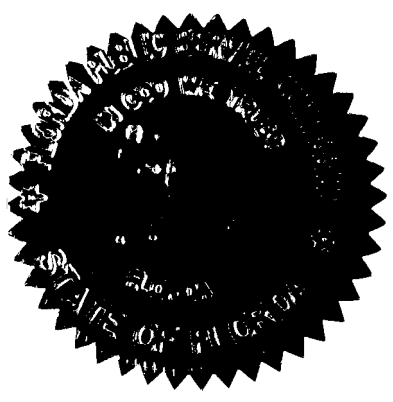


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030852-TP

In the Matter of

IMPLEMENTATION OF REQUIREMENTS
ARISING FROM FEDERAL COMMUNICATIONS
COMMISSION'S TRIENNIAL UNE REVIEW:
LOCATION-SPECIFIC REVIEW FOR DS1,
DS3 AND DARK FIBER LOOPS, AND
ROUTE-SPECIFIC REVIEW FOR DS1, DS3
AND DARK FIBER TRANSPORT.



ELECTRONIC VERSIONS OF THIS TRANSCRIPT ARE
A CONVENIENCE COPY ONLY AND ARE NOT
THE OFFICIAL TRANSCRIPT OF THE HEARING,
THE .PDF VERSION INCLUDES PREFILED TESTIMONY.

VOLUME 1

Pages 1 through 199

PROCEEDINGS: HEARING
BEFORE: CHAIRMAN BRAULIO L. BAEZ
COMMISSIONER J. TERRY DEASON
COMMISSIONER LILA A. JABER
COMMISSIONER RUDOLPH "RUDY" BRADLEY
COMMISSIONER CHARLES M. DAVIDSON
DATE Wednesday, March 3, 2004
TIME Commenced at 9:36 a.m.
Concluded at 9:54 a.m.

DOCUMENT NUMBER: 03214 MAR 5 3

03214 MAR 5 3

FPSC-COMMISSION CLERK

1 PLACE: Betty Easley Conference Center
Room 148
2 4075 Esplanade Way
3 Tallahassee, Florida

4 REPORTER: LINDA BOLES, RPR
Official FPSC Reporter
5 (850) 413-6734

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 APPEARANCES:

2 NANCY B. WHITE, ESQUIRE, R. DOUGLAS LACKEY, ESQUIRE
3 and MEREDITH E. MAYS, ESQUIRE, BellSouth Telecommunications,
4 Inc., c/o Ms. Nancy H. Sims, 150 South Monroe Street, Suite
5 400, Tallahassee, Florida 32301-1556, appearing on behalf of
6 BellSouth Telecommunications, Inc.

7 RICHARD CHAPKIS, ESQUIRE, and JENNIFER McCLELLAN,
8 ESQUIRE, 201 North Franklin Street, FLTC0717, Tampa, Florida
9 33602, appearing on behalf of Verizon Florida, Inc.

10 SUSAN MASTERTON, ESQUIRE, Sprint-Florida/Sprint
11 Communications Company, P.O. Box 2214, Tallahassee, Florida
12 32316-2214, appearing on behalf of Sprint-Florida/Sprint
13 Communications Company.

14 J. JEFFRY WAHLEN, ESQUIRE, Ausley Law Firm, P.O. Box
15 391, Tallahassee, Florida 32302, appearing on behalf of
16 Sprint-Florida/Sprint Communications Company.

17 JON MOYLE, JR., ESQUIRE, Moyle, Flanigan Law Firm,
18 The Perkins House, 118 North Gadsden Street, Tallahassee,
19 Florida 32301, appearing on behalf of NuVox and NewSouth
20 Communications Corporation.

21

22

23

24

25

1 APPEARANCES CONTINUED:

2 JOSEPH MCGLOTHLIN, ESQUIRE, McWhirter, Reeves Law
3 Firm, 117 S. Gadsden St., Tallahassee, Florida 32301, appearing
4 on behalf of Florida Competitive Carriers Association.

5 TRACY HATCH, ESQUIRE, 101 North Monroe Street, Suite
6 700, Tallahassee, Florida 32301-1549, appearing on behalf of
7 AT&T Communications of the Southern States, LLC.

8 STEVEN A. AUGUSTINO, ESQUIRE, Kelley, Drye & Warren,
9 LLP, 1200 19th Street, N.W., Suite 500, Washington, D.C. 20036,
10 appearing on behalf of Florida Competitive Carriers
11 Association.

12 FLOYD SELF, ESQUIRE, Messer, Caparello & Self, P.O.
13 Box 1876, Tallahassee, Florida 32302-1876, appearing on behalf
14 of KMC Telecom, ITC^DeltaCom, MCI WorldCom and Xspedius.

15 DONNA CANZANO MCNULTY, ESQUIRE, MCI WorldCom
16 Communications, Inc. 1203 Governors Square Blvd., Suite 201,
17 Tallahassee, Florida 32301-2960, appearing on behalf of MCI
18 WorldCom Communications, Inc.

19

20

21

22

23

24

25

1 APPEARANCES CONTINUED:

2 DULANEY L. O'ROARK, III, ESQUIRE, and KEN WOODS,
3 ESQUIRE, MCI WorldCom Communications, Inc., Six Concourse
4 Parkway, Suite 600, Atlanta, Georgia 30328, appearing on behalf
5 of MCI WorldCom Communications, Inc.

6 NORMAN H. HORTON, JR., ESQUIRE, Messer, Caparello &
7 Self, 215 South Monroe, Suite 701, Tallahassee, Florida
8 32302-1876, appearing on behalf of Xspedius.

9 NANETTE EDWARDS, ITC^DeltaCom, 4092 South Memorial
10 Parkway, Huntsville, Alabama 35802, appearing on behalf of
11 ITC^DeltaCom.

12 SCOTT KASSMAN, ESQUIRE, FDN Communications, 390 North
13 Orange Ave., Suite 2000, Orlando, Florida 32801-1640, appearing
14 on behalf of FDN Communications.

15 CHARLES E. WATKINS, Covad Communications Company,
16 1230 Peachtree Street, NE, 19th Floor, Atlanta, Georgia
17 30309-3574, appearing on behalf of Covad Communications
18 Company.

19 ADAM TEITZMAN, ESQUIRE, JEREMY SUSAC, ESQUIRE, and
20 JASON ROJAS, ESQUIRE, FPSC General Counsel's Office, 2540
21 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850,
22 appearing on behalf of the Commission Staff.

23

24

25

1 I N D E X

2 WITNESSES

3 NAME: PAGE NO.

4 ANIRUDDHA "ANDY" BANERJEE

5	Prefiled Direct Testimony Inserted	26
	Prefiled Supplemental Direct Testimony Inserted	49
6	Prefiled Surrebuttal Testimony Inserted	52

7 A. WAYNE GRAY

8	Prefiled Direct Testimony Inserted	68
	Prefiled Surrebuttal Testimony Inserted	80

9

SHELLEY N. PADGETT

10

	Prefiled Direct Testimony Inserted	89
11	Prefiled Supplemental Direct Testimony Inserted	117
	Prefiled Rebuttal Testimony Inserted	120
12	Prefiled Surrebuttal Testimony Inserted	130
	Errata Sheet	156

13

ORVILLE D. FULP/JOHN WHITE (PANEL)

14

	Prefiled Joint Direct Testimony Inserted	157
15	Prefiled Joint Supplemental Direct Testimony Inserted	184

16

17

18

19

20 CERTIFICATE OF REPORTER 199

21

22

23

24

25

EXHIBITS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	NUMBER:		ID.	ADMTD.
	1	Exhibit List-Stip-1	23	23
	2	Access-Stip-1	23	23
	3	Allegiance-Stip-1	23	23
	4	FCCA-Stip-1	23	23
	5	Global-Stip-1	23	23
	6	ICG-Stip-1	23	23
	7	Intermedia-Stip-1	23	23
	8	Network-Stip-1	23	23
	9	NewSouth-Stip-1	23	23
	10	NuVox-Stip-1	23	23
	11	SBC-Stip-1	23	23
	12	Time-Stip-1	23	23
	13	Xspedius-Stip-1	23	23
	14	Z-Tel-Stip-1	23	23
	15	DR Responses-Stip-1	23	23
	16	CONF DR Responses-Stip-1	23	23
	17	SDR-Responses-Stip-1	23	23
	18	SDR-CONF Responses-Stip-1	23	23
	19	BST CONF-Stip-1	23	23
	20	VZ CONF-Stip-1	23	23
	21	Sprint CONF-Stip-1	23	23

EXHIBITS

	NUMBER:		ID.	ADMTD.
1				
2				
3				
4	22	MISC CONF-Stip-1	23	23
5	23	OFJW-D	23	23
6	24	SPT-D	23	23
7	25	AWG-D	23	23
8	26	DAB-D	23	23
9	27	GBL-D	23	23
10	28	JEJ-D	23	23
11	29	JBV-D	23	23
12	30	RYH-D-1	23	23
13	31	KWD-D	23	23
14	32	JCF-D	23	23
15	33	LNH-D	23	23
16	34	SBW-D	23	23
17	35	MBJ-D	23	23
18	36	RAN-D	23	23
19	37	BST-Stip-1	23	23
20	38	Ver-Stip-1	23	23
21	39	AT&T-Stip-1	23	23
22	40	Covad-Stip-1	23	23
23	41	FDN-Stip-1	23	23
24	42	ITC/BTI-Stip-1	23	23
25	43	KMC-Stip-1	23	23

EXHIBITS

	NUMBER:	ID.	ADMTD.
1			
2			
3			
4	44 MCI-Stip-1	23	23
5	45 Sprint-Stip-1	23	23
6	46 AWG-E-1	23	23
7	47 AWG-E-2	23	23
8	48 AWG-E-3	23	23
9	49 AWG-E-4	23	23
10	50 AWG-E-5	23	23
11	51 AWG-E-6	23	23
12	52 DAB-E-1	23	23
13	53 SWP-E-1	23	23
14	54 SWP-E-2	23	23
15	55 SWP-E-3	23	23
16	56 SWP-E-4	23	23
17	57 SWP-E-5	23	23
18	58 SWP-E-6	23	23
19	59 SWP-E-7	23	23
20	60 SWP-E-8	23	23
21	61 SWP-E-9	23	23
22	62 SWP-E-10	23	23
23	63 SWP-E-11	23	23
24	64 SWP-E-12	23	23
25	65 SWP-E-13	23	23

EXHIBITS

	NUMBER:	ID.	ADMTD.
1			
2			
3			
4	66 SWP-E-14	23	23
5	67 SWP-E-15	23	23
6	68 SWP-E-16	23	23
7	69 SWP-E-17	23	23
8	70 DAB-E-2	23	23
9	71 DAB-E-3	23	23
10	72 OFJW-E-1	23	23
11	73 OFJW-E-2	23	23
12	74 OFJW-E-3	23	23
13	75 OFJW-E-4	23	23
14	76 OFJW-E-5	23	23
15	77 OFJW-E-6	23	23
16	78 OFJW-E-7	23	23
17	79 OFJW-E-8	23	23
18	80 OFJW-E-9	23	23
19	81 OFJW-E-10	23	23
20	82 OFJW-E-11	23	23
21	83 OFJW-E-12	23	23
22	84 OFJW-E-13	23	23
23	85 OFJW-E-14	23	23
24	86 OFJW-E-15	23	23
25	87 OFJW-E-16	23	23

EXHIBITS

	NUMBER:	ID.	ADMTD.
1			
2			
3			
4	88 OFJW-E-17	23	23
5	89 OFJW-E-18	23	23
6	90 OFJW-E-19	23	23
7	91 OFJW-E-20	23	23
8	92 OFJW-E-21	23	23
9	93 OFJW-E-22	23	23
10	94 OFJW-E-23	23	23
11	95 OFJW-E-24	23	23
12	96 OFJW-E-25	23	23
13	97 OFJW-E-26	23	23
14	98 OFJW-E-27	23	23
15	99 OFJW-E-28	23	23
16	100 RAN-E-1	23	23
17	101 JBY-E-1	23	23
18	102 JBY-E-2	23	23
19	103 JBY-E-3	23	23
20	104 JBY-E-4	23	23
21	105 JBY-E-5	23	23
22	106 GJB-E-1	23	23
23	107 GJB-E-2	23	23
24	108 GJB-E-3	23	23
25	109 GJB-E-4	23	23

EXHIBITS

	NUMBER:	ID.	ADMTD.
1			
2			
3			
4	110 GJB-E-5	23	23
5	111 GJB-E-6	23	23
6	112 GJB-E-7	23	23
7	113 GJB-E-8	23	23
8	114 GJB-E-9	23	23
9	115 GJB-E-10	23	23
10	116 GJB-E-11	23	23
11	117 GJB-E-12	23	23
12	118 GJB-E-13	23	23
13	119 GJB-E-14	23	23
14	120 GJB-E-15	23	23
15	121 GJB-E-16	23	23
16	122 GJB-E-17	23	23
17	123 GJB-E-18	23	23
18	124 GJB-E-19	23	23
19	125 GJB-E-20	23	23
20	126 MBJ-E-1	23	23
21	127 MBJ-E-2	23	23
22	128 KWD-E-1	23	23
23	129 KWD-E-2	23	23
24	130 KWD-E-3	23	23
25	131 KWD-E-4	23	23

EXHIBITS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NUMBER:		ID.	ADMTD.
132	JCF-E-1	23	23
133	JCF-E-2	23	23
134	Test-CONF-1	23	23
135	Late-Filed-1	23	23
136	Late-Filed-2	23	23
137	Late-Filed-3	23	23
138	Late-Filed-4	23	23
139	Late-Filed-5	23	23

P R O C E E D I N G S

1
2 CHAIRMAN BAEZ: Okay. We'll call this hearing to
3 order. Mr. Teitzman, can you read the notice, please.

4 MR. TEITZMAN: Yes, Chairman. Pursuant to notice
5 published February 4th, 2004, this time and place has been set
6 for a hearing in Docket Number 030852-TP.

7 CHAIRMAN BAEZ: Thanks. And we're going to start
8 taking appearances with staff.

9 MR. TEITZMAN: Adam Teitzman, Jeremy Susac and Jason
10 Rojas on behalf of the Florida Public Service Commission.

11 CHAIRMAN BAEZ: Okay.

12 MS. WHITE: Nancy White, Meredith Mays and Doug
13 Lackey on behalf of BellSouth Telecommunications.

14 MR. CHAPKIS: Richard Chapkis and Jennifer McClellan
15 for Verizon.

16 MR. WAHLEN: Jeff Wahlen and Susan Masterton on
17 behalf of Sprint.

18 MR. MOYLE: Jon Moyle, Jr., Moyle, Flanigan Law Firm
19 on behalf of NuVox and NewSouth.

20 MR. MCGLOTHLIN: Joe McGlothlin, McWhirter Reeves for
21 the Florida Competitive Carriers Association.

22 MR. HATCH: Tracy Hatch appearing on behalf of AT&T
23 Communications of the Southern States, LLC.

24 MR. AUGUSTINO: Steve Augustino from Kelley, Drye &
25 Warren on behalf of the FCCA.

1 MR. SELF: Floyd Self of the Messer Law Firm
2 appearing on behalf of MCI, KMC, ITC^DeltaCom and Xspedius.

3 I'd also like to enter appearances for Donna Canzano
4 McNulty, Ken Woods and Dulaney O'Roark on behalf of MCI. I'd
5 also like to enter an appearance for Doc Horton also on behalf
6 of Xspedius and, finally, Nanette Edwards on behalf of
7 ITC^DeltaCom.

