) that NPAC uses for
21		capacity planning and implementation. All local, long-distance, and wireless
22		carriers in the region have the same opportunity to provide forecasts through NFG
23		to assist NeuStar in developing an optimally efficient process. It is unknown
24		whether MCI provides such forecasts.
25		

1		To illustrate the NPAC's volume-handling capability, consider that total
2		transactions between BellSouth and the NPAC jumped from 480,831 in
3		November 2002 to 1,219,923 in November 2003 - a significant increase of 154%
4		in a year's time. The NPAC has successfully met the increased transaction
5		demand from BellSouth - as well as that from other service providers in the region
6		- because of due diligence in capacity planning with its regional forecasting
7		partners. There is no rationale for suggesting the same would not be true of
8		NPAC's ability to handle any number of the types of transactions envisioned by
9		Ms. Lichtenberg.
0		
1	Q.	SUPRA'S MR. STAHLY, IN HIS TESTIMONY ON PAGE 23, COMPLAINS
12		THAT "THE NPAC SYSTEM BECOMES CONGESTED AND ADDS TO THE
13		DELAY" OF PORTING ACTIVITY. IS THAT TRULY A PROBLEM?
14		
15	A.	No. Short-duration congestion has occasionally occurred in the past, but it is not
16		the pervasive problem that Mr. Stahly would have the Commission believe, nor
17		should it be a problem in the future. Although any past congestion issues were
18		part of the NPAC's system, BellSouth nonetheless has a vested interest in the
19		overall performance of the LNP process. To that end, BellSouth in 2003 has
20		worked more closely with the NPAC to evaluate and improve the efficiency of
21		NPAC traffic flow to eliminate as much as possible the likelihood of future
22		congestion problems.
23		
24		In 2003, the NPAC implemented several modifications to its server/router
25		configurations to combat congestion, and since then there has been virtually no

1		congestion. Additionally, BellSouth will implement the following improvements
2		in early 2004:
3		• A feature (TN Range) that will allow multiple telephone numbers to be
4		processed as a range of numbers on a single transaction instead of
5		requiring a transaction per individual number, thus fewer total
6		transactions. (Release 14.1, January 14)
7		• Implementation of Dual Service Provider Identification (SPID) numbers to
8		separate different types of port transaction traffic between two NPAC
9		routers instead of the current one router, allowing NeuStar to monitor and
10		spread the transaction traffic load more efficiently. (Release 15.0, March
11		14)
12		
13	CLEC	C-TO-CLEC MIGRATIONS
14	Q.	STARTING ON PAGE 53 OF HIS TESTIMONY, MR. VAN DE WATER OF
15		AT&T, AND STARTING ON PAGE 26 OF HER TESTIMONY, MS.
16		LICHTENBERG OF MCI, RAISE ISSUES RELATED TO CLEC-TO-CLEC
17		MIGRATIONS. SHOULD THE ISSUE OF CLEC-TO-CLEC MIGRATION BE
18		PART OF THIS DOCKET?
19		
20	A.	No. CLEC-to-CLEC migrations are extraneous to this docket. That being said,
21		BellSouth will accept and process orders for CLEC-to-CLEC migrations. The
22		issues about which the CLECs complain are not BellSouth's issues. Rather, they
23		are issues related to the CLEC's transactions with each other. Hence, they are not
24		relevant to the question of whether BellSouth's process impairs the CLECs
25		without access to unbundled local switching. I would like, however, to discuss

1		the collaborative process that is currently underway to develop the rules to govern
2		the migration of UNE loops among the CLECs.
3		
4	Q.	PLEASE DESCRIBE THE END USER MIGRATION COLLABORATIVE
5		AND ITS ACTIONS.
6		
7	A.	The end user migration collaborative is part of the Telecommunications
8		Competitive Interests Forum, which is under the auspices of the Florida
9		Commission. The purpose of the collaborative is to develop the rules for the
10		migration of UNE loops or UNE-L among the CLECs, first for voice grade
11		circuits, and then for data circuits. Some of the participants are: AT&T, Sprint,
12		MCI, Allegiance, Verizon, and BellSouth.
13		
14		The collaborative has submitted a draft of the migration rules for voice grade
15		circuits to the Florida Commission. The Commission requested comments from
16		the participants, which were due on September 29, 2003. The participants
17		updated their comments by November 13, 2003. On November 20, 2003, at a
18		regularly-scheduled meeting of the Telecommunications Competitive Interests
19		Forum, the parties and the Florida Commission discussed four unresolved issues
20		related to the draft migration rules. During the meeting, the parties were able to
21		resolve two of the four issues. During the next meeting on December 15, 2003,
22		the parties were able to resolve one of the two remaining issues. The next
23		meeting of the collaborative is scheduled for late January 2004.
24		
25		

