FPSC - COMMISSION CLERK

ORIGINAL

Nancy B. White General Counsel-Florida

BellSouth Telecommunications, Inc. 150 South Monroe Street Room 400 Tallahassee, Florida 32301 305 347-5558

February 4, 2004

Mrs. Blanca S. Bayó
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 030852-TP

Dear Ms. Bayó:

Enclosed are an original and fifteen copies of BellSouth Telecommunications, Inc.'s Surrebuttal Testimony of A. Wayne Gray, Shelley W. Padgett, and Dr. Aniruddah Banerjee, which we ask that you file in the captioned docket. Also enclosed is a revised prehearing statement, which includes two exhibits to the testimony of A. Wayne Gray, which were inadvertently omitted from the original prehearing statement, and which also includes the surrebuttal exhibits.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

RECEIVED & FILED

WIND B White

PSC-BUREAU OF RECORDS

Nancy B. White

Nancy B. Wh

CERTIFICATE OF SERVICE Docket No. 030852-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via

Electronic Mail, Hand Delivery* and FedEx this 4th day of February 2004 to the

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(+) signed protective agreement

(*) via Hand Delivery

(**) via Electronic Mail only

1	BELLSOUTH TELECOMMUNICATIONS, INC.
2	SURREBUTTAL TESTIMONY OF A. WAYNE GRAY
3	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4	DOCKET NO. 030852
5	FEBRUARY 4, 2004
6	
7 Q .	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8	POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9	("BELLSOUTH").
0	
11 A.	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	
5 Q .	ARE YOU THE SAME A. WAYNE GRAY WHO CAUSED TO BE FILED
16	DIRECT TESTIMONY BEFORE THE FLORIDA PSC IN THIS CASE?
17	
18 A.	Yes.
19	
Q. Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
21	
22 A.	My surrebuttal testimony responds to erroneous assertions made by several witnesses in
23	their rebuttal testimonies, focusing on general network issues, network costs, and co-
24	carrier cross-connect issues.
5	

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GENERAL NETWORK ISSUES 1 2 MANY CLEC WITNESSES CONTEND THAT AS A RESULT OF THEIR 3 Q. PARTICULAR NETWORK ARCHITECTURE, THEY DO NOT SELF-PROVIDE 4 DEDICATED TRANSPORT. (E.G., BRADBURY, REBUTTAL P. 15). PLEASE 5 COMMENT. 6 7 While Ms. Padgett will address such arguments in more detail in connection with her 8 A. 9 triggers analysis, from a network perspective it makes no difference whether a call is routed directly over transport facilities from an ILEC central office A to another ILEC 10 central office B, or whether it is routed indirectly from A to a CLEC collocation 11 12 arrangement, then to a CLEC switch, and then to B. That is, a CLEC with a network 13 architecture that routes calls from central office A to central office B through an 14 intermediate CLEC switch or CLEC collocation is operationally ready to provide 15 transport from A to B. 16 17 I would also note that, while I am not a lawyer, some of the language contained in the 18 rebuttal testimony of the CLEC witnesses seems to focus more on definitional smokescreens than on actual network issues. For example: 19 20 21 "AT&T does not self-provide any 'dedicated transport' facilities in Florida as that term is defined in the TRO." (Bradbury rebuttal, p. 15) (first emphasis in original; second 22 23 emphasis added). "FDN maintains that it has deployed dedicated transport meeting the criteria of the self-24 provisioning trigger " (Hand rebuttal, p. 4) (emphasis added). 25

"Neither the 'backhaul' of traffic from an MCI collocation to an MCI switch, which I 1 discuss below, nor a 'route' consisting of a path between an MCI collocation in wire 2 center B and that switch, constitutes 'dedicated transport." (Hardin rebuttal, p. 6, 3 4 original quotation marks). 5 All of these witnesses demonstrate the common, Alice-in-Wonderland-like attempt that 6 Ms. Padgett describes to define terms as they wish, rather than how the FCC defined 7 them. 8 9 MCI SUGGESTS THAT INDIRECT ROUTES THROUGH A SWITCH 10 Q. 11 INTRODUCES ADDITIONAL POINTS OF FAILURE (HARDIN REBUTTAL, P. 9). CAN YOU ADDRESS THIS? 12 13 14 A. Yes. For all practical purpose, an indirect route and a direct route are equivalent. Indirect routes with multiple intermediate switches are used all the time in any voice or 15 data network and the number of intermediate switches is typically higher for interLATA 16 routes (especially for routes across the country). CLECs typically use indirect routes to 17 route traffic between two ILEC central offices even if they buy dedicated transport from 18 the ILEC since their logical architecture is still a hub and spoke with every circuit passing 19 through a CLEC switch. I find it puzzling that MCI raises the specter of network failure 20 for such a standard architecture, when MCI's network using this design is used by many 21 government agencies, and federal contracts typically require network reliability. 22 Moreover, even BellSouth's network often uses intermediate switching equipment on 23 routes between its central offices, although this fact is invisible to CLECs buying 24