8 MR. KASSMAN: Scott Kassman on behalf of FDN
9 Communications.

10 MR. WATKINS: And Gene Watkins on behalf of Covad
11 Communications.

12 CHAIRMAN BAEZ: Is there anyone that didn't enter an
13 appearance that needs to? No?

14 Okay. We've got, what it looks like is several
15 preliminary matters. And, Mr. Teitzman, you want to fill us
16 in?

17 MR. TEITZMAN: Yes, Chairman. Yesterday, March 2nd,
18 the D.C. Circuit Court of Appeals released its decision which
19 vacated several aspects of the FCC's Triennial Review Order.
20 Commission staff conducted a status call late yesterday to
21 discuss with the parties if there was a consensus on how the
22 Commission should proceed.

23 After discussing this matter with the parties, all
24 parties have agreed to the following: One, all prefiled
25 testimony and testimony exhibits shall be moved into the record

1 without objection; however, all parties reserve the right to
2 conduct cross-examination of witnesses if further proceedings
3 are convened in this docket. Two, all hearing exhibits
4 identified in staff's hearing exhibit list shall be moved into
5 the record without objection. Three, upon the conclusion of
6 moving the aforementioned items into the record, this hearing
7 will be held in abeyance indefinitely. And, four, in 30 days
8 the parties have agreed to participate in an informal status
9 conference.

10 CHAIRMAN BAEZ: Thank you, Mr. Teitzman. Does that
11 constitute everyone's understanding of what was agreed upon
12 yesterday? If not, speak up. People nodding their heads.
13 That's good.

14 Now we can move on to the exhibits?

15 MR. TEITZMAN: Yes, Chairman. As usual, Mr.
16 Chairman, staff has compiled a list of discovery exhibits that
17 we believe can be entered into the record by stipulation. In
18 an effort to facilitate the entry of those exhibits, we've
19 compiled a chart that we've provided to all parties, the
20 Commissioners and the court reporter. In lieu of reading off
21 and marking each exhibit for the record, today I'd suggest that
22 this list itself be marked as the first hearing exhibit and
23 that the discovery exhibits be marked thereafter in sequential
24 order as set forth in that chart.

25 I'd like to note that staff has also included in this

1 chart the prefiled exhibits attached to the witnesses'
2 testimony in this case. To further facilitate entry of those
3 exhibits in the record, I suggest -- I'd suggest that these
4 exhibits also be marked as set forth in the exhibit chart.

5 CHAIRMAN BAEZ: All right. Now you're going, you're
6 going to lead us through this, I guess, since you all prepared
7 the chart?

8 MR. TEITZMAN: Yes. I'm prepared to go ahead. Mr.
9 Chairman, staff would move Exhibits 1 through 139 into the
10 record. And I'd like to note for clarification of the record
11 that Exhibits 46 through 71 are sponsored by BellSouth
12 witnesses, 72 through 99 are sponsored by Verizon witnesses,
13 100 by the Allegiance witness, 101 through 105 by AT&T's
14 witness, 106 through 125 by FCCA, 126 through 127 by KMC, 128
15 through 131 by Sprint, and 132 through 133 by Xspedius. I'd
16 also like to note that Exhibit Number 134 is a composite
17 exhibit consisting of the confidential portions of all prefiled
18 testimony.

19 Before we move on, Chairman, there are just a few
20 brief corrections that we do need to address.

21 CHAIRMAN BAEZ: Okay.

22 COMMISSIONER JABER: Mr. Chairman, could I interrupt
23 here, and I apologize for the interruption.

24 CHAIRMAN BAEZ: Go ahead.

25 COMMISSIONER JABER: The first preliminary matter

1 with regard to the settlement by the parties on procedure --

2 CHAIRMAN BAEZ: Uh-huh.

3 COMMISSIONER JABER: -- do you need a motion for
4 that? Because if you do, before we move into the exhibits, if
5 you do, I can -- I'm quite willing to make that kind of a
6 motion.

7 CHAIRMAN BAEZ: Well, can you -- Mr. Melson, I
8 don't -- I was under the impression that the only, the only
9 vote or motion that was actually needed was to hold in
10 abeyance. If you could clear that up for us.

11 MR. MELSON: Commissioner, I think either approach
12 would be fine. If you want to accept the stipulation of the
13 parties to admit all of the evidence and to hold in abeyance
14 and do that up front and then move the documents into the
15 record, that would be appropriate.

16 CHAIRMAN BAEZ: Commissioner Jaber, is that all right
17 with you?

18 COMMISSIONER JABER: Yeah. I'm quite willing to make
19 such a motion to move this along.

20 COMMISSIONER DAVIDSON: Second.

21 CHAIRMAN BAEZ: All right. A motion and a second.

22 All those in favor, say aye.

23 (Unanimous affirmative vote.)

24 CHAIRMAN BAEZ: Show that motion passed unanimously.

25 MR. HATCH: Mr. Chairman, could I ask one clear

1 question?

2 CHAIRMAN BAEZ: Pardon? Oh, I'm sorry, Mr. Hatch.

3 MR. HATCH: I just want to be clear on the exhibits.

4 As part of our discussion last night, some of the CLECs had
5 raised objections to certain things that were in the original
6 list. We just want to make sure that those were noted and that
7 they have been reflected in this list.

8 CHAIRMAN BAEZ: Mr. Teitzman.

9 MR. TEITZMAN: They have been noted and there will
10 be -- one of the corrections I was going to make will be
11 removing one of the items.

12 CHAIRMAN BAEZ: That's -- thanks for reminding me.
13 We had, we had interrupted you on your correction, so you can
14 go ahead and proceed and clear that up for us now.

15 MR. TEITZMAN: Okay. The first correction is
16 ITC^DeltaCom has indicated that the following portions of
17 Witness Brownworth's deposition are confidential. That would
18 be Page 38, Lines 20 through 24; Page 43, Lines 20 through 22
19 and 25; Page 44, Lines 5 through 8 and 13; Page 46, Lines
20 5 through 8, 13, 21 and 22; and Page 48, Lines 4 through 7.
21 Counsel for ITC^DeltaCom has indicated that they will be filing
22 a redacted copy of the transcript and the appropriate request
23 for confidential classification.

24 CHAIRMAN BAEZ: Okay. And as to Mr. Hatch's
25 notation, are there any, are there any other corrections that

1 need to be made?

2 MR. TEITZMAN: Yes, Chairman. Item 19, that would
3 address Mr. Hatch's comments. The last item listed in number
4 19, which would be BellSouth's responses to staff's second set
5 of interrogatories, Item Number 25, and CD containing copy of
6 revised BACE model in response to staff's supplemental request
7 for staff's second PODs, that item will be removed from the
8 exhibit list and also from the exhibit packets.

9 CHAIRMAN BAEZ: Okay.

10 MR. TEITZMAN: And the final correction was Item,
11 sorry, 136. It's currently listed as a late-filed deposition
12 exhibit; however, I was notified this morning that BellSouth
13 did serve its responses on March 1st. And that would, that
14 would be it for all the corrections.

15 CHAIRMAN BAEZ: All right.

16 MR. McGLOTHLIN: Mr. Chairman.

17 CHAIRMAN BAEZ: Mr. McGlothlin.

18 MR. McGLOTHLIN: I have either a correction or
19 question. I'm not sure which at this point.

20 CHAIRMAN BAEZ: Okay.

21 MR. McGLOTHLIN: On Page 19 of this document, with
22 respect to the FCCA exhibits, the FCCA Witness Gary Ball
23 sponsored -- in addition to the items shown there, his prefiled
24 Exhibit 4 consisted of subparts 4A through F and his prefiled
25 Exhibit GJB-5 included parts A through G. I don't believe, if

1 I understand this document correctly, I don't believe that the
2 list here is complete with respect to Mr. Ball's exhibits,
3 prefiled exhibits.

4 CHAIRMAN BAEZ: I'm sorry. Did I hear you correctly?
5 You're saying that this list is incomplete?

6 MR. McGLOTHLIN: Unless I'm misinterpreting what I'm
7 looking at. It does not look to be a complete --

8 CHAIRMAN BAEZ: What doesn't it -- can you repeat
9 again what it doesn't include? Because it may be, it may be
10 that some of the --

11 MR. McGLOTHLIN: I beg your pardon. I'm told that
12 I'm looking at a prior list and that the current list does,
13 does cover this, this information.

14 CHAIRMAN BAEZ: Oh, all right.

15 MR. McGLOTHLIN: I think we're okay.

16 CHAIRMAN BAEZ: You're okay, Mr. McGlothlin?

17 Mr. Self.

18 MR. SELF: Thank you, Mr. Chairman. I have what I
19 think are two corrections to the list. On Page 15, what's
20 identified there as hearing ID Number 44, the last two items on
21 that list, MCI's responses to BellSouth's second request for
22 admissions, sixth set of interrogatories, and MCI's responses
23 to BellSouth's fifth set of interrogatories, those are actually
24 from the 030851 docket, not this docket. So those should be
25 removed from this list. BellSouth only served 1 through 4 in

1 terms of interrogatories in this docket.

2 CHAIRMAN BAEZ: And if I can get confirmation from,
3 from staff. Are you running that down?

4 MR. TEITZMAN: I'm comfortable with what Mr. Self has
5 stated. I certainly can quickly check; however, I think we can
6 proceed. We can make those corrections.

7 CHAIRMAN BAEZ: All right.

8 MR. SELF: And, Mr. Chairman, one other thing that
9 I've been advised of, on Page 11, Item 33, which is the
10 deposition transcript of Lonnie Hardin, I've just been told
11 that parts of that may be confidential. We have not had a
12 chance to review the entire transcript yet, and so I'd like to
13 reserve the ability, like we did with ITC^DeltaCom, no later
14 than tomorrow, if we identify that parts of that are
15 confidential, to file the appropriate paperwork to, or redacted
16 copy and request for confidentiality.

17 CHAIRMAN BAEZ: Okay.

18 MR. SELF: Thank you.

19 CHAIRMAN BAEZ: That will be fine.

20 Mr. Kassman.

21 MR. KASSMAN: Yes. Mr. Chairman. FDN would like to
22 point out two typographical errors on Page 9 of the document.
23 Items Number 7 and 8 make reference to intermedia. That
24 reference should actually be the word "interrogatory," I think.
25 As it was listed, it was -- as we filed the exhibit, it was

1 "INT.," so that should be interrogatory rather than Intermedia.

2 CHAIRMAN BAEZ: By golly, I think you're right.

3 Okay.

4 MR. KASSMAN: Thank you.

5 CHAIRMAN BAEZ: Anything else? Hello. Sorry. Any
6 other corrections? All right. Seeing none, now I'm showing --
7 just to make sure we haven't added anything, I'm showing
8 Exhibits 1 through 139 --

9 MR. TEITZMAN: That is correct.

10 CHAIRMAN BAEZ: -- as corrected. And with the
11 correction, the corrected documents, any that are necessary to
12 follow. Without objection, we'll move Exhibits 1 through 139
13 into the record.

14 (Exhibits 1 through 139 marked for identification and
15 admitted into the record.)

16 CHAIRMAN BAEZ: Now we can move to the prefiled
17 testimony?

18 MR. TEITZMAN: Yes, Chairman.

19 CHAIRMAN BAEZ: Okay.

20 MR. TEITZMAN: In an effort to assist in moving the
21 testimony into the record, staff has prepared a second chart
22 this morning that has been provided to all the parties, the
23 court reporter and the Commissioners. The chart sets forth the
24 testimony that has been prefiled in this matter, and staff
25 offers to move the prefiled testimony into the record as though

1 read in accordance with and in the order set forth on the
2 charts. But we'd like to clarify for purposes of the record
3 that the testimony of the witnesses identified in 1 through 19
4 is proffered by BellSouth -- oops, that's not 1 through 19. I
5 apologize. 1 through 9. I apologize. 1 through 9 is
6 proffered by BellSouth, 10 through 13 by Verizon, 14 by
7 Allegiance, 15 and 16 by AT&T, 17 through 19 by FCCA, 20 by
8 FDN, 21 by ITC^DeltaCom, 22 by KMC, 23 by MCI, 24 by NewSouth,
9 and 25 through -- 25 through 27 by Sprint and 28 by Xspedius.

10 CHAIRMAN BAEZ: Okay. And are there any corrections
11 that -- Mr. Wahlen.

12 MR. WAHLEN: Thank you, Mr. Chairman. Mr. Dickerson
13 did not file direct testimony, so the one identified as Number
14 25 does not need to be on the list. He filed rebuttal and
15 surrebuttal.

16 CHAIRMAN BAEZ: Okay. Any other corrections?

17 MR. TEITZMAN: Chairman, if I may. I believe the
18 problem there is -- did Mr. Dickerson file direct testimony in
19 851?

20 MR. WAHLEN: Yes, he did.

21 MR. TEITZMAN: What I think occurred there is the
22 testimony of Dickerson has been, was filed in 851 and 852. So
23 I have no problem removing that from the list and not moving it
24 into the record. However, you may want to take note that the
25 direct testimony of Kent Dickerson was filed in both dockets.

1 MR. WAHLEN: We just need the surrebuttal and
2 rebuttal in this.

3 MR. TEITZMAN: Right. It's not a problem removing
4 that from the list.

5 MR. WAHLEN: I'm sorry if we confused you. We may
6 have confused everyone, including ourselves. I apologize.

7 CHAIRMAN BAEZ: It won't be the first time,
8 Mr. Wahlen, so don't feel too bad. I'm only speaking for
9 myself.

10 All right. Show that correction noted, that the item
11 identified as Number 25 on this list that we're working off of
12 is removed. I guess that's representing the direct testimony
13 of Kent W. Dickerson. Otherwise, we'll show the, the entirety
14 of this list, the prefiled testimony we'll move into the record
15 as though read without objection.

16

17

18

19

20

21

22

23

24

25

PUBLIC DISCLOSURE VERSION

1 **ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.**
2 **DIRECT TESTIMONY OF ANIRUDDHA (ANDY) BANERJEE, Ph.D.**
3 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
4 **DOCKET NO. 030852-TP**
5 **DECEMBER 22, 2003**

6 **I. INTRODUCTION AND SUMMARY**

7 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**
8 **POSITION.**

9
10 A. My name is Aniruddha (Andy) Banerjee. I am a Vice President at NERA Economic
11 Consulting located at One Main Street, Cambridge, Massachusetts 02142.

12
13 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL, PROFESSIONAL, AND**
14 **BUSINESS EXPERIENCE.**

15
16 A. I earned a Bachelor of Arts (with Honors) and a Master of Arts degree in Economics
17 from the University of Delhi, India, in 1975 and 1977 respectively. I received a
18 Ph.D. in Agricultural Economics from the Pennsylvania State University in 1985,
19 and subsequently served there as an Assistant Professor of Economics. I have over
20 eight years of experience teaching undergraduate and graduate courses in various
21 fields of Economics, and have conducted academic research that has led to several
22 publications and conference presentations.



1 Since 1988, I have held various positions in the telecommunications industry. Prior
2 to my present position, I have been an economist in the Market Analysis &
3 Forecasting Division at AT&T Communications in Bedminster, NJ, a Member of
4 Technical Staff at Bell Communications Research in Livingston, NJ, and a Research
5 Economist at BellSouth Telecommunications in Birmingham, AL. In these
6 positions, I was responsible for conducting economic and market analysis, building
7 quantitative demand models for telecommunications services, developing economic
8 positions and strategies, and providing expert testimony support on regulatory
9 economic matters.