1 Q. WHAT IS THE ONE REMAINING UNRESOLVED ISSUE?

2

A. This table below shows the issue and BellSouth's position on it. This issue is still
 open primarily because of issues related Customer Proprietary Network

5 Information ("CPNI").

٥		
	Issue	BellSouth Position
1	Should the ILEC (as DSP	No, for both CSR and Transition data the old Local
	and/or NSP) be required to	Service Provider (LSP) has the most current, complete,
	provide CSR and Transition	and accurate end user information that will be available
	information for CLEC's	to the new LSP. Only the minimum data required to
	customers?	support the LSP care of their end user service is retained
		by the ILEC.
	DSP=Digital Service Provider	The ILEC is required to notify the current LSP when
	NSP=Network Service	ILEC initiated changes are made to the content of the end
	Provider	user's CSR, Directory Listings, or Transition
	CSR=Customer Service	information. There is no requirement for the current LSP
	Provider	to notify the ILEC for LSP or end user initiated changes
		to these records.
		Further for Transition information, there is no
		requirement or reliable method for the ILEC to associate
		an end user's telephone number or data service to the old
		LSP circuit identification.
		Concerning CSR data, for UNE-P or Resale end-user

Issue	BellSouth Position
	accounts, BellSouth responded to a CCP request (July
	2003) that provided a method where CLECs may view
	the customer service records maintained by BellSouth for
	an end-user currently served by another CLEC. With this
	mechanized process, CLECs may authorize other CLEC
	to view their end-user's records maintained by BellSouth.
	CLECs that have not provided permission to another
	CLEC for viewing their end-user records maintained by
	BellSouth must request this information directly from the
	incumbent CLEC.
	BellSouth CSR content for end-users that have migrated
	to facility-based providers contain only a record that the
	end-user has ported out their telephone number.

Q. WILL THE END USER MIGRATION RULES BE USED REGIONALLY?

A.

After the Florida collaborative establishes the end user migration rules for voice grade circuits, the participants plan to use the rules as guidelines for establishing rules in the other states in BellSouth's region. The participants plan to use the end user migration rules for data circuits in the same manner, once those rules have been established.

1	Q.	ON PAGE 53 OF HIS TESTIMONY, MR. VAN DE WATER COMPLAINS
2		THAT CLEC-TO-CLEC MIGRATIONS OF UNE-L MUST BE PERFORMED
3		MANUALLY. PLEASE COMMENT.
4		
5	A.	BellSouth recognizes that it must be involved in the transfer of loops between
6		CLECs. Consequently, it accepts LSRs from CLECs that are migrating UNE-L.
7		CLECs currently submit these LSRs manually, because the volume of LSRs has
8		not been sufficient to justify the cost to mechanize the flow-through of LSRs for
9		CLEC-to-CLEC migrations of UNE-L. For January through November 2003, the
10		CLECs have requested the migration of only 47 loops. BellSouth notes that no
11		CLEC has submitted a change request to the CCP to mechanize the LSR for
12		CLEC-to-CLEC migrations of UNE-L.
13		
14	Q.	ON PAGES 31-33, MS. LICHTENBERG PROPOSES THE ESTABLISHMENT
15		OF A "DISTRIBUTED CSR DATABASE" TO BE SHARED AND
16		MAINTAINED BY THE CLECS AND ILECS. SHE STATES THAT THIS A
17		REQUIREMENT FOR CLEC-TO-CLEC UNE-L MIGRATIONS. WHAT IS
18		YOUR RESPONSE?
19		
20	A.	BellSouth agrees that the CLECs need the information from each other that Ms.
21		Lichtenberg describes in order to migrate UNE-Ls from one CLEC to another.
22		What BellSouth does not agree with is Ms. Lichtenberg's approach to facilitating
23		the transfer of this information.
24		

1	Q.	WHY DOES BELLSOUTH BELIEVE THAT THE CLECS SHOULD SHARE
2		INFORMATION WITH EACH OTHER?
3		
4	A.	The CLECs should be sharing information with each other (rather than BellSouth
5		servicing as a central depository) because they have the information on their
6		customers served by loops, and BellSouth does not. After a CLEC has
7		established an end user with UNE-L, BellSouth does not know what kind of
8		services the CLEC is providing to the end user. The CLEC maintains its own
9		records, including customer service information, for its UNE-L end users.
10		
11	Q.	HOW DOES BELLSOUTH BELIEVE THAT THIS MATTER SHOULD BE
12		APPROACHED?
13		
14	A.	BellSouth believes that it and the CLECs should continue to deal with the matters
15		surrounding the sharing of CSR information and other data among the CLECs as
16		part of the as part of the Telecommunications Competitive Interests Forum under
17		the Florida Commission.
18		
19		However, there is another, more sensible, approach to this matter, than that
20		proposed by Ms. Lichtenberg. Just as BellSouth has opened its OSS to the
21		CLECs, so the CLECs could be required to maintain their own records and to
22		provide fully-integratable, machine-to-machine electronic interfaces with each
23		other at the CLECs' cost. Various measurements and penalties could also be
24		established to ensure that the CLECs cooperate with each other and provide the
25		necessary information with each other in a timely manner. This is a more direct