dedicated transport from BellSouth who neither ask nor are able to notice when this kind 1 2 of routing occurs. 3 4 Q. CLECS CONTEND ALSO THAT ADDITIONAL NETWORK EQUIPMENT IS NEEDED BEFORE THEIR FACILITIES CAN PROVIDE TRANSPORT. WHAT 5 IS YOUR RESPONSE? 6 7 8 A. The point that I was making in my direct testimony, which the CLEC witnesses appear to 9 have overlooked, is that regardless of the *specific* type of network architecture deployed, CLECs are capable of performing the necessary tasks to subdivide capacity as needed. 10 Although AT&T may contend that its network exhibit (JMB-R2) "better depict[s] the full 11 12 requirements for channelization" (Bradbury rebuttal, p. 25) – my testimony explains that AT&T's alleged "need" for additional equipment is one that can be met easily. 13 14 Moreover, efficient carriers typically order the line cards, multiplexers, and other equipment necessary to subdivide capacity on an "as-needed" basis to preserve 15 investment capital. (See Anderson rebuttal, p. 5) ("we are continually optimizing the 16 distribution network..."). Likewise, channel banks are widely available and can be 17 provisioned in reasonable time frames. (Dickerson Rebuttal, pp. 22-23.) The fact that a 18 given carrier chooses to wait to deploy equipment does not mean that such a carrier is not 19 "operational ready" to use transport facilities. Put simply, a carrier with the ability to 20 channelize OCn level facilities is "operationally ready" to provide transport at DS1 and 21 DS3 capacity levels. 22 23

24

1		NETWORK COST ISSUES
2		
3	Q.	MR. DICKERSON, TESTIFYING ON BEHALF OF SPRINT, RAISES A
4		NUMBER OF CONCERNS RELATING TO COST ISSUES. HOW DO YOU
5		RESPOND?
6		
7	A.	Overall, Mr. Dickerson raises a number of concerns that are simply invalid, with one
8		exception. BellSouth has revisited its conclusions relating to intrabuilding network cable
9		and termination ("INCT"). Mr. Dickerson criticized BellSouth's assumption that INCT
10		is available 50% of the time. (Dickerson Rebuttal, p. 23). BellSouth has sought
11		additional discovery from CLECs on this issue, and while responses have not yet been
12		received, BellSouth has chosen to modify this input with the conservative assumption
13		that a CLEC is required to purchase INCT in 100% of the buildings that it serves.
14		
15	Q.	HAVE YOU MADE ANY OTHER MODIFICATIONS TO THE NETWORK
16		COST ASSUMPTIONS?
17		
18	A.	I have made an additional change. BellSouth has modified the costs associated with
19		Light Guide Cross-connect (LGX) equipment by replacing the original cost used with
20		that of an entire 12-port panel for the off-net building or central office being connected
21		and – to be conservative – a portion of a new panel for existing nodes (even though these
22		nodes are likely to already have spare LGX ports). The revised network costs
23		assumptions are shown in Exhibits AWG-3 and AWG-6, which replace the prior versions
24		of these exhibits.