10
11 In my present capacity, I provide quantitative and regulatory economic analysis for
12 telecommunications industry clients principally on matters of concern to local
13 exchange carriers. I have testified before state and federal regulators on
14 interconnection and unbundling, universal service, local and long distance
15 competition, efficient rate rebalancing, and inter-carrier compensation. I have
16 participated in several proceedings on antitrust damage issues, price and alternative
17 regulation, and telephone company mergers. I have published several papers and
18 made several presentations at international forums on topics such as telephone
19 service quality performance, mobile telephony growth, telecommunications
20 privatization, and Internet economics. My curriculum vita is attached to this
21 testimony as Exhibit

22 AXB-1.

23

1 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE FLORIDA PUBLIC**
2 **SERVICE COMMISSION?**

3
4 A. Yes. I have testified before the Florida Public Service Commission (“Commission”)
5 in a number of proceedings, most recently in the “rate rebalancing” proceeding
6 (Docket Nos. 030961-TL, 030867-TL, 030868-TL, and 030869-TL).

7
8 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

9
10 A. In my Direct Testimony, I present evidence based on the potential deployment test
11 for determining whether or not competitive local exchange carriers (“CLECs”) are
12 impaired without access to an incumbent local exchange carrier’s (“ILEC’s”)
13 unbundled network elements (“UNEs”). This test is prescribed by the Federal
14 Communications Commission (“FCC”) for circumstances in which specific
15 “triggers”—signifying actual competitive availability of the desired UNEs—do not
16 exist. My testimony covers issues 4,6,13, and 19.

17
18 **Q. WHAT ARE YOUR PRINCIPAL CONCLUSIONS?**

19
20 A. Upon applying the potential deployment test to loops and transport facilities in
21 BellSouth’s service territory in Florida, I find that CLECs are not impaired without
22 access to BellSouth’s unbundled loops in 387 customer locations, and CLECs are not

1 impaired without access to BellSouth's transport facilities on 91 routes.

2

3 **Q. ARE THESE CUSTOMER LOCATIONS AND ROUTES INCREMENTAL**
4 **TO THOSE ALREADY INCLUDED IN THE TRIGGERS ANALYSIS?**

5

6 A. The routes identified in the potential deployment test are incremental to those
7 included in the triggers analysis. However, because of differences in building-
8 address conventions, it is possible that – despite best efforts – some overlap may
9 remain between the customer locations identified in the potential deployment test
10 and in the triggers analysis. Any overlap should not, however, be considered
11 particularly significant because the customer locations in that overlap would already
12 qualify for relief under the triggers analysis.

13

14 **II. POTENTIAL LOOP DEPLOYMENT**

15 **Issue 4: If neither the self-provisioning nor the wholesale triggers for DS3 loops is**
16 **satisfied at a specific customer location, using the potential deployment criteria**
17 **specified in §51.319(a)(5)(ii), what evidence of non-impairment for a DS3 loop at a**
18 **specific customer location exists? Is this evidence sufficient to conclude that there is**
19 **no impairment at a specific customer location?**

20

1 **Issue 6: If the self-provisioning trigger for dark fiber loops is not satisfied at a**
 2 **specific customer location, using the potential deployment criteria specified in**
 3 **§51.319(a)(6)(ii), what evidence of non-impairment for dark fiber loops at a specific**
 4 **customer location exists? Is this evidence sufficient to conclude that there is no**
 5 **impairment at a specific customer location?**

6

7 **Q. PLEASE DESCRIBE THE FCC'S POTENTIAL DEPLOYMENT TEST FOR**
 8 **IDENTIFYING CUSTOMER LOCATIONS WHERE CLECS ARE NOT**
 9 **IMPAIRED WITHOUT ACCESS TO UNBUNDLED LOOPS FROM THE**
 10 **ILEC?**

11

12 A. For DS3 and dark fiber, the FCC's *Triennial Review Order*¹ allows state
 13 commissions to analyze "whether [a] particular customer location *could* be
 14 economically served by competitive carriers through deployment of alternative loop
 15 transmission facilities" even if the location does not meet the triggers test provided
 16 by the FCC.²

17

18 The FCC requires that, in conducting such an analysis, a state must consider and may

¹ FCC, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, and *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking ("*Triennial Review Order*"), released August 21, 2003.

² *Triennial Review Order*, at ¶335.

1 also find no impairment at a particular customer location even when this trigger has
2 not been facially met if the state commission finds that no material economic or
3 operational barriers at a customer location preclude competitive LECs from
4 economically deploying loop transmission facilities to that particular customer
5 location at the relevant loop capacity level. In making a determination that
6 competitive LECs could economically deploy loop transmission facilities at that
7 location at the relevant capacity level, the state commission must consider various
8 factors affecting the ability to economically deploy at that particular customer
9 location. These factors include: evidence of alternative loop deployment at that
10 location; local engineering costs of building and utilizing transmission facilities; the
11 cost of underground or aerial laying of fiber or copper; the cost of equipment needed
12 for transmission; installation and other necessary costs involved in setting up service;
13 local topography such as hills and rivers; availability of reasonable access to rights-
14 of-way; building access restrictions/costs; availability/feasibility of similar
15 quality/reliability alternative transmission technologies at that particular location.³
16

17 **Q. WHAT IS THE PURPOSE OF BELL SOUTH'S POTENTIAL DEPLOYMENT**
18 **ANALYSIS?**

19
20 A. The purpose of BellSouth's potential deployment analysis for loops is to identify
21 locations that do not meet the triggers, but which "could be economically served by

³ *Id.*

1 competitive carriers” when the criteria described above are examined. As I show
2 below, 387 such locations have been identified in BellSouth’s service territory in
3 Florida.

4

5 **Q. HOW MANY CLECS ARE REQUIRED TO “ECONOMICALLY SERVE A**
6 **LOCATION?”**

7

8 A. In the self-provisioning trigger analysis described above, the *Triennial Review Order*
9 sets *two* CLECs as the lower threshold for competitive supply that would be
10 sufficient for non-impairment. Therefore, I assume that a minimum of two CLECs is
11 also required in my potential deployment analysis. That is, if one actual CLEC
12 currently serves a location, to establish non-impairment it would only require the
13 demonstration that one more CLEC could potentially deploy loop facilities to that
14 location. If no actual CLEC currently serves that location, then it would be necessary
15 to demonstrate that two CLECs would potentially be able to deploy loop facilities.
16 This methodology allows me to take into account “evidence of alternative loop
17 deployment at that location,” as the *Triennial Review Order* requires.

18

19 **Q. PLEASE DESCRIBE BELLSOUTH’S POTENTIAL DEPLOYMENT**
20 **ANALYSIS AT A CONCEPTUAL LEVEL.**

21

22 A. BellSouth’s potential deployment analysis investigates the economic attractiveness

1 to CLECs of deploying fiber-based loop facilities to additional customer locations
2 where they may not have such facilities at the present time. The financial viability of
3 extending fiber to an additional location is determined using a net present value
4 (“NPV”) test, as prescribed by the *Triennial Review Order* (fn. 260). That is, with a
5 positive NPV, it is economically rational for a carrier to deploy fiber to that location,
6 as the potential revenue exceeds the potential cost. The “revenue” in this case is
7 derived from the portion of end-user spending that a CLEC could capture by serving
8 a particular location. The “cost” comprises the expenses that the CLEC would incur
9 (both upfront and on an ongoing basis) to extend its network by deploying fiber to
10 the additional location from its nearest current “fiber node,” i.e., a currently
11 collocated wire center or facilities-served building.

12

13 **Q. HOW DO YOU CALCULATE THE REVENUE OPPORTUNITY PER**
14 **BUILDING?**

15

16 A. I use data from TNS Telecoms, a third-party data source that provides an estimate of
17 wireline telecommunications spending per tenant for business locations nationwide.
18 For each building located in BellSouth’s service territory in Florida, I sum the
19 spending of all tenants in that building to get an estimate of the total end-user
20 spending per building.

21

22

1 **Q. DO YOU BELIEVE THAT TNS TELECOMS IS AN ACCURATE SOURCE**
2 **OF DATA ON TELECOMMUNICATIONS SPENDING?**

3

4 A. Yes. TNS Telecoms is the leading market research firm for site-specific demand for
5 telecommunications services. In the context of universal service, the FCC, AT&T,
6 MCI, and many other companies have relied on TNS Telecoms to estimate the exact
7 locations of business and voice lines. Moreover, a comparison of revenue estimates
8 from TNS Telecoms with national revenue estimates made by J.P. Morgan confirms
9 that the estimated spending reported by TNS Telecoms is reasonable and even a little
10 conservative (about 10% lower).

11

12 **Q. HOW DO YOU DETERMINE THE COST TO DEPLOY LOOP FACILITIES**
13 **PER BUILDING?**

14

15 A. This calculation proceeds in two steps. First, I determine the length of the fiber
16 facilities that a carrier would have to deploy in order to connect a building to its
17 network. Next, I determine the costs of installing and providing service over such a
18 facility.

19

20

21

22

1 **Q. HOW DO YOU DETERMINE THE LENGTH OF THE FIBER LOOP THAT**
2 **A CLEC NEEDS TO EXTEND ITS FACILITIES TO A CUSTOMER**
3 **LOCATION?**
4

5 A. The determination of the length of the fiber loop requires the creation of two tables.
6 The first table contains, for each CLEC, information on every building and wire
7 center currently connected by its self-deployed fiber. This is the same information
8 (compiled from discovery and BellSouth's internal data) that is used by BellSouth
9 witness Shelly Padgett in her Direct Testimony in this proceeding to conduct the
10 triggers tests for unbundled loop and transport facilities. BellSouth's internal records
11 and standard address-matching software provide the "V&H coordinates," or latitude
12 and longitude, for every building and wire center.

13
14 The second table contains all buildings in the TNS Telecoms database that are
15 associated with at least \$5,000 of estimated retail wireline spending per month (this
16 minimum spending threshold is a conservative "filter" that is applied to make the
17 table smaller and, therefore, more manageable). This file also includes the latitude
18 and longitude for each building, as provided by TNS Telecoms.

19
20 Given the two tables, a simple program in Microsoft Excel and Visual Basic is used
21 to determine, for every building in the second table, the two CLECs that have the
22 nearest "fiber nodes," defined as the buildings or wire centers where they have
23 already deployed fiber (as listed in the first table). Distance between the building

1 under consideration for potential deployment and the nodes is calculated as the
2 North/South right angle distance, which generally overestimates the distance because
3 a more direct route can usually be found. The specific formula used for this purpose
4 is described in the FCC's rules in 47 CFR Section 73.208(c).

5

6 **Q. HOW DO YOU DETERMINE THE COST FOR A CLEC TO EXTEND LOOP**
7 **FACILITIES TO A CUSTOMER LOCATION?**

8

9 A. The necessary elements to construct the loop and the cost of each such element are
10 presented in the Direct Testimony of BellSouth witness Wayne Gray in this
11 proceeding. I rely upon Mr. Gray's evidence to establish the physical cost of the
12 loop in my analysis.

13

14 **Q. WHAT ADDITIONAL COSTS DO YOU CONSIDER?**

15

16 A. I consider four other types of cost that CLECs incur to serve customers: (1) cost of
17 goods sold (COGS), (2) other network costs (i.e., not including the loop which was
18 already covered above), (3) sales and marketing (S), and (4) general and
19 administrative (G&A).

20

21 I use the BellSouth Analysis of Competitive Entry ("BACE") model for business

1 customers with four or more lines to determine COGS and other network costs.⁴
2 Based on this model, COGS and other network costs combined are 25% of revenue.
3 Sales and marketing cost is assumed to be ***** times the monthly revenue.⁵
4 Sales cost is incurred in year zero (the first year of operations), along with other
5 costs of establishing service to a customer. In addition, sales and marketing cost is
6 incurred on an ongoing basis as the CLEC offsets the churn of 20% per year for
7 business customers with other gross customer additions. Finally, G&A is assumed to
8 be 27.4% of revenue, obtained as a weighted average of G&A costs for long distance
9 voice service (15% of revenue) and remaining services (28.5% of revenue).⁶

10

11 **Q. HAVING DETERMINED THE REVENUES AND COSTS, HOW DO YOU**
12 **CALCULATE THE NPV OF THE DEPLOYMENT?**

13

14 A. The NPV is calculated in the standard way from the after-tax cash flows, assuming
15 that all capital expenditures are made in year zero and depreciate over 10 years and
16 using the tax and cost of capital assumptions that were filed in Docket No. 030851-
17 TP. That is:

18 1. Calculate the required capital expenditure in year zero.

⁴ See Direct Testimony of James Stegeman in Docket No. 030851-TP (the proceeding that considers whether there is impairment for the switching UNE).

⁵ See Direct Testimony of Debra Aron in Docket No. 030851-TP.

⁶ See Direct Testimony of Debra Aron in Docket No. 030851-TP.

- 1 2. Calculate the annual depreciation and the resulting depreciation tax-shield using
- 2 an average tax rate of 39%.
- 3 3. Calculate network-operating expenses, including COGS and SG&A.
- 4 4. Calculate pre-tax operating income by subtracting network operating expenses
- 5 from revenue.
- 6 5. Calculate after-tax operating income and, hence, cash flows (by adding the
- 7 depreciation tax shield).
- 8 6. Calculate the 10-year NPV, using the mid-year convention for cash flows and a
- 9 discount rate of 10.8%. To be conservative, I do not assume any continuing
- 10 value beyond the 10-year period.

11

12 **Q. HOW DO YOU SELECT THE BUILDINGS THAT SATISFY THE**
13 **POTENTIAL DEPLOYMENT TEST?**

14

- 15 A. The buildings that satisfy the potential deployment test are those with $NPV > 0$ at
- 16 some assumed market share. To be conservative, I assume that any building that
- 17 requires the CLEC to achieve a market share of 15% or less for the loop deployment
- 18 to yield a positive NPV satisfies the potential deployment test. This assumption is
- 19 consistent with the information found in JP Morgan's Broadband 2001 (which
- 20 estimates that the overall CLEC share of telecommunications spending in a building
- 21 could be as high as 50%) and with CLEC experience in the marketplace.

1 **Q. BASED ON THE ANALYSIS THAT YOU HAVE JUST DESCRIBED,**
2 **WHICH CUSTOMER LOCATIONS SATISFY THE POTENTIAL**
3 **DEPLOYMENT TEST FOR NON-IMPAIRMENT WITH RESPECT TO**
4 **LOOPS AND DARK FIBER?**

5

6 A. Exhibit AXB-2 shows the list of customer locations that satisfy the test for potential
7 deployment of fiber-based facilities. These buildings therefore meet the test for
8 potential deployment of dark fiber and DS3 loops, and I conclude that there is no
9 impairment for these facilities at the locations on that list.

10

11 **Q. ARE YOU SUBMITTING THE FINAL LIST OF BUILDINGS THAT**
12 **QUALIFY FOR UNBUNDLING RELIEF ON THE BASIS OF THE**
13 **POTENTIAL DEPLOYMENT TEST?**

14

15 A. No. BellSouth reserves the right to change the list of buildings after receiving
16 responses to additional discovery requests.