1		resolution to the problem than imposing additional unwarranted obligations on
2		BellSouth.
3		
4	Q.	MS. LICHTENBERG, ON PAGES 30-31 OF HER TESTIMONY,
5		SPECIFICALLY DISCUSSES THE AVAILABILITY OF CIRCUIT IDS FOR
6		CLEC-TO-CLEC MIGRATIONS. DO CLECS NEED CIRCUIT IDS TO
7		MIGRATE UNE-P TO UNE-L?
8		
9	A.	No. CLECs do not need circuit IDs to migrate UNE-P to UNE-L, either
10		individually or in bulk, because UNE-P is on BellSouth's switch. CLECs may
11		need circuit IDs when they are performing CLEC-to-CLEC migrations of UNE-l
12		The CLEC that is gaining the end user should obtain the circuit ID information
13		from the CLEC that is losing the end user. The issue of circuit IDs related to
14		CLEC-to-CLEC migrations is being handled by the parties participating in the
15		end user migration collaborative under the Commission's Telecommunications
16		Competitive Interests Forum.
17		
18	Q.	IS IT FAIR TO SAY THAT THE ISSUE OF CLEC-TO-CLEC MIGRATIONS
19		IS BEING ADDRESSED?
20		
21	A.	Absolutely. The Commission does not need to look at that process here. To
22		reiterate, CLEC-to-CLEC migration matters are not relevant to the question of
23		whether BellSouth's process impairs the CLECs without access to unbundled
24		local switching. The appropriate forum for CLEC-to-CLEC migration matters is
25		the Commission's Telecommunications Competitive Interests Forum.

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

3 A. Yes.

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1/2	**	
	₩.	

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		SURREBUTTAL TESTIMONY OF RONALD M. PATE
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		January 28, 2004
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8		TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.
9		
10	A.	My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc.
11		("BellSouth") as a Director, Interconnection Services. In this position, I handle certain
12		issues related to local interconnection matters, primarily operations support systems
13		("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.
14		
15	Q.	ARE YOU THE SAME RONALD M. PATE WHO PREVIOUSLY FILED DIRECT
16		AND REBUTTAL TESTIMONY IN THIS DOCKET?
17		
18	A.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
21		
22	A.	The purpose of my testimony is to respond to certain issues raised in the testimony of
23		Mark David Van de Water of AT&T Communications of the Southern States, LLC
24		("AT&T"), Sherry Lichtenberg of MCI WorldCom Communications, Inc. and MCIMetro
25		Access Transmission Services, Inc. ("MCI"), and Mark Neptune of Supra

1 Telecommunications and Information Systems, Inc. ("Supra"). The issues I will respond 2 to are related to the ordering of batch migrations, flow-through, the LFACS database and 3 loop make-up, and CLEC-to-CLEC migrations. 5 Throughout this testimony, I will use the terms "batch" and "bulk" interchangeably when 6 referring to the process of migrating UNE-P to UNE-L in batches. 7 8 ORDERING UNE-TO-UNE BATCH MIGRATIONS 9 ON PAGE 13 OF HIS TESTIMONY, MR. VAN DE WATER OF AT&T STATES Q. 10 THAT YOUR TESTIMONY DID NOT ACCURATELY REFLECT AT&T'S CHANGE 11 REQUEST FOR THE UNE-TO-UNE BATCH MIGRATION PROCESS. DO YOU AGREE? 12 13 14 No, I do not. In my testimony, I referred to the portion of the change request CR0215 A. 15 that dealt with the establishment of electronic ordering process for UNE-to-UNE batch 16 migrations, but I included the entire change request document as an exhibit to my direct 17 testimony (Exhibit RMP-1). As part of its request, AT&T did, indeed, suggest an option for the provisioning of the cuts: "an option for doing the migration...is that BellSouth and 18 19 AT&T would schedule the cuts...to take place over a weekend. Our experience with this 20 process has been a very low number of customer outages." BellSouth, instead, 21 determined that the practice of providing either coordinated or non-coordinated hot cuts 22 for the CLECs' UNE-to-UNE batch migrations is more flexible than limiting cutovers to 23 just the weekends. Moreover, as described in Mr. Ainsworth's surrebuttal testimony, 24 BellSouth has committed to Saturday cutovers as part of the batch hot cut process. Thus, 25 Mr. Van de Water's complaint is moot.