1 Q	TO ANALYZE THE NETWORK COSTS ASSOCIATED WITH POTENTIAL	
2	DEPLOYMENT, IS IT NECESSARY TO INCLUDE "LOCATION SPECIFIC	
3	DATA"(DICKERSON REBUTTAL, P. 3)? SIMILARLY, MR. BALL CONTENDS	
4	THAT IT IS INAPPROPRIATE TO USE "HYPOTHETICAL" COSTS	
5	(REBUTTAL P. 58).	
6		
7 A.	The complaints of Mr. Dickerson and Mr. Ball are without merit. To analyze network	
8	costs the specific location of a route is not required beyond the distance- and capacity-	
9	specific costs already included in the model. The other costs I have addressed are	
10	common to any route, and are based upon the costs that this Commission has examined	
11	using TELRIC principles.	
12		
13 Q	MR. DICKERSON CLAIMS THAT SPRINT CANNOT OBTAIN THE SAME	
14	PRICES FOR EQUIPMENT AS BELLSOUTH DOES. (REBUTTAL, P. 35). MR	
15	DICKERSON ALSO DISPUTES BELLSOUTH'S CONDUIT COSTS. FCCA	
16	WITNESS BALL CONTENDS THAT BELLSOUTH'S ANALYSIS SHOULD NOT	
17	USE TELRIC COSTS. (REBUTTAL, PP. 58-59). WHAT IS YOUR RESPONSE?	
18		
19 A	The costs BellSouth has used are taken directly from the cost study that BellSouth filed in	
20	the Commission's most recent UNE cost case, which underlie the UNE rates approved by	
21	this Commission and are meant to reflect the costs associated with deploying an efficient	
22	network. In the absence of evidence to support Mr. Dickerson's claim, these are the most	
23	appropriate rates to use.	
24		
25		

INACCURATE PLANT MIX. IS THIS A VALID CLAIM? 2 3 No, it is not. Mr. Dickerson takes exception to BellSouth's assumption that for aerial 4 A. plant, and relies upon Rule 25-4.088 in support of his view. My reading of this rule does 5 not support his argument. The applicable rule does not preclude the placement of new 6 aerial plant, and is cited in full below. 7 8 9 25-4.088 Applicability. 10 (1) Extensions of telephone distribution lines applied for after 11 the effective date of these rules, and necessary to furnish 12 permanent telephone service to all structures within a new 13 residential subdivision, or to new multiple-occupancy buildings, 14 shall be made underground; except that the utility may not be 15 required to provide an underground distribution system in those 16 instances where the applicant has elected to install an overhead 17 electric distribution system. 18 Source: http://www.psc.state.fl.us/rules/index.cfm 19 20 Q. PLEASE DISCUSS MR. DICKERSON'S CONCERNS RELATING TO RIGHTS-21 OF-WAY. (PP. 40-41). 22 Mr. Dickerson claims that BellSouth has not considered the costs of delays or access to 23 A. 24 rights-of-way and implies that constructing lateral extensions are difficult. In effect, Mr. Dickerson suggests that there are unique or atypical barriers with constructing extensions, 25

MR. DICKERSON ALSO CLAIMS (P. 36) THAT BELLSOUTH HAS USED AN

1 Q.

1 which is not the case. While there are obstacles to any construction project (such as existing water, sewer, and power lines), Sprint does not face any unique obstacle that any 2 3 other provider or BellSouth does not face, which includes access to buildings. All carriers incur such costs, and as an experienced carrier Sprint has the experience and 4 ability to negotiate such issues. 5 6 7 I would note also that the costs filed with the Commission include what BellSouth pays for Right of Way (ROW) and other permitting fees both at the state and the municipality 8 9 level. Specifically, these and other miscellaneous fees are accounted for: 1) in the inplant factor that is applied to the base material cost to determine the fully-loaded capital 10 cost; 2) in the "Ad Valorem & Other Tax" factor that is used to determine the non-plant-11 12 specific operating expense. These factors include ROW, municipal license taxes, state privilege taxes, state self-insurer's tax, and taxes levied upon the assessed value of 13 14 property. 15 CO-CARRIER CROSS CONNECT ISSUES 16 17 ITC DELTACOM WITNESS STEVE BROWNWORTH QUESTIONS THE 18 Q. AVAILABILITY OF CO-CARRIER CROSS-CONNECTS ("CCXCs") 19 (REBUTTAL, P. 5). PLEASE ADDRESS THIS. 20 21 The direct testimony of Mr. John Ruscilli and my rebuttal and surrebuttal testimony in 22 A. Docket No. 030851 addresses this concern and provides additional details concerning 23 how BellSouth provides co-carrier cross-connects. Without restating this testimony in 24

detail, I would note simply that BellSouth makes CCXCs available on a non-

1	discriminatory basis and nothing in Mr. Brownworth's testimony suggests otherwise.
2	Moreover, there are many CCXCs in place in Florida today, there is language in the
3	interconnection agreement between ITC^DeltaCom and BellSouth that addresses this
4	issue, ITC^DeltaCom has the ability to use an approved vendor to install CCXCs for it in
5	BellSouth central offices, and ITC^DeltaCom can avail itself of BellSouth's January
6	2004 tariff offering which sets forth the terms whereby BellSouth will provide CCXCs.
7	
8 Q .	DOES THAT CONCLUDE YOUR TESTIMONY?
9 A.	Yes.
10	
11 525464	
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Cost elements for network extension (High capacity loops)