17

18 **III. POTENTIAL TRANSPORT DEPLOYMENT**

19 **Issue 13: If neither the self-provisioning nor the wholesale triggers for DS3 level**
20 **dedicated transport is satisfied along a route, using the potential deployment criteria**
21 **specified in §51.319(e)(2)(ii), what evidence of non-impairment for DS3 level**
22 **dedicated transport on a specific route exists? Is this evidence sufficient to conclude**

1 **that there is no impairment along this route?**

2

3 **Issue 19: If neither the self-provisioning nor the wholesale triggers for dark fiber**
4 **transport is satisfied along a route, using the potential deployment criteria specified**
5 **in §51.319(e)(3)(ii), what evidence of non-impairment for dark fiber on a specific**
6 **route exists? Is this evidence sufficient to conclude that there is no impairment**
7 **along this route?**

8

9 **Q. PLEASE DESCRIBE THE FCC'S POTENTIAL DEPLOYMENT TEST FOR**
10 **IDENTIFYING ROUTES WHERE CLECS ARE NOT IMPAIRED**
11 **WITHOUT ACCESS TO UNBUNDLED TRANSPORT FROM THE ILEC.**

12

13 A. For DS3 and dark fiber, the *Triennial Review Order* allows state commissions to
14 analyze the “potential ability of competitive LECs to deploy transport facilities along
15 a particular route” even if the route does not meet the triggers described above.⁷

16

17 The FCC requires that in conducting this analysis, the state must consider and may
18 also find no impairment on a particular route that it finds is suitable for “multiple,
19 competitive supply,” but along which this trigger is not facially satisfied. States must
20 expressly base any such decision on the following economic characteristics: local

⁷ *Triennial Review Order*, at ¶410.

1 engineering costs of building and utilizing transmission facilities; the cost of
2 underground or aerial laying of fiber; the cost of equipment needed for transmission;
3 installation and other necessary costs involved in setting up service; local topography
4 such as hills and rivers; availability of reasonable access to rights-of-way; the
5 availability or feasibility of alternative transmission technologies with similar quality
6 and reliability; customer density or addressable market; and existing facilities-based
7 competition.⁸

8

9 **Q. WHAT IS THE PURPOSE OF BELL SOUTH'S POTENTIAL DEPLOYMENT**
10 **ANALYSIS?**

11

12 A. The purpose of BellSouth's potential deployment analysis is to identify routes that
13 do not meet the triggers for transport, but which are suitable for "multiple
14 competitive supply" when the criteria described above are examined. As I show
15 below, 91 such routes have been identified in BellSouth's service territory in Florida.

16

17 **Q. HOW MANY CLECS ARE REQUIRED ON A ROUTE FOR "MULTIPLE**
18 **COMPETITIVE SUPPLY?"**

19

20 A. In the self-provisioning trigger analysis described above, the *Triennial Review Order*

⁸ *Id.*

1 sets *three* CLECs as the lower threshold for “multiple competitive supply” that
2 would be sufficient for non-impairment. Therefore, I assume that a minimum of
3 three CLECs is also required in my potential deployment analysis. That is, if two
4 actual CLECs currently serve a route, to establish non-impairment, it would only
5 require the demonstration that one more CLEC could potentially deploy transport
6 facilities along that route. If no actual CLEC currently serves that route, then it
7 would be necessary to demonstrate that three CLECs would potentially be able to
8 deploy transport facilities. This methodology allows me to take into account
9 “existing facilities-based competition,” as the *Triennial Review Order* requires.

10

11 **Q. PLEASE DESCRIBE BELL SOUTH’S POTENTIAL DEPLOYMENT**
12 **ANALYSIS AT A CONCEPTUAL LEVEL.**

13

14 A. BellSouth’s potential deployment analysis investigates the economic attractiveness
15 to CLECs of deploying fiber-based transport facilities to additional BellSouth wire
16 centers where they may not have such facilities at the present time. The financial
17 viability of extending fiber to an additional wire center is determined using a NPV
18 test, as prescribed by the *Triennial Review Order* (fn. 260). That is, with a positive
19 NPV it is economically rational for a CLEC to deploy fiber to that wire center, as the
20 potential revenue exceeds the potential cost.

21

22 The “revenue” in this case (unlike that in the potential loop deployment situation) is
23 the savings that a CLEC could realize by no longer having to lease from BellSouth

1 the unbundled transport and special access for routes that connect the wire center to
2 other wire centers where the CLEC is already collocated.⁹ The “cost” comprises the
3 expenses that the CLEC would incur (both upfront and on an ongoing basis) to
4 extend its network by deploying fiber to the additional wire center from its nearest
5 current collocation site where it has fiber facilities.

6
7 From an economic perspective, this analysis represents the familiar “buy or build”
8 decision. Its purpose is to determine whether it is more economical for the CLEC to
9 continue leasing transport facilities from BellSouth or to build its own facilities.

10
11 **Q. HOW DO YOU DETERMINE THE POTENTIAL REVENUE WHEN A**
12 **CLEC EXTENDS ITS NETWORK TO AN ADDITIONAL WIRE CENTER**
13 **BY INVESTING IN ITS OWN FIBER TRANSPORT FACILITIES?**

14
15 A. As described above, the potential revenue to a CLEC from extending its network to
16 an additional wire center where it is not currently collocated can be conservatively
17 estimated as that CLEC’s current total spending on BellSouth-leased transport from
18 that wire center to other wire centers within its network. This spending, which the
19 CLEC saves (or avoids) by deploying its own fiber transport facilities, is determined
20 for every CLEC from BellSouth’s actual September 2003 billing records for
21 wholesale transport (UNE and special access). Although a CLEC that has installed

⁹ This is a conservative estimate because it ignores the additional savings that may be realized if the CLEC currently buys transport at higher rates from wholesalers other than BellSouth.

1 its own facilities could likely generate additional revenue by wholesaling transport to
2 other carriers, my conservative estimate of potential CLEC revenue does not account
3 for that possibility.
4

5 **Q. HOW DO YOU DETERMINE THE CLEC'S ADDITIONAL COST TO**
6 **EXTEND ITS NETWORK TO AN ADDITIONAL WIRE CENTER?**

7
8 A. A CLEC's network is typically fully interconnected, i.e., transport facilities connect
9 every wire center within a LATA at which the CLEC is collocated. It follows that,
10 to add a new wire center to its network, a CLEC merely has to extend fiber to it from
11 any location at which it is currently collocated. To calculate the cost of that network
12 extension, it is first necessary to identify the nearest location from which the
13 extension can be made. Subsequently, it is necessary to determine the expenses that
14 would be incurred to lay the new fiber and add the equipment needed to make the
15 fiber operationally ready to provide transport. I describe each of these steps below.
16

17 **Q. IN CONSIDERING A WIRE CENTER THAT MAY BE ADDED TO THE**
18 **CLEC'S NETWORK, HOW DO YOU DETERMINE THE NEAREST**
19 **LOCATION (WIRE CENTER) WHERE THE CLEC CURRENTLY HAS**
20 **FIBER?**

21
22 A. That determination requires the creation of two tables. The first table contains, for

1 each CLEC, information on every building and wire center currently connected by its
2 self-deployed fiber. This is the same information (compiled from discovery and
3 BellSouth's internal data) that is used in BellSouth witness Shelly Padgett's Direct
4 Testimony to conduct the triggers tests for unbundled loop and transport facilities.
5 BellSouth's internal records and standard address-matching software provide the
6 "V&H coordinates," or latitude and longitude, for every wire center.

7
8 The second table contains, for each CLEC, the remaining wire centers at which the
9 CLEC is *not* collocated presently, but at which it could *potentially* collocate to
10 augment its existing network.

11
12 Given the two tables, simple queries in Microsoft Access are used to determine, for
13 each CLEC, the distance between each wire center from the second table and the
14 *nearest* wire center from the first table. This exercise provides the distance that
15 needs to be covered to connect a currently off-network wire center to the nearest on-
16 network wire center. As for extending loop facilities, distance here is also calculated
17 as the North/South right angle distance, which generally overestimates the distance
18 because a more direct route can usually be found.

19

20 **Q. HOW DO YOU DETERMINE THE COST TO EXTEND THE CLEC'S**
21 **NETWORK TO AN ADDITIONAL WIRE CENTER?**

22

23 A. The network design and the costs of the various components of that network design

1 necessary to extend the CLEC's network are described in the Direct Testimony of
2 Mr. Gray. I rely on Mr. Gray's evidence to establish the cost of extending the CLEC
3 network in my analysis.
4

5 **Q. HAVING DETERMINED THE REVENUES AND COSTS, HOW DO YOU**
6 **CALCULATE THE NPV OF THE DEPLOYMENT?**
7

- 8 A. The NPV is calculated in the standard way from the after-tax cash flows, assuming
9 that all capital expenditures are made in year zero and depreciate over 10 years, and
10 incorporating the tax and cost of capital assumptions as filed in Docket No. 030851-
11 TP. That is:
- 12 1. Calculate the required capital expenditure in year zero.
 - 13 2. Calculate the annual depreciation and the resulting depreciation tax-shield using
14 an average tax rate of 39%.
 - 15 3. Calculate network-operating expenses.
 - 16 4. Calculate pre-tax operating income by subtracting network operating expenses
17 from revenue.
 - 18 5. Calculate after-tax operating income and, hence, cash flows (by adding the
19 depreciation tax shield).

1 6. Calculate the 10-year NPV, using the mid-year convention for cash flows and a
2 discount rate of 10.8%. To be conservative, I do not assume any continuing value
3 beyond the 10-year period.

4

5 **Q. HOW DO YOU SELECT THE WIRE CENTERS (AND, HENCE, THE**
6 **ROUTES) THAT MEET THE POTENTIAL DEPLOYMENT TEST?**

7

8 A. For a given CLEC, the wire centers that satisfy the potential deployment test are
9 those for which $NPV > 0$ as calculated according to the methodology described
10 above. Once those wire centers are identified, it is a simple matter to calculate the
11 additional routes on which a CLEC would be able to deploy its own transport
12 facilities. Once this is done for every CLEC, it is a matter of counting to determine
13 which routes for which a finding of no impairment must be made.

14

15 **Q. BASED ON THE ANALYSIS THAT YOU HAVE JUST DESCRIBED,**
16 **WHICH ROUTES SATISFY THE POTENTIAL DEPLOYMENT TEST FOR**
17 **NON-IMPAIRMENT WITH RESPECT TO TRANSPORT FACILITIES?**

18

19 A. Exhibit AXB-3 shows the list of routes (pairs of wire centers) that satisfy the
20 potential deployment test for DS3 and dark fiber transport facilities. Based on the
21 test prescribed by the FCC, I conclude that there is no impairment for DS3 and dark
22 fiber transport on the routes on that list.

1 **Q. ARE YOU SUBMITTING THE FINAL LIST OF ROUTES THAT QUALIFY**
2 **FOR UNBUNDLING RELIEF ON THE BASIS OF THE POTENTIAL**
3 **DEPLOYMENT TEST?**

4
5 A. No. BellSouth reserves the right to change the list of routes after receiving
6 responses to additional discovery requests.

7
8 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

9
10 A. Yes.

11

1 **ON BEHALF OF BELL SOUTH TELECOMMUNICATIONS, INC.**

2 **SUPPLEMENTAL DIRECT TESTIMONY OF**

3 **ANIRUDDHA (ANDY) BANERJEE, Ph.D.**

4 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

5 **DOCKET NO. 030852-TP**

6 **JANUARY 9, 2004**

7 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**
8 **POSITION.**

9
10 A. My name is Aniruddha (Andy) Banerjee. I am a Vice President at NERA Economic
11 Consulting located at One Main Street, Cambridge, Massachusetts 02142.

12
13 **Q. ARE YOU THE SAME DR. BANERJEE THAT FILED DIRECT**
14 **TESTIMONY IN THIS PROCEEDING ON DECEMBER 22, 2003?**

15 A. Yes.

16 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT**
17 **TESTIMONY?**

18
19 A. This supplemental direct testimony updates the exhibits that were attached to my
20 Direct Testimony on December 22, 2003. Based on the revised exhibits, I also
21 update my principal conclusions concerning the total customer locations and routes
22 where CLECs are not impaired without access to BellSouth's unbundled loops and

1 transport facilities. I have attached supplemental exhibits AXB-2 and AXB-3, which
2 replace the former versions of these exhibits that were attached to my direct
3 testimony.

4 **Q. PLEASE DESCRIBE THE CHANGES YOU HAVE MADE TO EXHIBITS**
5 **AXB-2 AND AXB-3 AND THE REASONS FOR THE CHANGES.**

6

7 A. I have revised the list of customer locations (AXB-2) and routes between BellSouth
8 wirecenters (AXB-3) that are suitable for potential deployment. This change is
9 necessary because – as described in Ms. Padgett’s supplemental direct testimony –
10 after my testimony was filed on December 22nd, the ongoing discovery process
11 altered my prior understanding of the buildings and central offices where CLECs
12 have their own facilities. In addition, as Ms. Padgett’s supplemental direct testimony
13 describes, certain buildings not located in BellSouth’s territory were excluded. As
14 the case for *potential* deployment depends on where there is *actual* deployment (as I
15 described in my previous testimony), I have had to amend my exhibits accordingly.

16

17 **Q. WHAT IS THE OVERALL IMPACT OF THE CHANGES YOU HAVE**
18 **MADE TO EXHIBITS AXB-2 AND AXB-3?**

19

20 A. I find that CLECs are not impaired without access to BellSouth’s unbundled loops in
21 421 customer locations, and CLECs are not impaired without access to BellSouth’s
22 transport facilities on 155 routes.

1

2 **Q. ARE YOU SUBMITTING THE FINAL LIST OF BUILDINGS AND ROUTES**
3 **THAT QUALIFY FOR UNBUNDLING RELIEF ON THE BASIS OF THE**
4 **POTENTIAL DEPLOYMENT TEST?**

5

6 A. No. It is possible that as a result of ongoing discovery that further modifications
7 may occur and BellSouth reserves the right to change the list of buildings and routes.

8

9 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?**

10

11 A. Yes.

ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.
SURREBUTTAL TESTIMONY OF ANIRUDDHA (ANDY) BANERJEE, Ph.D.
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030852-TP

FEBRUARY 4, 2004

1 **I. INTRODUCTION AND PURPOSE**

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**
3 **POSITION.**

4
5 A. My name is Aniruddha (Andy) Banerjee. I am a Vice President at NERA Economic Consulting
6 located at One Main Street, Cambridge, Massachusetts 02142.

7
8 **Q. HAVE YOU FILED TESTIMONY PREVIOUSLY IN THIS PROCEEDING?**

9
10 A. Yes, I filed direct testimony (on December 22, 2003) and supplemental direct testimony (on
11 January 9, 2004) in this proceeding.

12 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

13 A. My surrebuttal testimony responds to specific allegations and claims of an economic nature by
14 witnesses for intervening parties, including Gary J. Ball on behalf of the Florida Competitive
15 Carriers Association ("FCCA"), Kent W. Dickerson on behalf of the Sprint/United Management
16 Company ("Sprint"), and James C. Falvey on behalf of Xspedius Communications LLC. In

1 addition, I attach revised versions of two exhibits that were filed with my direct testimony on
2 December 22, 2003.