What is most notable about Mr. Van de Water's testimony is that he focuses on the small issue of weekend cutovers (which, as an aside, AT&T wanted BellSouth to perform at no additional charge) in an attempt to gloss over the fact that AT&T actively participated in, and advocated the development of, the UNE-to-UNE batch migration process. AT&T's attempt to disavow the batch ordering mechanism in this proceeding is disingenuous given AT&T's prior advocacy of the change request.

Q. MS. LICHTENBERG, ON PAGE 9 OF HER REBUTTAL TESTIMONY,

COMPLAINS THAT BELLSOUTH HAS NOT PROVIDED DOCUMENTATION ON

HOW THE BATCH MIGRATION ORDERING PROCESS WORKS. MR. NEPTUNE

OF SUPRA, ON PAGES 11 AND 13 OF HIS TESTIMONY, MAKES A SIMILAR

CLAIM. ARE THEY CORRECT?

A. No, they are not. As I described in my direct testimony, on pages 5-7, BellSouth has provided CLECs with user requirements, business rules (contained in the Local Ordering Handbook or "LOH"), and the UNE-Port/Loop Combination (UNE-P) to UNE-Loop (UNE-L) Bulk Migration CLEC Information Package ("CLEC information package"). The CLEC information package was attached to my direct testimony as Exhibit RMP-2. The business rules (an excerpt from the LOH) and the user requirements are attached to this testimony as Exhibits RMP-4 and RMP-5. The user requirements were distributed via the CCP (of which MCI is a member), and also are posted in the password-protected areas of the CCP web site. The CLEC information package and the LOH are both available on BellSouth's interconnection web site. In addition, for CLECs that use the EDI ordering interface, like MCI, BellSouth has prepared a specifications document for

¹ The CLEC information package is located at http://interconnection.bellsouth.com/guides/html/unes.html. The LOH is located at http://www.interconnection.bellsouth.com/guides/html/leo.html.

1		EDI. This document is attached as Exhibit RMP-6, and is also available on BellSouth's
2		interconnection web site. ² Further, as shown in the chronology on pages 5-6 of my direct
3		testimony, BellSouth held two meetings to discuss the user requirements with the CLECs.
4		MCI did not send a representative to either meeting, which may explain Ms.
5		Lichtenberg's lack of knowledge about the documentation for BellSouth's batch
6		migration ordering process.
7		
8		In addition, for CLECs that use LENS, such as Supra, BellSouth has provided
9		instructions for ordering batch migrations in the LENS User Guide ("LENS Guide") that
10		is posted on BellSouth's interconnection web site for CLECs. ³ Attached to my
11		surrebuttal testimony as Exhibit RMP-7 is the section from the LENS Guide that explains
12		how CLECs can submit requests for batch migrations electronically via LENS.
13		
14	Q.	ON PAGE 10 OF HER TESTIMONY, MS. LICHTENBERG STATES THAT CLECS
15		MUST "DEVELOP NEW SOFTWARE TO ACCEPT AND IMPLEMENT THE NEW
16		NOTIFIERS THAT WOULD GO WITH THIS PROCESS. CLECS WOULD GET AN
17		FOC FOR THE 'BATCH' ORDER AND THEN FOCS FOR THE INDIVIDUAL
18		LSRS." PLEASE COMMENT.
19		
20	A.	Ms. Lichtenberg's information is inaccurate. With respect to FOCs, after BellSouth's
21		OSS has received the batch migration request, BellSouth's sends an acknowledgement to
22		the CLEC. This is not an FOC. If the CLEC were sending individual LSRs instead of

² The specifications for ELMS6 and for TCIF9 are located at http://www.interconnection.bellsouth.com/guides/html/leo.html. ELMS6 and TCIF9 are the two industry standards supported by BellSouth.

supported by BellSouth.

3 The LENS Guide is located at http://www.interconnection.bellsouth.com/guides/html/lens tafi.html. I would like to note that this excerpt contains one small error. It states that a CLEC can submit two to 100 EATNs. That should be two to 99 EATNs or Existing Account Telephone Numbers. BellSouth has opened a documentation defect change request to correct the LENS Guide; the change request number is CR1669.