	Initial Cost	Ongoing Costs
	(Year 0)	(Year 1+)
NetworkCosts (at customer premises)		
LGX	\$2,627.96	\$67.28
Fiber jumpers	\$123.12	\$3.15
OC3 multiplexer (commons + hardwire)	\$11,721.46	\$300.07
r ·	¢4 222 02	\$300.07 \$34.15
DS1 plug-in	\$1,333.82	
DS3 plug-in	\$1,303.52	\$33.37
DS1 cross connect panel	\$2,633.76	\$67.42
DS3 cross connect panel	\$10,536.91	\$269.74
D4 channel bank (commons + hardwire) Channel bank plug-ins (2 Data, 2 ISDN, 12 VG)	\$7,742.55 \$772.14	\$198.21 \$19.77
DS0 INCT first / additional	\$51.84 / \$13.44	\$47.52
DS1 INCT first / additional	\$55.91 / \$17.51	\$112.44
DST INCT IIIST / AUDITORIAI	φ33.817 φ17.31	φ112.44
Network Costs (at node)		
LGX	\$875.99	\$22.43
Fiber jumpers	\$123.12	\$3.15
OC3 multiplexer	• • -	
(commons + hardwire)	\$11,774.29	\$301.43
DS1 plug-in	\$1,339.83	\$34.30
DS3 plug-in	\$1,309.40	\$33.52
DS1 cross connect panel	\$2,645.64	\$67.73
DS3 cross connect panel	\$10,584.40	\$270.96
Fiber Extension Costs (per foot for 100-strand fiber)		
Total installed investment	\$4.92	\$0.07
Pole factor	\$0.14	\$0.00
Conduit factor Total per foot costs	\$2.35 \$7.41	\$0.03 \$0.10

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket Number 030852-TP
Revised Exhibit AWG-3
Page 1 of 1

ASSUMPTIONS:

٠	Number of fiber strands	100
•	Aerial Fiber	10.1%
•	Buried fiber	25.2%
•	Underground fiber	64.7%

r ") •

Cost elements for network extension (Dedicated Transport)

		Ongoing costs
	(Year 0)	(Year 1+
Network Costs (at new CO)		
LGX	\$2,627.96	\$67.28
Fiber jumpers	\$123.12	\$3.15
OC3 multiplexer		
(commons +		
hardwire)	\$12,878.88	\$250.74
OC12 multiplexer	\$36,165.27	\$824.56
OC48 multiplexer	\$85,599.85	\$1,951.68
DS1 plug-in	\$1,391.27	\$31.72
DS3 plug-in	\$1,359.68	\$31.00
DS1 cross connect panel	\$4,205.92	\$95.90
DS3 cross connect panel	\$16,826.64	\$383.65
Collocation expense (for 100 sq. ft)	\$5,962.66	\$22,831.20
Network Costs (at CO currently on network)		
LGX	\$875.99	\$22.43
Fiber jumpers	\$123.12	\$3.15
OC3 multiplexer	\$12,668.05	\$288.83
OC12 multiplexer	\$35,573.25	\$811.07
OC48 multiplexer	\$84,198.58	\$1,919.73
DS1 plug-in	\$1,368.50	\$31.20
DS3 plug-in	\$1,337.42	\$30.49
DS1 cross connect panel	\$4,137.07	\$94.33
DS3 cross connect panel	\$16,551.19	\$377.37
Fiber Extension Costs (per foot for 100-strand fiber)		
Total installed investment	\$4.92	\$0.07
Pole factor	\$0.14	\$0.00
Conduit factor	\$2.35	\$0.03
Total per foot costs	\$7.41	\$0.10

BellSouth Telecommunications, Inc. Florida Public Service Commission Docket Number 030852-TP Revised Exhibit AWG-6 Page 1 of 1

ASSUMPTIONS:

•	Quantity of fiber strands	100
•	Aerial Fiber	10.1%
•	Buried fiber	25.2%
•	Underground fiber	64.7%