3 **II. REVISED EXHIBITS**

4 **Q. PLEASE EXPLAIN WHY YOU HAVE INCLUDED REVISED EXHIBITS FOR**
5 **CUSTOMER LOCATIONS AND ROUTES THAT SATISFY THE POTENTIAL**
6 **DEPLOYMENT TEST.**

7 A. There are two reasons. First, the revised exhibits reflect modified cost and other inputs to my
8 analysis of potential deployment as detailed in the surrebuttal testimony of A. Wayne Gray. Thus,
9 I have used revised network costs for the LGX and intra-building network cable and termination.
10 In addition, I have used the most updated set of fiber nodes, which incorporates additional
11 discovery responses. As I noted in my direct and supplemental direct testimonies, BellSouth
12 reserved the right to modify the locations and routes that qualify for unbundling based on
13 additional discovery.
14

15 The revised customer locations and inter-office routes that satisfy the potential deployment test
16 are presented in the attached Exhibits AXB-2 and AXB-3, which replace the prior versions of
17 these exhibits.
18

19 **III. RESPONSES TO OTHER PARTIES**

20 **Q. MR. DICKERSON ARGUES [AT 29-30] THAT BELLSOUTH'S POTENTIAL**
21 **DEPLOYMENT TEST OVERLOOKS THE "FACT" THAT CLECS' FAILURE THUS**
22 **FAR TO SERVE MORE CUSTOMER LOCATIONS CONTRADICTS**

1 **BELLSOUTH’S CONTENTION THAT CLECS COULD POTENTIALLY DEPLOY**
2 **LOOP FACILITIES AT THOSE LOCATIONS. DO YOU AGREE?**
3

4 A. No. The thrust of Mr. Dickerson’s argument is that serving the additional customer locations in
5 Florida identified by my potential deployment test cannot possibly be profitable simply because
6 CLECs have thus far avoided serving those locations. This argument, presented as “evidence”
7 that CLECs remain impaired and involuntarily precluded from serving certain customer locations,
8 cannot be taken as serious criticism of either the potential deployment test itself (as devised by the
9 FCC) or how I have conducted it. Contrary to what Mr. Dickerson appears to imply, the
10 potential deployment test is *not* a gauge or barometer of what a CLEC *would* do; rather, it is
11 intended to demonstrate what it *could* do. That is, the mere fact that CLECs have not *yet* made
12 the effort to serve certain customer locations cannot be considered dispositive evidence that they
13 would not do so at the “right” time. Again, for the potential deployment test for loops, it suffices
14 only to demonstrate that, given what we know about specific customer locations and the
15 circumstances that any carrier would face to serve them, at least two CLECs could profitably
16 serve each such location.
17

18 Mr. Dickerson offers several “practical” explanations for the current seeming CLEC
19 disinterest in the additional customer locations in Florida to which loop deployment could be
20 profitable according to my analysis. These include (1) non-availability of conduit space, (2) non-
21 availability of rights-of-way within a “reasonable timeframe,” (3) insufficient revenue potential, and
22 (4) infeasible cost recovery. A careful reading of my testimony would show that my potential
23 deployment analysis attempts to take into account all of these factors. In fact, I note in my direct
24 testimony that the FCC has specifically required that account be taken in the potential deployment
25 analysis of many of the factors cited by Mr. Dickerson.

1

2 In the ultimate analysis, I question the premise that CLECs are unlikely to have chosen
3 voluntarily to pass up profitable business opportunities presented by the customer locations that
4 are identified by my potential deployment test. Entry and expansion decisions by firms are
5 dictated by a variety of factors including the availability of alternative deployment strategies, the
6 appropriate scale of efficient operations relative to the level of available demand, access to capital
7 markets, and (frequently) the business models and objectives of those firms regarding the scope
8 and timing of their activities. In the environment in which CLECs operate in Florida, the
9 availability of unbundled network elements (“UNEs”) at regulated prices is likely to have an
10 important bearing on CLEC choices because the relative economics of leasing UNEs and
11 deploying owned facilities may well prompt CLECs to choose to expand through the use of
12 UNEs rather than by deploying their own facilities. As a result, although the presence of facilities
13 meeting the triggers test is evidence of non-impairment, the absence of such facilities *cannot* be
14 taken as evidence of impairment. The advantage of having a “potential deployment” test in
15 addition to the triggers is that this fact is properly recognized.

16

17 **Q. PLEASE EXPLAIN WHETHER YOUR POTENTIAL DEPLOYMENT ANALYSIS**
18 **TAKES ACCOUNT OF THE FACTORS THAT MR. DICKERSON IDENTIFIES AS**
19 **PRESENTING PRACTICAL CONSTRAINTS ON THE DEPLOYMENT OF LOOP**
20 **FACILITIES BY CLECS.**

21 A. The FCC’s *Triennial Review Order* specifies a set of nine factors each for the potential
22 deployment analysis of loop facilities (to serve customer locations) and transport facilities (to
23 serve inter-office routes), respectively. I detail below the manner in which I take those nine
24 factors or criteria into account.

1 Loops (see TRO ¶335 and Rules §51.319(a)(5)(ii), (6)(ii))

2 Factor 1 (*Evidence of alternative loop deployment at that location*)

3

4 I count actual loops deployed to the customer location towards the two carriers required to
5 show competitive supply. That is, if one actual carrier currently serves a location, a finding of
6 non-impairment would only require the demonstration that one more carrier could potentially
7 deploy facilities to that location. (Note that Mr. Dickerson is incorrect – and inconsistent with his
8 own argument – when he asserts (p.24) that two CLECs must both be potentially deploying,
9 thereby ignoring the evidence of actual loop deployment.)

10 Factors 2 to 5 (*Local engineering costs of building and utilizing transmission facilities;*
11 *the cost of underground or aerial laying of fiber or copper; the cost of equipment*
12 *needed for transmission; installation and other necessary costs involved in setting up*
13 *service*)

14

15 The costs of building the network to the customer location and setting up service are fully
16 considered in the analysis and are detailed in the direct and surrebuttal testimonies of BellSouth
17 witness A. Wayne Gray in this proceeding.

18

19 Factor 6 (*Local topography such as hills and rivers.*)

20 To determine the cost of deploying a fiber cable to a customer location, I use, as a reasonable
21 proxy, the conservative assumption that the fiber loop follows a right-angle path from the CLEC's
22 fiber node to the customer location. Because the locations for which potential deployment is

1 viable are located in urban commercial areas with few topography concerns, and since CLECs
2 already have fiber nodes relatively close to these locations, the right-angle methodology is a
3 conservative alternative that accounts for local topography. If anything, this methodology is likely
4 to over-estimate, rather than under-estimate, the distances over which CLECs have to deploy
5 their loops. Thus, my analysis is likely also to under-estimate the number of customer locations
6 that CLECs could serve profitably out of their own loops.

7 *Factor 7 (Availability of reasonable access to rights-of-way)*

8 Costs associated with rights-of-way are taken into account, as described in Mr. Gray's direct
9 and surrebuttal testimonies.

10 *Factor 8 (Building access restrictions/costs)*

11 Based on BellSouth's experience in deploying high-capacity services to commercial buildings,
12 few building access restrictions or costs constitute a material barrier to loop deployment.
13 Typically, building owners in BellSouth's service territory do not charge access fees and, in the
14 limited situations in which this occurs, such costs are passed directly on to end-user customers.

15 *Factor 9 (Availability/feasibility of similar quality/reliability alternative transmission*
16 *technologies at that particular location)*

17
18 Although the *Triennial Review Order* provides the flexibility to consider alternative transmission
19 technologies that may be more cost effective for particular customer locations, BellSouth has
20 chosen to model costs for a fiber-optics network architecture similar to the one it uses when
21 deploying loops to high-capacity buildings.

22 Transport (see TRO ¶410 and Rules §51.319(e)(2)(ii), (3)(ii))

1 Factors 1 to 4 (*Local engineering costs of building and utilizing transmission facilities;*
2 *the cost of underground or aerial laying of fiber or copper; the cost of equipment*
3 *needed for transmission; installation and other necessary costs involved in setting up*
4 *service)*

5 The costs of building the network and setting up service are fully considered and are described in
6 Mr. Gray's direct and surrebuttal testimonies.

7 Factor 5 (*Local topography such as hills and rivers)*

8 The transport analysis is similar to the loop analysis, which uses, as a proxy, the conservative
9 assumption that the fiber loop follows a right-angle path from the CLEC's fiber node to the wire
10 center. Because the wire centers involved are in urban commercial areas with few or no
11 topography concerns, and since CLECs already have fiber nodes relatively close to these wire
12 centers, this methodology is a conservative and reasonable method of satisfying the topography
13 aspect of the rule. Again, this methodology is likely to under-estimate the number of routes on
14 which CLEC deployment would be profitable.

15 Factor 6 (*Availability of reasonable access to rights-of-way)*

16 Costs associated with rights-of-way are taken into account, as described in Mr. Gray's direct
17 and surrebuttal testimonies.

18 Factor 7 (*Availability/feasibility of similar quality/reliability alternative transmission*
19 *technologies along the particular route)*

20 Although the *Triennial Review Order* provides the flexibility to consider alternative transmission
21 technologies that may be more cost effective for particular routes, BellSouth has chosen to model
22 costs for a fiber-optic network architecture similar to the one it uses when deploying interoffice
23 transport facilities.

1 Factor 8 (*Customer density or addressable market*)

2 My analysis of potential deployment of transport facilities uses a “build versus buy” decision
3 where the benefit of self-deployment for each CLEC is the savings achieved by not leasing
4 wholesale transport from BellSouth. Since I use the actual BellSouth revenues by CLEC for each
5 specific route in the analysis, this methodology reflects the actual revenues that each CLEC
6 obtains from the currently addressed market.

7 Factor 9 (*Existing facilities-based competition*)

8 As three carriers are required to meet the self-deployment trigger for transport, I assume the
9 same threshold for the potential case – that is, I demonstrate that, counting actual transport
10 facilities, a total of three carriers are required on a particular route to show competitive supply
11 (e.g., if one actual carrier currently has transport facilities along a route, a finding of non-
12 impairment would require the demonstration that two more carriers could potentially deploy
13 facilities on that route).

14
15 **Q. BEYOND THESE FCC-SPECIFIED FACTORS, DOES YOUR POTENTIAL**
16 **DEPLOYMENT ANALYSIS TAKE OTHER FACTORS INTO ACCOUNT, SUCH AS**
17 **CLECS’ ACCESS TO CAPITAL, AS SUGGESTED BY MR. FALVEY [AT 22]?**
18

19 A. No. Although Mr. Falvey asks this Commission to consider the “current limited access to capital
20 of CLECs,” I would urge that there be no expansion of the potential deployment test beyond the
21 factors specified by the FCC. The granularity achieved in such a test by following the FCC’s
22 instructions in the matter is significant enough. Granting Mr. Falvey’s request would open the
23 door to various other requests to expand and, in the process, unnecessarily complicate the test.
24 Besides, Mr. Falvey’s concern about limited access to capital is clearly less valid in today’s

1 capital market circumstances than it may have been some years ago. Moreover, the return on
2 equity, used to determine the cost of capital, takes in consideration the circumstance of the capital
3 market.
4

5 **Q. PLEASE RESPOND TO MR. DICKERSON'S SPECIFIC CONCERN [AT 28],**
6 **ECHOED BY MR. BALL [AT 57], THAT CUSTOMERS AT LOCATIONS TO**
7 **WHICH CLECS HAVE NOT DEPLOYED LOOP FACILITIES MAY BE TIED UP IN**
8 **MULTI-YEAR CONTRACTS WITH BELL SOUTH.**
9

10 A. Mr. Dickerson's concern in this respect is almost certainly exaggerated. While contracts are a
11 standard business arrangement that minimizes risk and raises the certainty of financial
12 commitments of buyers and sellers alike, there is no reason to believe—and neither Mr.
13 Dickerson nor any of the other parties provides any evidence—that BellSouth has employed such
14 contracts as an entry deterrent. Contracts are not of indefinite or unduly long durations, and they
15 probably do not run concurrently for every business customer in a building. That is, some of the
16 customers in a building may be in contracts that are likely to expire imminently or in the near term,
17 and opportunities for CLEC entry into the building may certainly exist for those customers.
18 Moreover, when CLECs signal an interest in bidding for a customer's *future* business, that
19 customer may itself be reluctant to sign long-term contracts that would effectively preclude it from
20 seeking alternatives to an incumbent carrier like BellSouth. Competitive pressures may increase
21 the prospects for a variety of contracts, including various shorter-term contracts designed to
22 entice customers away from the incumbent by offering specific advantages and incentives.
23

24 **Q. PLEASE COMMENT ON MR. BALL'S ASSERTION [AT 46], REPEATED BY MR.**

1 **DICKERSON [AT 42 AND 45], THAT BELLSOUTH’S DEMONSTRATION OF**
2 **POTENTIAL DEPLOYMENT BY THE REQUIRED NUMBER OF CLECS (TWO**
3 **FOR LOOPS, THREE FOR ROUTES) MUST BE *LOCATION-SPECIFIC*.**

4 A. That is exactly how I have conducted my potential deployment analysis. As the exhibits attached
5 to my direct testimony clearly show, *specific* customer locations and routes between pairs of
6 BellSouth central offices are identified as being profitable for the requisite number of CLECs to
7 serve. These locations and routes are actual and readily identifiable by their addresses or
8 latitude-longitude parameters. For *each* such location or route, my analysis examines the 10-year
9 net present value of CLEC entry, conditional on the nine factors that the FCC requires be taken
10 into account.

11
12 **Q. MR. BALL ALSO CONTENDS [AT 50] THAT THE POTENTIAL DEPLOYMENT**
13 **TEST MUST DEMONSTRATE THAT THE REVENUE AVAILABLE TO A CLEC**
14 **AT A PARTICULAR LOCATION MUST BE SUFFICIENT TO “OVERCOME THE**
15 **FIXED AND SUNK COSTS OF CONSTRUCTING A FACILITY AT THAT**
16 **LOCATION.” DOES YOUR ANALYSIS MAKE THAT DEMONSTRATION?**

17 A. Yes. In fact, my analysis is even more comprehensive than that suggested by Mr. Ball. The
18 revenues available to CLECs must be shown to compensate them not only for their fixed and
19 sunk costs but also for all of the variable operational costs associated with a 10-year period of
20 operation. The revenue assumptions are developed carefully by reference to expert reports on
21 actual CLEC experiences in the marketplace. Again, because the burden carried by the potential
22 deployment test is only to demonstrate that the CLEC *could* earn enough revenues to recover its
23 various costs, it is not necessary to prove somehow that actual CLEC deployments would occur.
24 My analysis and the assumptions on which it rests are consistent with that predicate.