1 the batch migration request, the CLECs would receive an acknowledgement for each 2 LSR. Thus, there is nothing new or different with this process. Contrary to what Ms. 3 Lichtenberg believes, the CLEC will not receive an FOC for both the batch migration 4 request and the individual LSRs that are generated from the batch migration request. 5 BellSouth only sends an FOC to the CLEC after the individual LSRs have been accepted 6 by BellSouth's Service Order Communications System (SOCS). Again, this same 7 sequence of notification is also followed for individually-submitted LSRs. 8 9 With respect to software development, if a CLEC chooses to use machine-to-machine 10 electronic ordering interfaces, such as EDI or TAG, the CLEC must program its side of 11 the interface whenever it chooses to use any new functionality that BellSouth has 12 implemented. That is the nature of machine-to-machine interfaces. As the Commission 13 will recall, the CLECs were vocal advocates for the necessity of machine-to-machine 14 interfaces. Moreover, given that a CLEC submitted this change request (CR0215), and 15 the CLECs prioritized it and publicly criticized BellSouth until it was implemented, they 16 should not now be heard to complain that the change requires software work on their side 17 of the interface. 18 19 ON PAGES 11 AND 13 OF HIS TESTIMONY, MR. NEPTUNE CRITICIZES O. 20 BELLSOUTH'S PROJECT MANAGER. ARE MR. NEPTUNE'S CRITICISMS 21 VALID? 22 23 A. No, they are not. Mr. Neptune appears to be confused over the role of the project 24 manager for batch migrations. As Mr. Ainsworth testified on page 23 of his direct testimony, the role of the project manager is to be a liaison between the CLEC and 25

BellSouth's network operations. The project manager coordinates due dates, advises the CLEC of potential delays or problems, and advises the CLEC of completion of the project. The role of the project manager is not to explain how a CLEC completes LSRs and uses the electronic ordering interfaces. Instead, the CLEC should ask its Local Service Manager ("LSM") any questions related to completing and submitting LSRs via the electronic interfaces. Information about the roles of the Account Team and CLEC Care Team, of which the LSM is a member, is posted on BellSouth's interconnection web site. BellSouth most recently informed Supra of the names of Supra's CLEC Care Team and Account Team on September 4, 2003.

Q. ON PAGES 3 AND 11 OF HIS TESTIMONY, MR. NEPTUNE COMPLAINS THAT IN ORDER TO SUBMIT BATCH MIGRATION ORDERS ELECTRONICALLY VIA LENS, SUPRA MUST REFORMAT THE EXCEL SPREADSHEET INTO A TAB DELIMITED TEXT FILE. PLEASE COMMENT.

A.

I do not understand why Mr. Neptune is making an issue of something that is so easy to do. In order to reformat a file in the Microsoft Excel format (Excel files have the .xls extension) into a file with the tab delimited text format (an extension of .txt), Supra simply can save the Excel file as a text file using the "save as" function in Excel. This task takes just a few seconds. BellSouth has clearly explained this to CLECs in the LENS Guide. Pages UNE-88 and UNE-89 of Exhibit RMP-7 (excerpts from the LENS Guide) explain how to create the batch package file in Excel, how to convert it to a tab delimited text file, and how to upload the file to LENS for submission to BellSouth. If Supra does not choose to use a spreadsheet to submit its bulk migration requests, it can

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⁴ http://www.interconnection.bellsouth.com/contact/faqs.html

1		type the information directly into LENS, as described on pages UNE-83 through UNE-87 $$
2		of Exhibit RMP-7.
3		
4	Q.	ON PAGES 13 AND 14 OF HIS TESTIMONY, MR. NEPTUNE STATES THAT
5		DESPITE THE TESTIMONY THAT BELLSOUTH HAS ALREADY FILED, SUPRA
6		BELIEVES CLECS STILL MUST SUBMIT INDIVIDUAL LSRS AS PART OF THE
7		ELECTRONIC ORDERING PROCESS FOR BATCH MIGRATIONS. IS HE
8		CORRECT?
9		
10	A.	No. As I explained in my direct testimony, starting on page 10 at line 6, BellSouth's
11		systems generate the individual LSRs from the batch migration request, once it receives
12		an accurate and complete batch migration request. BellSouth has two systems, LSR-
13		CMG and BOG, that reside between the CLEC electronic interfaces (EDI, TAG, and
14		LENS) and BellSouth's service order generation systems that generate the individual
15		LSRs from the batch migration request. There are two systems because BellSouth
16		supports two industry standards, TCIF9 and ELMS6. LENS currently uses the ELMS6
17		standard. LSR-CMG stands for LSR Complex Message Generator ("LSR-CMG")
18		supports TCIF9 and Bulk Order Generator ("BOG") supports the ELMS6 standard.
19		
20	Q.	MR. VAN DE WATER OF AT&T, ON PAGE 9, AND MS. LICHTENBERG, ON
21		PAGE 10, COMPLAIN THAT BELLSOUTH IS NOT WILLING TO ESTABLISH A
22		COLLABORATIVE FOR THE BATCH HOT CUTS PROCESS. PLEASE
23		COMMENT.
24		

1 A. As I stated in my rebuttal testimony on pages 4-5, given the CLECs' position in this case, 2 their demands that BellSouth collaborate on improvements to the UNE-to-UNE batch 3 migration manual processes is an attempt by the CLECs to divert BellSouth's resources 4 from this case. Under ordinary circumstances BellSouth fully supports collaborative 5 improvements to its processes, such as the Line Sharing Collaborative. As Mr. 6 Ainsworth has also testified, on page 33 of his rebuttal testimony, in this instance, 7 BellSouth cannot support the CLECs' requests for collaboration. The CLECs have 8 admitted that no matter how many improvements BellSouth makes to its manual process, 9 the CLECs will continue to argue they are impaired without an eight (8) billion dollar 10 retrofit of BellSouth's network to allow for automated hot cuts. BellSouth also notes that 11 the CLECs' requests for collaboration only have occurred after the commencement of the 12 state impairment cases. 13 14 That being said, BellSouth welcomes specific proposals for changes and improvements to 15 this or any other process that would benefit the CLECs and BellSouth. During the 16 December 10, 2003 meeting of the CCP, the CLECs stated that they were primarily 17 interested in a process to improve the provisioning aspect of the hot-cut process, which is manual, rather than the currently established ordering process. On December 15, 2003, 18 19 ITC^DeltaCom, on behalf of the CLECs, provided a written request and some materials 20 that it asked BellSouth to consider. BellSouth responded directly to ITC^DeltaCom on 21 January 7, 2004, and forwarded its response to all the CLECs participants in the CCP on 22 January 8, 2004. In this response, BellSouth stated, "CCP will review recommended process changes for the Bulk migration process. Please submit specific process changes 23 within the scope of CCP via change request(s)." As of January 23, 2003, the CLECs 24 25 have not submitted any specific process changes.

1 1 6 8

1 Q. DID THE CLECS HAVE THE OPPORTUNITY TO COLLABORATE ON THE 2 DEVELOPMENT OF THE UNE-TO-UNE BATCH MIGRATION PROCESS? 3 4 A. Yes. CLECs had the opportunity to collaborate on the development of the batch ordering 5 component of the batch hot cut process when BellSouth developed the process in 6 response to change request CR0215. Very few CLECs attended the user requirements 7 meetings in 2002. MCI (including WorldCom) and Supra did not. No CLEC used the 8 escalation or dispute process of the CCP for any questions or problems that it had with 9 the development of the process. Thus far, no CLEC has submitted a change request to 10 alter the process established by CR0215. Only when the state impairment proceedings 11 started did the CLECs begin to complain about this process. 12 13 CLEC-TO-CLEC MIGRATIONS 14 O. ON PAGE 7 OF HER TESTIMONY, MS. LICHTENBERG OF MCI COMPLAINS 15 THAT BELLSOUTH IGNORES CLEC-TO-CLEC BULK MIGRATIONS. WHAT IS 16 YOUR RESPONSE? 17 18 A. I discussed CLEC-to-CLEC migrations on pages 18-23 of my rebuttal testimony, so 19 BellSouth has not ignored this type of transaction. To reiterate, CLEC UNE-L to CLEC 20 UNE-L migrations are extraneous to this docket, because the issues that the CLECs have 21 complained of are not BellSouth's. Instead, they are related to the relationships between 22 and among CLECs. Hence, they are not relevant to the question of whether BellSouth's 23 process impairs the CLECs without access to unbundled local switching. Moreover, as 24 set forth in Mr. Ainsworth's surrebuttal testimony, BellSouth has agreed to implement

1 CLEC-to-CLEC UNE-L migrations in the batch hot cut process. Thus, this issue is moot 2 with respect to BellSouth's involvement in the process. 3 IN YOUR REBUTTAL TESTIMONY YOU DISCUSSED A COLLABORATIVE 4 0. THAT IS CONSIDERING CLEC-TO-CLEC UNE-L MIGRATIONS. PLEASE 5 6 COMMENT. 7 8 As I discussed, on page 19 of my rebuttal testimony, the end user collaborative of the A. 9 Florida Commission's Telecommunications Competitive Interests Forum is considering 10 the rules for CLEC-to-CLEC migrations. The parties have developed draft rules for 11 voice grade circuits and have submitted them to the Commission. Once the rules for 12 voice grade loops have been finalized, the parties will develop rules for data circuits. 13 After the rules have been established in Florida, the participants plan to use the Florida 14 rules as the guidelines for establishing rules in the other states in BellSouth's region. 15 16 IS THERE ANOTHER VENUE WHERE CLEC UNE-L TO CLEC UNE-L Q. MIGRATIONS ARE BEING DISCUSSED? 17 18 19 Yes. The industry standards organization, the Ordering and Billing Forum ("OBF"), has A. 20 begun to consider the issue of multi-provider migrations, including CLEC-to-CLEC 21 migrations. AT&T is one of the sponsors of this issue at the OBF, along with Alliance 22 for Telecommunications Industry Solutions ("ATIS") and Cap Gemini Ernst & Young. 23