25

1 **Q. PLEASE PROVIDE AN EXAMPLE OF YOUR USE OF ACTUAL CLEC**
2 **EXPERIENCE IN THE MARKETPLACE TO MAKE ASSUMPTIONS ABOUT**
3 **REVENUE IN YOUR POTENTIAL DEPLOYMENT ANALYSIS.**

4 A. One important example is the assumption that each of the two potential CLECs serving a new
5 building would have 15% of the revenue available from that building (note that Mr. Dickerson is
6 incorrect when he asserts that my analysis “fails to take into account” that 2 CLECs must share
7 the revenue (p.32)). The basis for this assumption is provided by three specific market reports
8 that document revenue shares achieved by CLECs serving business customers. These are (1)
9 “Teligent, Inc. Initial Report” by Ferris Baker Watts, September 21, 2000, (2) “Winstar
10 Communications, Inc. Initial Report” by Ferris Baker Watts, January 26, 2001, and (3)
11 “Broadband 2001” by McKinsey & Company and J.P. Morgan, April 2, 2001.
12

13 **Q. HOW DO YOU RECONCILE YOUR ASSUMPTION THAT TWO CLECS CAN**
14 **EACH GAIN A 15% REVENUE SHARE IN A BUILDING WITH THE POSSIBILITY**
15 **(CITED BY MR. DICKERSON) THAT CUSTOMERS MAY BE TIED UP IN LONG-**
16 **TERM CONTRACTS WITH THEIR CURRENT SUPPLIERS?**

17 A. This is a reasonable assumption because, when selecting buildings from the TNS Telecoms
18 database, all the buildings with fewer than three tenants are first removed from consideration,
19 leaving only buildings with a large enough pool of potential customers to be targeted by CLECs.
20 Also, customers in the enterprise market typically have multiple telecommunications suppliers in
21 order to negotiate better contracts and to obtain redundancy to protect against network failures.
22 This multiple supplier environment, together with the filter on number of tenants per building,
23 assures that opportunities exist for CLECs to gain market share in a building.
24

1 **Q. PLEASE RESPOND TO MR. DICKERSON’S ASSERTION [AT 31] THAT THE**
2 **ASSUMPTION THAT “\$60,000 IS SUFFICIENT ANNUAL REVENUE TO JUSTIFY**
3 **BUILDING FIBER INTO ALL 421 IDENTIFIED LOCATIONS”**
4 **UNDERESTIMATES SIGNIFICANTLY THE REVENUE THAT WOULD**
5 **ACTUALLY BE NEEDED.**

6 A. The basis for Mr. Dickerson’s assertion appears to be his mistaken belief that my analysis
7 regards any building with \$60,000 in annual revenue as suitable for facilities deployment. Nothing
8 could be farther from the actual, building-by-building analysis that I performed, and I suspect this
9 fundamental misunderstanding may be at the root of many of Mr. Dickerson’s other, equally
10 incorrect observations about my methodology. In fact, I use the \$60,000 annual (equivalently,
11 \$5,000 monthly) revenue figure merely as an initial filter that conservatively reduces the number of
12 buildings considered in the potential deployment analysis to a manageable level by eliminating any
13 that are below this threshold (even though they may have met the potential deployment test). For
14 example, use of this filter reduces the number of candidate buildings in Florida from more than
15 200,000 to approximately 7,000.
16

17 Mr. Dickerson also asserts [at 33-34] that the annual revenue available from a building ought
18 to be at least \$240,000, rather than the \$60,000 I have chosen for my filter. This assertion,
19 again, stems from a misunderstanding of my purpose in using the \$60,000 annual revenue filter.
20 Moreover, it is based on a number of other assumptions that need not apply to my analysis. For
21 example, Mr. Dickerson computes his \$240,000 minimum annual revenue requirement on the
22 assumption that the two CLECs that potentially deploy their own loops would account for 50%
23 of the revenue available from a building. My analysis makes the more conservative assumption,
24 based on actual CLEC experience, that the collective share of the two equally sized CLECs
25 would be approximately 30%. Second, Mr. Dickerson cites CLEC market share estimates

1 (available from independent market research firms) that, if read Mr. Dickerson's way, would
 2 appear to cast doubt on either the collective 30% share assumption in my analysis or even the
 3 more extreme 50% share assumption. Mr. Dickerson does not explain why the 14.6% CLEC
 4 share of private line revenue may match its likely revenue share from serving a building occupied
 5 by small and medium business customers. Furthermore, in selectively reporting the 13.2% CLEC
 6 share of "entire telecommunications market," Mr. Dickerson does not explain why that statistic
 7 represents the CLEC share of the *enterprise* market.¹ Finally, Mr. Dickerson does not explain
 8 that any nationwide or region wide CLEC share (averaged over a larger base that includes
 9 buildings not served by CLEC) is necessarily lower than the CLEC shares of the telecom spend
 10 in buildings that CLECs actually serve over their own facilities.

11
 12 **Q. GIVEN THE CRITICISMS OF YOUR ANALYSIS (IN PARTICULAR, MR. BALL'S**
 13 **ASSERTION [AT 65] THAT YOU RELY ON "HYPOTHETICAL COST"**
 14 **ASSUMPTIONS), PLEASE EXPLAIN HOW YOU ENSURED THAT THE INPUTS IN**
 15 **YOUR ANALYSIS ARE REASONABLE.**

16 A. As I explained earlier, my analysis makes every effort to conform to the nine FCC-specified
 17 factors for both loops and transport facilities. Beyond the investment cost associated with loops
 18 and associated equipment, I also include two categories of cost: "COGS and other network
 19 cost," and SG&A:

¹ Mr. Dickerson does not mention whether that share is of access lines served or revenues earned. If it is the access-line share then, given that CLECs seek out the most lucrative business customers, a 13.2% line share may well translate into a considerably higher revenue share. FCC statistics show that CLECs account for over 23% of access lines sold to enterprise market customers nationwide. See FCC, *Local Telephone Competition: Status as of June 30, 2003*, Wireline Competition Bureau, December 2003, Table 2. Moreover, in Florida, there is reason to believe that CLECs serve over 34% of business customers in BellSouth's service territory in Florida. See Revised Direct Testimony of John A. Ruscilli, on behalf of BellSouth Telecommunications, Florida Public Service Commission Docket No. 030869-TL, September 23, 2003, at 14.

- 1 1. “COGS and other network cost” includes all network-related expenses beyond the cost of the
2 loop, including any potential capacity upgrades to the CLEC’s existing network that would be
3 necessary to provide retail services to *new* customer locations. For example, this category of
4 cost includes the cost of voice switches (both operating expenses and depreciation), switched
5 access and other interconnection costs, various transport, transit, and peering costs, cost of
6 data network equipment, etc.
- 7 2. “SG&A” includes all CLEC expenses, including sales and marketing, billing, customer care,
8 and overhead expenses.

9 These categories are more than sufficient to account for CLECs’ expenses. The basis for these
10 inputs is detailed in the testimony of BellSouth witness Debra Aron in Docket No. 030851-TP.
11 The expenses in the two categories above, which are based on actual CLEC experiences,
12 amount to more than 50% of retail revenue. In addition, contrary to Mr. Dickerson’s stated
13 apprehension [at 41], sales and marketing expenses are adjusted for assumed annual rates of
14 churn as well as other gross customer additions.

15 With respect to the cost of capital that I use, which is commented on by both Mr. Ball (at p.54)
16 and Mr. Dickerson (at p.42), I defer to the testimonies of Dr. Billingsley in the switching case
17 (030851-TP), where it is explained and defended against the critiques of Dr. Staihr that Mr.
18 Dickerson cites.

19

20 Finally, Mr. Dickerson’s claim [at 41] that the assumed amortization period of 10 years in my
21 analysis “is entirely too long to assume a customer would subscribe to competitive services”
22 confuses two different issues.² My analysis makes no assumption regarding the length of time a

² Mr. Ball displays the same confusion [at 61]. His suggestion for evaluating the net present of value over five years makes little sense from the perspective of a CLEC that wishes to make an investment for the long haul,

(continued...)

1 CLEC would be able to serve a given customer. Rather, it only assumes that the CLEC
2 evaluates the net present value of its entry into a building occupied by multiple business customers
3 over a 10-year period, a standard time period in financial analysis (and used, e.g., in the model
4 that Mr. Ball attaches to his testimony as Exhibit GJB-3 which amortizes costs over 10.24 years,
5 and in the cost model filed by AT&T in the switching proceeding before this commission). Over
6 this period, the CLEC may end up serving different customers or even several customers at a
7 time. All that matters is that, on average, it be able to secure at least 15% of the revenue
8 available from the building as a whole.

9 **Q. MR. BALL SUGGESTS [AT 57] THAT YOUR POTENTIAL DEPLOYMENT TEST**
10 **FOR LOOPS IS DEFICIENT IN THAT IT DOES NOT CONSIDER THE SAME**
11 **“BUY OR BUILD” DECISION THAT IS PART OF YOUR POTENTIAL**
12 **DEPLOYMENT TEST FOR TRANSPORT FACILITIES. DO YOU AGREE?**

13 A. No. There is a fundamental difference between the two situations. Loops deployed to business
14 customer locations in buildings are part of a retail facilities-based local exchange service, the
15 revenue from which accrues in the form of spending on that service by end-user business
16 customers. With such a retail service, no “build or buy” decision is involved. That is, I do *not*
17 consider the circumstance of a CLEC that is currently running a special access line obtained from
18 BellSouth into a customer location and has the option to replace that line with its own facilities.
19 Rather, my analysis focuses on buildings that are presently not served *by any means* by the
20 CLEC and asks under what revenue and cost circumstances would up to two CLECs find it
21 profitable to deploy their own loops into those buildings.

(...continued)

particularly given that many of its upfront costs are likely to be sunk.

1 On the other hand, transport is a wholesale service where the CLEC has a choice of
2 deploying either its own facilities or purchasing/leasing them from the ILEC. The “revenue” in this
3 instance is the cost saved from the forgone option.
4

5 **Q. MR. BALL SUGGESTS [AT 62] THAT AN AT&T STUDY THAT HE INCLUDES**
6 **WITH HIS TESTIMONY “PRESENTS A MORE REALISTIC DEPICTION OF THE**
7 **COSTS AND NECESSARY REVENUES FOR A CLEC TO EXTEND ITS**
8 **NETWORK INTO A NEW BUILDING.” PLEASE COMMENT.**

9 A. This study is irrelevant for the potential deployment test as defined in the *Triennial Review*
10 *Order*. First, almost everything in AT&T’s study (including distances and prices of wholesale
11 alternatives) appears to reflect national averages for AT&T’s network, rather than the specific
12 conditions that prevail for the buildings in Florida in my analysis. Second, the AT&T study is a
13 buy-versus-build analysis for loops and, therefore, not suitable for the potential deployment test
14 required by the *Triennial Review Order*. As explained above, just because it may be more
15 profitable to purchase UNEs or special access service from the ILEC does not mean a CLEC
16 could not profitably deploy its own facilities to a building. In summary, even if the inputs in the
17 AT&T study are accurate (a matter I have not investigated), the study itself is non-granular,
18 contrary to the FCC’s requirements. The AT&T study does not address whether a CLEC could
19 profitably deploy its own facilities to provide retail services at various customer locations. It is,
20 therefore, irrelevant to the purposes of the building-specific analysis defined by the FCC in the
21 *Triennial Review Order*.
22

23 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

24 A. Yes.

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 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

15 **Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.**

16

17 A. 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

DOCUMENT MADE PUBLIC

13321 DEC 22 8

FPSC-COMMISSION CLERK

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 TESTIMONY?**

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 OC_n 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**
2 **EXTEND A LOOP FACILITY TO A PARTICULAR CUSTOMER LOCATION?**

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

1 Between the Off Net Building and the node on the CLEC's existing fiber-optic network
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
4 another party's poles, ducts or conduits.

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
11 to terminate the fiber and provide DS0/DS1/DS3 loops to end-use customers is illustrated
12 in Exhibit AWG-2. This diagram shows pictorially the relationship of the individual
13 "piece parts" described above.

14

15 **Q. WHAT ARE THE COSTS FOR THE EQUIPMENT ELEMENTS LISTED?**

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
19 material, labor, all overhead, and taxes. These costs are taken directly from the cost
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 $N \leq 28$, number of DS1s = N, number of DS3s = 0

9 If $N > 28$, number of DS1s = $\max(28, N \times 1/3)$, 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 ILEC 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
5 of the carrier's ability to provide a dedicated DS1 or DS3 transport route over that
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
14 cost of deploying a fiber cable is mostly fixed (e.g., digging up the streets, attaching cable
15 to poles, and deploying the fiber) and only slightly correlated with the number of fiber
16 strands in the cable, carriers almost always choose to deploy a considerable larger
17 number of strands than what they need for their immediate transmission needs. In fact,
18 although generally four (4) fibers are enough to support OCn circuits that can provide
19 enough capacity for any route (e.g., an OC192 has capacity for 192 DS3s, or 129,024
20 simultaneous voice conversation, and this capacity can be multiplied several times over
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
23 buildings or ILEC wire centers.

24

25

1 Q. **WHAT FACTORS INFLUENCE A CARRIER'S COSTS TO EXTEND THE**
2 **CARRIER'S NETWORK TO AN ADDITIONAL WIRE CENTER?**

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
11 operationally ready to provide transport.

12

13 Q. **HOW DO YOU DETERMINE THE COST TO EXTEND THE CARRIER'S**
14 **NETWORK TO AN ADDITIONAL WIRE CENTER?**

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
19 collocated wire center or building that the new location is being connected to, and along
20 the fiber route itself.

21

22 As is shown starting on the left side of the diagram in Exhibit AWG-4, the network
23 equipment required at the new (the so-called "Off Net" central office) and existing
24 central office to terminate the fiber and provide DS1/DS3 facilities is depicted. Those
25 devices are functionally similar to those used in the context of providing high capacity

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 muldemers.
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 **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").**

10

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

15 **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

20 **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.

25

GENERAL NETWORK ISSUES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. MANY CLEC WITNESSES CONTEND THAT AS A RESULT OF THEIR PARTICULAR NETWORK ARCHITECTURE, THEY DO NOT SELF-PROVIDE DEDICATED TRANSPORT. (E.G., BRADBURY, REBUTTAL P. 15). PLEASE COMMENT.

A. While Ms. Padgett will address such arguments in more detail in connection with her 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 central office B, or whether it is routed indirectly from A to a CLEC collocation arrangement, then to a CLEC switch, and then to B. That is, a CLEC with a network architecture that routes calls from central office A to central office B through an intermediate CLEC switch or CLEC collocation is operationally ready to provide transport from A to B.

I would also note that, while I am not a lawyer, some of the language contained in the rebuttal testimony of the CLEC witnesses seems to focus more on definitional smokescreens than on actual network issues. For example:

“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 emphasis added).

“FDN maintains that it has deployed dedicated transport *meeting the criteria of the self-provisioning trigger*” (Hand rebuttal, p. 4) (emphasis added).

1 “Neither the ‘backhaul’ of traffic from an MCI collocation to an MCI switch, which I
2 discuss below, nor a ‘route’ consisting of a path between an MCI collocation in wire
3 center B and that switch, constitutes ‘dedicated transport.’” (Hardin rebuttal, p. 6,
4 original quotation marks).

5
6 All of these witnesses demonstrate the common, Alice-in-Wonderland-like attempt that
7 Ms. Padgett describes to define terms as they wish, rather than how the FCC defined
8 them.

9
10 **Q. MCI SUGGESTS THAT INDIRECT ROUTES THROUGH A SWITCH**
11 **INTRODUCES ADDITIONAL POINTS OF FAILURE (HARDIN REBUTTAL, P.**
12 **9). CAN YOU ADDRESS THIS?**

13
14 **A.** Yes. For all practical purpose, an indirect route and a direct route are equivalent.
15 Indirect routes with multiple intermediate switches are used all the time in any voice or
16 data network and the number of intermediate switches is typically higher for interLATA
17 routes (especially for routes across the country). CLECs typically use indirect routes to
18 route traffic between two ILEC central offices even if they buy dedicated transport from
19 the ILEC since their logical architecture is still a hub and spoke with every circuit passing
20 through a CLEC switch. I find it puzzling that MCI raises the specter of network failure
21 for such a standard architecture, when MCI’s network using this design is used by many
22 government agencies, and federal contracts typically require network reliability.
23 Moreover, even BellSouth’s network often uses intermediate switching equipment on
24 routes between its central offices, although this fact is invisible to CLECs buying

25

1 dedicated transport from BellSouth who neither ask nor are able to notice when this kind
2 of routing occurs.

3

4 **Q. CLECS CONTEND ALSO THAT ADDITIONAL NETWORK EQUIPMENT IS**
5 **NEEDED BEFORE THEIR FACILITIES CAN PROVIDE TRANSPORT. WHAT**
6 **IS YOUR RESPONSE?**

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,
10 CLFCs are capable of performing the necessary tasks to subdivide capacity as needed.
11 Although AT&T may contend that its network exhibit (JMB-R2) “better depict[s] the full
12 requirements for channelization” (Bradbury rebuttal, p. 25) – my testimony explains that
13 AT&T’s alleged “need” for additional equipment is one that can be met easily
14 Moreover, efficient carriers typically order the line cards, multiplexers, and other
15 equipment necessary to subdivide capacity on an “as-needed” basis to preserve
16 investment capital. (See Anderson rebuttal, p. 5) (“we are continually optimizing the
17 distribution network...”). Likewise, channel banks are widely available and can be
18 provisioned in reasonable time frames. (Dickerson Rebuttal, pp. 22-23.) The fact that a
19 given carrier chooses to wait to deploy equipment does not mean that such a carrier is not
20 “operational ready” to use transport facilities. Put simply, a carrier with the ability to
21 channelize OCn level facilities is “operationally ready” to provide transport at DS1 and
22 DS3 capacity levels.