1	FLO	<u>W-THROUGH</u>
2	Q.	IN HER REBUTTAL TESTIMONY ON PAGE 4, LINES 1-7, MCI'S MS.
3		LICHTENBERG DISCUSSES WHAT SHE PERCEIVES TO BE BELLSOUTH'S
4		RELATIVE FLOW-THROUGH RATES FOR UNE-P AND UNE-L LSRS. PLEASE
5		COMMENT.
6		
7	A.	Unfortunately, Ms. Lichtenberg did not have the opportunity to read my rebuttal
8		testimony in this docket prior to filing her own rebuttal testimony. AT&T's Mr. Van de
9		Water, on page 11 of his direct testimony, made a similar mischaracterization of the data
10		I provided in response to AT&T's Interrogatory No. 28. On pages 11-12 of my rebuttal
11		testimony, I provided a full explanation of the true meaning of the numbers provided in
12		that interrogatory, and stated that the numbers do not represent flow-through, nor did the
13		AT&T interrogatory specifically request flow-through information.
14		•
15	Q.	REGARDLESS OF MS. LICHTENBERG'S CONFUSION, DID BELLSOUTH'S UN E
16		P AND UNE-L FLOW-THROUGH PERFORMANCE FOR FLORIDA EXCEED THE
17		COMMISSION'S BENCHMARKS FOR THE PERIOD IN QUESTION?
18		
19	A.	As I explained on pages 6-7 of my rebuttal testimony, BellSouth's flow-through rate for
20		UNE-P (96.40% vs. 90% benchmark) and UNE-L (86.19% vs. 85% benchmark) both
21		exceeded the Commission's benchmarks for August 2003.
22		
23	Q.	MS. LICHTENBERG FURTHER STATES ON PAGE 6, LINE 13 OF HER
24		TESTIMONY THAT "MOST UNE-L ORDERS FELL OUT FOR MANUAL

1 PROCESSING IN BELLSOUTH'S ORDERING SYSTEM AND THEN HAD TO BE 2 PROVISIONED MANUALLY AS WELL." PLEASE COMMENT. 3 4 A. I responded to her same allegation about ordering systems (as well as a similar one made 5 by Mr. Van de Water) on page 9 of my rebuttal testimony. From the previous answer, it 6 is clear that "most" UNE-L requests do flow through the ordering systems. I explained 7 further that this Commission has recognized in its performance measurement docket that 8 the complexity of UNE-L requests warrants a lower benchmark, and that other factors 9 should be considered with flow-through percentages to determine that BellSouth does not 10 now (nor will it in the future) impair CLECs in their ability to order UNE loops. 11 12 For a discussion of her allegation regarding manual provisioning, I refer the Commission 13 to the testimony of Mr. Ainsworth. 14 15 O. DO BELLSOUTH'S SYSTEMS PROVIDE FOR ELECTRONIC SUBMISSION OF 16 LSRS WITH FLOW-THROUGH FOR MIGRATING ACCOUNTS FROM UNE-P TO 17 UNE-L? 18 19 Yes. In December 2003, one Florida-based CLEC submitted electronically via the LENS A. 20 interface more than 8,700 LSRs to migrate accounts from UNE-P to UNE-L with LNP. 21 Preliminary data reflects a 99% flow-through rate for those LSRs, greatly contributing to 22 an improvement in the overall LNP flow-through rate for December 2003. This CLEC's 23 submissions accounted for approximately 45% of all electronic LNP submissions that 24 month, and the preliminary overall LNP flow-through rate was 93%. 25

3

1	SCA.	LABILITY/THIRD PARTY TESTING
2	Q.	MS. LICHTENBERG, IN HER REBUTTAL TESTIMONY (PAGE 5, LINES 11-21),
3		AND MR. VAN DE WATER, IN HIS REBUTTAL TESTIMONY (PAGE 7, LINES 5-
4		17), DISMISS YOUR DIRECT TESTIMONY REGARDING THIRD PARTY
5		TESTING, SPECIFICALLY, THE CRITERIA AND RESULTS OF TEST TVV-2.
6		PLEASE RESPOND.
7		
8	A.	The purpose of the KPMG (now BearingPoint) TVV-2 was to test the ability of
9		BellSouth's systems to handle future CLEC ordering volumes over a wide range of
10		product/service requests types, including various UNE-L scenarios. As I stated in my
11		direct testimony, BellSouth's systems were judged capable of handling a significant
12		increase in CLEC ordering volumes, regardless of whether the CLEC orders are the types
13		of orders involved in hot cuts. This Commission understands the breadth of its Third
14		Party Test and understands that it was designed to assess future CLEC ordering volumes.
15		BellSouth's Mr. Ainsworth has additional testimony on the KPMG tests of hot-cut
16		provisioning capability.
17		
18	LOO	P MAKE-UP AND THE LOOP FACILITIES ASSIGNMENT AND CONTROL SYSTEM
19	("LF.	ACS") DATABASE
20	Q.	ON PAGE 8, LINES 16-21, MR. NEPTUNE OF SUPRA STATES THAT
21		BELLSOUTH'S HOT CUT PROCESS "DOES NOT PROVIDE FOR LOCAL LOOP
22		VERIFICATION" AND FURTHER STATES "BST DECLINES TO IDENTIFY THESE
23		CUSTOMERS [REQUIRING A FACILITY CHANGE FROM IDLC TO COPPER OR
24		UDLC] PRIOR TO THE CONVERSION." IS HE CORRECT?
25		

1	A.	No. CLECS, including Supra, may perform loop verification of any working loop prior
2		to requesting a hot cut/migration. CLECs may perform an electronic loop makeup pre-
3		order transaction to determine if a loop is presently served by copper, universal DLC, or
4		integrated DLC. The Transmission Medium field indicates whether a loop is served by
5		copper facilities or, when served by digital loop carrier, indicates the system type. ⁵ This
6		information is clearly documented in Chapter 5 of the D/CLEC Pre-Ordering and
7		Ordering Guide for Electronic Loop Makeup (LMU) and may be found on the
8		interconnection website. ⁶
9		
10	Q.	ON PAGE 12, LINES 9-12, MR. NEPTUNE STATES THAT THE CLEC MUST RE-
11		QUALIFY EVERY LINE BEFORE SUBMITTING ITS LSRS TO ASSURE NOTHING
12		HAS CHANGED IN THE 14-DAY BUSINESS INTERVAL. IS THIS NECESSARY?
13		
14	A.	No. A CLEC may submit its bulk spreadsheet to BellSouth's Project Manager without
15		initially qualifying the loop. When the Project Manager returns the spreadsheet with the
16		BOPI and due date indicated, the CLEC may, at that time, perform a loop makeup pre-
17		order query to qualify the loop(s) for the first and only time. ⁷ The majority of loops do
18		not need to be qualified. As BellSouth's witness Milton McElroy testified on pages 9-10
19		of his rebuttal testimony, BellSouth reviewed its existing base of UNE-L accounts to
20		determine the actual class of service make-up. The analysis indicated that approximately
21		87% of actual UNE-L migrations were for Service Level One (SL1) voice grade loops
22		while 7% of the UNE-L migrations were for Service Level Two (SL2) voice grade loops.

⁵ The "TRMED" field identifies the Transmission Medium Type or system type supporting the loop segment (e.g., METAL, SLC96). A value of "METAL" indicates a copper facility. A value of anything other than "METAL" indicates the system type of the serving DLC. For those facilities that are all copper, the transmission media type of "METAL" will be populated for all segments. This data field is always populated.

⁶ http://www.interconnection.bellsouth.com/guides/html/bpobr.html

As I stated on page 7 of my direct testimony, the batch migration request must be for the same loop type; the existing UNE-P combinations must be non-complex, and the loops must all be in the same wire center.

1		The remaining 6% were distributed across the other designed and non-designed UNE-L
2		classes of service. Of the 6%, the only loops that must be qualified are UCL-Designed,
3		ADSL, and HDSL loops. UCL-ND, SL1 or SL2 loops may optionally be loop qualified
4		prior to LSR submittal. In those instances where the existing loop is served by IDLC, the
5		CLEC may perform a second loop make-up pre-order query to determine if spare copper
6		or universal DLC facilities exist at that location and they may, at the same time, reserve
7		those facilities.
8		
9	Q.	IS THE LOOP MAKE-UP PRE-ORDER TRANSACTION DIFFICULT?
10		
11	A.	No. A single loop make-up transaction takes, on average, 60-90 seconds to complete. If
12		spare facilities must be investigated/reserved, an additional 60-90 seconds is required for
13		a second transaction.
14		
15	Q.	ON PAGE 12, LINES 21-22, MR. NEPTUNE IMPLIES THAT BELLSOUTH'S OSP
16		ASSIGNMENT DATABASE CONTAINS A SIGNIFICANT ERROR RATE. IS HE
17		CORRECT?
18		
19	A.	No. I have already addressed this complaint fully on pages 11-14 of my rebuttal
20		testimony filed on January 7, 2004.
21		
22	Q,	DOES THIS CONCLUDE YOUR TESTIMONY?
23		
24	A.	Yes.
25		

1		(Transcript	continues	in	sequence	with	Volume	7.)
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1	STATE OF FLORIDA)
2	: CERTIFICATE OF REPORTER COUNTY OF LEON)
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4	I, LINDA BOLES, RPR, Official Commission
5	Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
6	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been
7	transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said
8	proceedings.
9	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative
10	or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in
11	the action.
12	DATED THIS 26th DAY OF FEBRUARY, 2003.
13	
14	LINDA BOLES, RPR
15	FPSC Official Commission Reporter (850) 413-6734
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