23

24

25

NETWORK COST ISSUES

1

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.

25

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

1 Q. MR. DICKERSON ALSO CLAIMS (P. 36) THAT BELLSOUTH HAS USED AN
2 INACCURATE PLANT MIX. IS THIS A VALID CLAIM?

3

4 A. No, it is not. Mr. Dickerson takes exception to BellSouth's assumption that for aerial
5 plant, and relies upon Rule 25-4.088 in support of his view. My reading of this rule does
6 not support his argument. The applicable rule does not preclude the placement of new
7 aerial plant, and is cited in full below.

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.sos.ga.gov/telecom/rules/25-4.088.pdf>

19

20 Q. PLEASE DISCUSS MR. DICKERSON'S CONCERNS RELATING TO RIGHTS-
21 OF-WAY. (PP. 40-41).

22

23 A. Mr. Dickerson claims that BellSouth has not considered the costs of delays or access to
24 rights-of-way and implies that constructing lateral extensions are difficult. In effect, Mr.
25 Dickerson suggests that there are unique or atypical barriers with constructing extensions.

1 which is not the case. While there are obstacles to any construction project (such as
2 existing water, sewer, and power lines), Sprint does not face any unique obstacle that any
3 other provider or BellSouth does not face, which includes access to buildings. All
4 carriers incur such costs, and as an experienced carrier Sprint has the experience and
5 ability to negotiate such issues.

6
7 I would note also that the costs filed with the Commission include what BellSouth pays
8 for Right of Way (ROW) and other permitting fees both at the state and the municipality
9 level. Specifically, these and other miscellaneous fees are accounted for: 1) in the in-
10 plant factor that is applied to the base material cost to determine the fully-loaded capital
11 cost; 2) in the "Ad Valorem & Other Tax" factor that is used to determine the non-plant-
12 specific operating expense. These factors include ROW, municipal license taxes, state
13 privilege taxes, state self-insurer's tax, and taxes levied upon the assessed value of
14 property.

15
16 **CO-CARRIER CROSS CONNECT ISSUES**

17
18 **Q. ITC DELTACOM WITNESS STEVE BROWN WORTH QUESTIONS THE**
19 **AVAILABILITY OF CO-CARRIER CROSS-CONNECTS ("CCNCs")**
20 **(REBUTTAL, P. 5). PLEASE ADDRESS THIS.**

21
22 **A.** The direct testimony of Mr. John Ruscilli and my rebuttal and surrebuttal testimony in
23 Docket No. 030851 addresses this concern and provides additional details concerning
24 how BellSouth provides co-carrier cross-connects. Without restating this testimony in
25 detail, I would note simply that BellSouth makes CCNCs 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 52846-

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 **BELLSOUTH TELECOMMUNICATIONS, INC.**
2 **DIRECT TESTIMONY OF SHELLEY W. PADGETT**
3 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
4 **DOCKET NO. 030852-TP**
5 **DECEMBER 22, 2003**

6
7 **I. INTRODUCTION**

8
9 Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
10 TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS
11 ADDRESS.

12
13 A. My name is Shelley W. Padgett. I am employed by BellSouth as Manager –
14 Regulatory and Policy Support in the Interconnection Services organization. My
15 business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

16
17 Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR BACKGROUND
18 AND EXPERIENCE.

19
20 A. I graduated summa cum laude from Harding University in 1992, with a Bachelor
21 of Arts degree in International Studies, and I did post-graduate work at The
22 George Washington University. I began my career in market research at
23 ALLTEL Telecommunications, Inc., but left to obtain a Master of Business
24 Administration degree from Texas A&M University, graduating in 1998. After
25 receiving my graduate degree, I began employment with BellSouth in the

1 Interconnection Services organization. I have held various positions involving
2 Negotiations and Product Management within the BellSouth Interconnection
3 Services organization. I have held my present position since October 2001.

4

5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

6

7 A. The purpose of my testimony is to address all or portions of issue numbers 1-3, 5,
8 7-12, 14-18, and 20. For DS1, DS3, and dark fiber loops and transport facilities, I
9 identify the customer locations and interoffice transport routes in BellSouth's
10 territory in Florida where the facilities triggers established by the FCC in its
11 Triennial Review Order (TRO) have been satisfied, and where Competitive Local
12 Exchange Carriers (CLECs) are therefore not impaired without access to
13 unbundled high-capacity loops or dedicated transport.

14

15 The first part of my testimony focuses on the facilities triggers for high-capacity
16 loops. I describe the two triggers the FCC established, explain how they should
17 be applied, and present evidence of where the triggers have been satisfied in
18 BellSouth's territory in Florida. My testimony demonstrates that the triggers have
19 been met for DS1, DS3 and dark fiber loops to approximately 100 customer
20 locations. For these locations, which represent only a very small percentage of
21 BellSouth's 25,000 total locations served by high-capacity loops in Florida, the
22 Florida Public Service Commission ("Commission") must find that BellSouth is
23 not required to continue offering unbundled loops at the capacity level for which
24 the triggers have been satisfied.

1 The second part of my testimony focuses on the facilities triggers for dedicated
2 transport. I describe the two triggers the FCC established, explain how they
3 should be applied, and present evidence of where the triggers have been satisfied
4 in BellSouth's territory in Florida. My testimony demonstrates that the triggers
5 have been met for DS1 dedicated transport on 648 interoffice routes, for DS3
6 transport on 692 interoffice routes, and for dark-fiber transport on 692 interoffice
7 routes. For these routes, which represent only a small percentage of the 4,800
8 total routes between BellSouth's central offices in Florida, the Commission must
9 find that BellSouth is not required to continue offering unbundled dedicated
10 transport at the capacity level for which the triggers have been satisfied.

11

12 **II. HIGH-CAPACITY LOOPS**

13

14 Q. WHAT TYPES OF LOOPS DO YOU ADDRESS IN YOUR TESTIMONY?

15

16 A. I discuss DS1, DS3, and dark fiber loops. These loops are described and
17 defined in BellSouth witness Wayne Gray's testimony.

18

19 Q. PLEASE DESCRIBE THE TRIGGERS THAT THE FCC ESTABLISHED TO
20 IDENTIFY CUSTOMER LOCATIONS FOR WHICH COMPETING
21 CARRIERS ARE NOT IMPAIRED WITHOUT ACCESS TO UNBUNDLED
22 LOOPS FROM THE ILEC.

23

24 A. There are two triggers set forth in the FCC's TRO – the "self-provisioning
25 trigger" (which applies to DS3 and dark-fiber loops) and the "competitive

1 wholesale facilities” trigger (which applies to DS1 and DS3 loops). If, for a given
 2 loop capacity, any applicable trigger is met for a particular customer location, this
 3 Commission must find that BellSouth is no longer required to offer unbundled
 4 loops at that capacity to the location.

5
 6 Both triggers are simple, “bright line” tests that require this Commission to count
 7 the number of competitors providing loops to a given location. To meet the self-
 8 provisioning trigger for DS3 or dark-fiber loops, there must be “two or more
 9 competing providers not affiliated with each other or with the incumbent LEC,
 10 including intermodal providers of service comparable in quality” that have self-
 11 deployed facilities to a particular location and that are serving customers via those
 12 facilities at that location. (§51.319(a)(4)(ii)(B) and §51.319(a)(5)(i)(B)). To meet
 13 the competitive wholesale facilities trigger for DS1 or DS3 loops, there must be
 14 “two or more competing providers not affiliated with each other or with the
 15 incumbent LEC, including intermodal providers of service comparable in quality”
 16 that have deployed facilities to a particular location and that are offering a loop on
 17 a widely available wholesale basis to other carriers seeking to serve customers at
 18 the location. (§51.319(a)(4)(ii) and §51.319(a)(5)(i)(B)).

19

20 Q. IF A CARRIER HAS AN OC_n FACILITY TO A CUSTOMER LOCATION,
 21 SHOULD IT QUALIFY FOR THE DS3 SELF-PROVISIONING TRIGGER?

22

23 A. Yes. As BellSouth witness Mr. Wayne Gray discusses in his testimony, carriers
 24 typically deploy fiber-optic facilities that can operate at a range of capacities
 25 determined by the electronics attached to them. For example, when laying fiber it

1 makes sense to deploy high-capacity, OCn facilities so that there will always be
2 enough bandwidth to handle the traffic on a given loop. The carrier then attaches
3 electronics to subdivide (or “channelize”) the available capacity, activating the
4 amount of capacity and number of channels needed along the loop. Indeed, this
5 channelization is extremely common given that the vast majority of retail loops
6 sold are at the DS3 level or below – indeed, according to the market research firm
7 IDC, more than 99% of dedicated enterprise loops, excluding switched voice
8 lines, are provided at DS3 or lower capacity.

9

10 Q. SHOULD AN OCn FACILITY QUALIFY FOR THE DS3 AND DS1
11 WHOLESALE TRIGGERS?

12

13 A. Yes, as long as the competitive carrier offers DS1 and DS3 loop facilities to other
14 carriers on a wholesale basis, the capacity of the underlying facility is irrelevant.
15 As explained by Mr. Gray, a carrier with channelized OCn facilities is
16 operationally ready to provide DS1 or DS3 facilities and its network can support
17 the sale of DS1 and DS3 loops, so whether the carrier wholesales depends only on
18 its choice of commercial strategy.

19

20 Q. REGARDING THE DARK FIBER TRIGGERS, DOES THE TRO REQUIRE
21 THE COMPETITIVE CARRIER TO HAVE AVAILABLE UNLIT FIBER
22 STRANDS IN ITS LOOP FACILITY?

23

24 A. No. The dark fiber trigger is a self-provisioning trigger and therefore it does not
25 require the provisioning carrier to have additional dark fiber strands (i.e., fiber

1 stands that have not been lit by attaching transmission electronics) to potentially
2 sell to other carriers. The Order is clear that as long as a competitive carrier
3 deployed a fiber loop to a customer location, it should qualify for the dark fiber
4 trigger in that customer location.

5

6 Q. WHAT EVIDENCE DID YOU USE TO IDENTIFY THE CUSTOMER
7 LOCATIONS WHERE COMPETITIVE CARRIERS HAVE DEPLOYED LOOP
8 FACILITIES THAT QUALIFY FOR THE SELF-PROVISIONING TRIGGERS
9 ON DS3 AND DARK FIBER LOOPS?

10

11 A. I used two data sources to identify customer locations where competitive carriers
12 have deployed loop facilities that qualify for the self-provisioning triggers.
13 First and foremost, I used carriers' discovery responses describing the locations
14 they serve with high-capacity loop facilities. I aggregated these responses by
15 building, counting facilities where carriers confirmed that they have deployed
16 fiber towards the self-provisioning trigger for dark fiber loops, and facilities
17 where carriers confirmed transmission capacities of DS3 or OCn towards the self-
18 provisioning trigger for DS3 loops. (For the reasons explained above, many
19 carriers' responses indicated OCn facilities even though carriers rarely sell OCn
20 loops to end users.)

21

22 Since not every party has fully responded to BellSouth's discovery requests and
23 because BellSouth has not received complete data from non-party carriers, I was
24 required to turn to a third-party vendor for data on carriers from whom I did not
25 have adequate responses. BellSouth purchased data from GeoResults, Inc., an

1 independent consulting firm specializing in national business and residential
2 databases, customized database marketing and geo-mapping services, business
3 level telecom bandwidth, demand and spend estimates, a comprehensive set of
4 telecom competitive intelligence reports, proprietary wire center boundary
5 products and spatial analysis tools and services.

6

7 GeoResults provided its GeoLIT™ Plus Report, listing buildings that contain
8 fiber-based equipment together with the names of the carriers that own the
9 equipment. The GeoLIT™ Plus Report was further refined to exclude instances
10 where a carrier obtained the loop facility from another carrier (including
11 BellSouth) on a wholesale basis, leaving only those buildings where the carrier
12 has deployed its own fiber loop facility capable of providing DS3 and dark fiber
13 loops.

14

15 Q. WHY DO YOU BELIEVE THE GEOLIT™ PLUS REPORT IS A RELIABLE
16 SOURCE OF DATA TO USE IN THE TRIGGERS' ANALYSIS?

17

18 A. First let me reiterate that using the GeoResults data is the best alternative
19 BellSouth had to overcoming the lack of useful discovery data, and that I have
20 used this data only in instances where a carrier has not provided us with
21 information through discovery.

22

23 The GeoLIT™ Plus Report is a summary of building locations that have been
24 identified as being served by a fiber facility and lists carriers providing fiber-
25 based services in those buildings. The report is based on the CLONES (Central

1 Location Online Entry System) database from Telecordia, to which carriers self-
2 report records of their equipment as it is deployed. This database is widely used
3 in the industry to create, update, and maintain Common Language Location
4 (CLLI) Codes to uniquely identify geographic places and certain types of
5 equipment. GeoResults uses proprietary analysis methodologies and data
6 compilation techniques to determine, from CLONES, which pieces of equipment
7 are fiber-based.

8
9 I also note that the GeoLIT™ Plus Report is conservative, because it does not
10 identify all instances where competitive carriers have deployed fiber-base loop
11 facilities: GeoResults uses a conservative algorithm to identify fiber-based loop
12 facilities, which only identifies facilities as “lit” when it is absolutely clear from
13 the description field in CLONES that the equipment is fiber-based – when in
14 doubt, the facility is not identified as “lit.” Moreover, since creating records in
15 CLONES is voluntary, there are not infrequent situations where a competitive
16 carrier deploys a loop facility to a customer location, but fails to create a
17 CLONES record for the facility. Facilities with no records in CLONES are
18 obviously not captured in the GeoLIT™ Plus Report from GeoResults.

19
20 Q. WHICH FACILITIES COULD QUALIFY FOR THE “COMPETITIVE
21 WHOLESALE FACILITIES” TRIGGER FOR DS1 AND DS3 LOOPS?

22
23 A. Any facility that qualifies for the self-provisioning trigger could potentially meet
24 the wholesale facilities trigger also – the only question is whether the provisioning
25 carrier chooses to offer loops on it to other carriers on a wholesale basis. Further,

1 because any carrier with an OCn or DS3 facility is operationally able to provide a
2 DS1 loop as described by Mr. Gray, the same set of qualifying facilities should be
3 used for DS1 and DS3 loops.

4
5 Q. HAVE YOU IDENTIFIED CARRIERS THAT USE THEIR FACILITIES TO
6 OFFER LOOPS ON A WHOLESALE BASIS? IF SO, HOW?

7
8 A. Yes. Although I believe it would be rational for any carrier with its own facilities
9 to wholesale, to be conservative I only identified as a “wholesaler” a carrier for
10 which there is actual evidence that it has entered into wholesale deals or that it
11 actively promotes wholesale service. This evidence was compiled from a number
12 of sources:

- 13 - Carriers’ discovery responses, indicating the offer or purchase of
- 14 wholesale loops and/or transport
- 15 - BellSouth’s experience in losing wholesale contracts to another carrier
- 16 - A carrier’s own advertisements offering wholesale services
- 17 - A carrier’s public statements and filings indicating willingness to
- 18 wholesale or revenues from wholesaling
- 19 - Analyst and industry reports identifying carriers as wholesalers

20 A list of carriers that offer wholesale facilities based on these sources is included
21 as Exhibit SWP-1.

22
23 It is important to note that for a competitive provider to qualify for the wholesale
24 trigger, it does not have to be *currently selling* wholesale services – the Order is
25 clear that the competitive provider only has to be *willing* to provide wholesale

1 service (TRO ¶329). That is, even if it does not currently have a wholesale
2 customer, it would still qualify as long as it is willing to provide wholesale
3 service. Given that, the analysis to determine which competitive carriers offer
4 facilities on a wholesale basis can be conducted by carrier, rather than by
5 customer location, because the decision about whether a carrier wholesales is one
6 of business model, and so is made at the company level rather than on a location-
7 by- location basis. In other words, if a carrier is willing to wholesale high-
8 capacity loops at a given customer location, it is also likely to be willing to
9 wholesale high-capacity loops at all other customer locations where it has
10 deployed its own loop facilities. I don't know of any reason to believe that this is
11 not the case and nothing that we learned through discovery suggests otherwise.

12

13 **Issue 1: To what specific customer locations have two or more competing providers,**
14 **not affiliated with each other or the ILEC, including intermodal providers of service**
15 **comparable in quality to that of the ILEC, deployed their own DS1 facilities,**
16 **(including leased, purchase or UNE dark fiber with the carrier's own optronics**
17 **attached to activate the fiber) and offer DS1 loops over their own facilities on a**
18 **widely available basis to other carriers? For each such location, do the wholesale**
19 **providers have access to the entire customer location, including each individual unit**
20 **within the location?**

21

22

23

1 Q. HAVE YOU IDENTIFIED LOCATIONS THAT MEET THE DS1
2 WHOLESALE FACILITIES TRIGGER? IF SO, PLEASE IDENTIFY THOSE
3 LOCATIONS.

4
5 A. Yes. The customer locations that meet the definition in Issue 1, and that,
6 therefore, satisfy the wholesale trigger for DS1 loops, are listed in Exhibit SWP-2.
7 Exhibits SWP-1 and SWP-3 provide supporting evidence used in the analysis.
8 Exhibit SWP-3 shows, by location, the carriers with high-capacity loops deployed
9 in Florida and the capacities the carrier is capable of providing to that location.
10 As previously discussed, Exhibit SWP-1 lists carriers that are willing to offer
11 services on a wholesale basis.

12
13 In its discovery requests, BellSouth asked carriers to specifically identify barriers
14 to access that they faced in particular locations. Unless a carrier identified a
15 specific barrier, BellSouth assumed that the carrier has access to the entire
16 premises.

17
18 **Issue 2: To what specific customer locations have two or more competing providers,**
19 **not affiliated with each other or the ILEC, including intermodal providers of service**
20 **comparable in quality to that of the ILEC, either (1) deployed their own DS3**
21 **facilities and actually serve customers via those facilities or (2) deployed DS3**
22 **facilities by attaching their own optronics to activate dark fiber obtained under a**
23 **long-term infeasible right of use and actually serve customers via those facilities**
24 **at that location?**

25

1 Q. HAVE YOU IDENTIFIED LOCATIONS THAT MEET THE DS3 SELF-
2 PROVISIONING TRIGGER? IF SO, PLEASE IDENTIFY THOSE
3 LOCATIONS.

4

5 A. Yes. The customer locations that meet the definition in Issue 2, and that,
6 therefore, satisfy the self-deployment trigger for DS3 loops, are listed in Exhibit
7 SWP-4. Exhibits SWP-1 and SWP-3 provide supporting evidence used in the
8 analysis, as described above.

9

10 **Issue 3: To what specific customer locations have two or more competing providers,**
11 **not affiliated with each other or the ILEC, including intermodal providers of service**
12 **comparable in quality to that of the ILEC, deployed their own DS3 facilities**
13 **(including leased, purchased or UNE dark fiber with the carrier's own optronics**
14 **attached to activate the fiber) and offer DS3 loops over their own facilities on a**
15 **widely available wholesale basis to other carriers? For each such location, do the**
16 **wholesale providers have access to the entire customer location, including each**
17 **individual unit within the location?**

18

19 Q. HAVE YOU IDENTIFIED LOCATIONS THAT MEET THE DS3
20 WHOLESALE FACILITIES TRIGGER? IF SO, PLEASE IDENTIFY THOSE
21 LOCATIONS.

22

23 A. Yes. The customer locations that meet the definition in Issue 3, and that,
24 therefore, satisfy the wholesale trigger for DS3 loops, are also listed in Exhibit

1 SWP-4. Exhibits SWP-1 and SWP-3 provide supporting evidence used in the
2 analysis, as described above.

3

4 In its discovery requests, BellSouth asked carriers to specifically identify barriers
5 to access that they faced in particular locations. Unless a carrier identified a
6 specific barrier, BellSouth assumed that the carrier has access to the entire
7 premises.

8

9 **Issue 5: To what specific customer locations have two or more competing providers**
10 **deployed their own dark fiber facilities, including dark fiber owned by the carrier**
11 **or obtained under a long-term indefeasible right of use (but excluding ILEC**
12 **unbundled dark fiber)?**

13

14 Q. HAVE YOU IDENTIFIED LOCATIONS THAT MEET THE DARK FIBER
15 SELF-DEPLOYMENT TRIGGER? IF SO, PLEASE IDENTIFY THOSE
16 LOCATIONS.

17

18 A. Yes. The customer locations that meet the definition in Issue 5, and that,
19 therefore, satisfy the self-deployment trigger for dark fiber loops, are listed in
20 Exhibit SWP-5. Exhibits SWP-1 and SWP-3 provide supporting evidence used in
21 the analysis, as described above.

22

23

24

25

1 **III. HIGH-CAPACITY TRANSPORT**

2

3 Q. PLEASE DESCRIBE THE TRIGGERS THAT THE FCC ESTABLISHED TO
4 IDENTIFY ROUTES FOR WHICH COMPETING CARRIERS ARE NOT
5 IMPAIRED WITHOUT ACCESS TO UNBUNDLED DEDICATED
6 INTEROFFICE TRANSPORT FACILITIES.

7

8 A. There are two triggers set forth in the TRO – the “self-provisioning trigger”
9 (which applies to DS3 and dark-fiber transport) and the “competitive wholesale
10 facilities” trigger (which applies to DS1, DS3, and dark-fiber transport). If, for a
11 given transport capacity, any applicable trigger is met on a particular route, the
12 Commission must find that BellSouth is no longer required to offer unbundled
13 dedicated transport at that capacity on the route.

14

15 Both triggers are simple, “bright line” tests that require the Commission to count
16 the number of competitors on a given route. To meet the self-provisioning trigger
17 for DS3 or dark-fiber transport, there must be “three or more competing providers
18 not affiliated with each other or with the incumbent LEC, including intermodal
19 providers of service comparable in quality” that have self-deployed fiber transport
20 facilities along a particular route and that are operationally ready to use those
21 facilities to provide transport along that route. (47 C.F.R. §§ 51.319(e)(2)(i)(A)
22 and (e)(3)(i)(A)). To meet the competitive wholesale facilities trigger for DS1,
23 DS3, or dark-fiber transport, there must be “two or more competing providers not
24 affiliated with each other or with the incumbent LEC, including intermodal
25 providers of service comparable in quality” that are operationally ready and

1 willing to offer wholesale transport of a given capacity along a particular route.
2 (47 C.F.R. §§51.319(e)(1)(ii), (e)(2)(i)(B) and (e)(3)(i)(B)).

3

4 Q. WHAT IS A "ROUTE," AS THE TERM IS USED IN THE FCC'S TRIGGERS?

5

6 A. A route is defined in the FCC's rules as "a transmission path between one of an
7 incumbent LEC's wire centers or switches and another of the incumbent LEC's
8 wire centers or switches" within a LATA. Furthermore "a route between two
9 points (*e.g.*, wire center or switch "A" and wire center or switch "Z") may pass
10 through one or more intermediate wire centers or switches (*e.g.*, wire center or
11 switch "X"). Transmission paths between identical end points (*e.g.*, wire center
12 or switch "A" and wire center or switch "Z") are the same 'route,' irrespective of
13 whether they pass through the same intermediate wire centers or switches, if any."
14 (47 C.F.R. §51.319(e)).

15

16 Q. IS IT REASONABLE TO ASSUME THAT A CARRIER HAS A "ROUTE"
17 BETWEEN ANY PAIR OF INCUMBENT LEC WIRE CENTERS IN THE
18 SAME LATA WHERE IT HAS OPERATIONAL COLLOCATION
19 ARRANGEMENTS?

20

21 A. Yes. As explained in Mr. Gray's testimony, it is logical and reasonable to
22 assume that a carrier's network within a LATA is fully interconnected and no
23 discovery response received by BellSouth indicated otherwise. Additionally,
24 both FPL FiberNet and Time Warner Telecom indicated that any point on the ir
25 network may be connected to any other point on the network. FPL FiberNet's

1 response to the Staff's Request for Discovery states, "All on-net locations are
2 accessible (*sic*) to all other on-net locations and are not limited to the existing
3 circuits documented below." Time Warner's response to the Staff's Request for
4 Discovery contains a note that states, "TWTC has or can provision over its own
5 facilities transport routes from any of its cages to any of its cages." Another note
6 says, "In Florida where TWTC has its own intercity network, TWTC is able to
7 provision high capacity transport circuits between all cage locations in the state."
8

9 Q. IF A CARRIER HAS AN OCn TRANSPORT FACILITY TO A
10 COLLOCATION ARRANGEMENT IN AN ILEC WIRE CENTER, DOES IT
11 MEET THE "OPERATIONALLY READY" CONDITION OF THE DS3 SELF-
12 PROVISIONING TRIGGER?

13
14 A. Yes. The FCC's rules say that to count toward the trigger, the competing provider
15 should have "deployed its own transport facilities and [be] operationally ready to
16 use those transport facilities to provide dedicated DS3 transport along the
17 particular route." (47 C.F.R. §51.319(e)(2)(i)(1)). In reality, carriers typically
18 deploy fiber-optic facilities that can operate at a range of capacities determined by
19 the electronics attached to them. For example, when laying fiber it makes sense
20 to deploy high-capacity, OCn facilities so that there will be enough bandwidth to
21 handle all traffic on a given route and leave room for growth. The carrier can then
22 attach electronics to subdivide (or "channelize") the available capacity, activating
23 the amount of capacity and number of channels needed along the route. As Mr.
24 Gray explains, the electronics used to do this channelization of OCn facilities into
25 DS1 or DS3 facilities are relatively inexpensive, are widely available, and can be

1 quickly installed whenever the carrier has demand for DS3 transport facilities.
2 The fact that the capacity of the facility itself is at the OCn level is therefore
3 independent of the carrier's ability to provide a dedicated DS1 or DS3 transport
4 route over that facility.

5

6 Q. SHOULD AN OCn FACILITY QUALIFY FOR THE DS3 AND DS1
7 WHOLESale TRIGGERS?

8

9 A. Yes, as long as the competitive carrier offers DS1 and DS3 transport to other
10 carriers on a wholesale basis, the capacity of the underlying facility is irrelevant.
11 As explained above, a carrier with channelized OCn facilities is operationally
12 ready to provide DS1 or DS3 facilities – its network can support the sale of DS1
13 and DS3, so whether the carrier wholesales or not depends only on its commercial
14 strategy.

15

16 Q. REGARDING THE DARK FIBER TRIGGERS, DOES THE TRO REQUIRE
17 THE COMPETITIVE CARRIER TO HAVE AVAILABLE UNLIT FIBER
18 STRANDS IN ITS COLLOCATION ARRANGEMENT?

19

20 A. This requirement in the TRO applies only for the wholesale trigger, which
21 requires the competitive provider be ready to provide dark fiber facilities to other
22 carriers. For the self-provisioning trigger, the TRO is clear that as long as a
23 competitive carrier deployed fiber transmission facilities to a collocation
24 arrangement, it should qualify for the dark fiber trigger in that wire center (TRO

1 ¶408). There is no condition on the existence of extra dark fiber strands that have
2 not yet been lit.

3

4 Q. HOW DID YOU IDENTIFY ROUTES WHERE COMPETITIVE CARRIERS
5 HAVE DEPLOYED FACILITIES THAT QUALIFY FOR THE SELF-
6 PROVISIONING TRIGGER FOR DS3 AND DARK FIBER ROUTES?

7

8 A. I initially hoped to rely primarily on discovery responses from competitive
9 carriers. Unfortunately, to date, BellSouth has received far fewer responses than
10 expected, so we have been forced to rely heavily on our own billing and
11 operations data regarding collocation arrangements and fiber entrance facilities.
12 Using discovery and these internal data, a list of fiber-based collocations for each
13 competitive carrier was created and used to generate all the potential transport
14 routes for a given carrier using the assumption that competitive carriers can route
15 traffic between any pair of fiber-based collocation arrangements in a LATA.
16 Furthermore, if a carrier has a collocation arrangement in a BellSouth wire center
17 and it has pulled its own fiber to the collocation, it is reasonable to assume that it
18 should qualify for the self-provisioning trigger for both dark fiber and DS3
19 dedicated transport (due to the channelization I described above).

20

21 Q. WHICH FACILITIES COULD QUALIFY FOR THE "COMPETITIVE
22 WHOLESALE FACILITIES" TRIGGER FOR DS1, DS3 AND DARK FIBER
23 TRANSPORT?

24

1 A. Any route that qualifies for the self-provisioning trigger could meet the wholesale
2 facilities trigger also – the only question is whether the competitive carrier
3 chooses to offer transport on it to other carriers on a wholesale basis. Further,
4 because any carrier with an OCn or DS3 facility is operationally able to provide
5 DS1 transport, I assumed the same set of qualifying facilities for DS1 transport as
6 for DS3 transport. Additional DS3 and DS1 facilities that qualify for wholesale
7 are included only if we learned through discovery of facilities that meet the
8 conditions of the wholesale triggers but not the self-provisioning triggers (i.e., the
9 carrier does not own the underlying fiber used in the transport facility).
10
11 Finally, for dark fiber the wholesale trigger requires the competitive provider to
12 have unused dark fiber to sell to other carriers and that requesting carriers are able
13 to obtain reasonable and nondiscriminatory access to the competing providers’
14 termination points through a cross-connect to the providers’ collocations.
15 (§51.319(e)(3)(i)(B)). For the reasons explained by Mr. Gray, it is logical to
16 assume that interoffice facilities have spare fiber strands. Furthermore, our billing
17 records indicate that most CLECs that pulled fiber into BellSouth’s wire centers
18 requested 2 cables of 24 strands each, leaving plenty of spare strands to
19 wholesale. In short, unless we learn through discovery that carriers do not have
20 extra dark fiber, it is reasonable to assume that any dark fiber facility that meets
21 the self-provisioning trigger may count toward the wholesale trigger also, if the
22 provisioning CLEC chooses to wholesale them.
23

1 Q. HAVE YOU IDENTIFIED CARRIERS THAT USE THEIR FACILITIES TO
2 OFFER DEDICATED TRANSPORT ON A WHOLESALE BASIS? IF SO,
3 HOW?

4
5 A. Yes. Since dedicated transport and high-capacity loops are two components of
6 the same wholesale product, commonly known as dedicated access or special
7 access, the carriers that offer dedicated transport on a wholesale basis, where they
8 have facilities, are the same as for loops. A list of carriers that offer wholesale
9 facilities is included as Exhibit SWP-6 (see my loop testimony above for a
10 description of how this list was compiled).

11
12 As I explained for high-capacity loops, it is important to note that for a
13 competitive provider to qualify for the wholesale trigger, it does not have to be
14 *currently selling* wholesale services – the Order is clear that the competitive
15 provider only has to be *willing* to provide wholesale service (TRO ¶412).

16
17 **Issue 7: Along what particular routes have two or more competing providers, not**
18 **affiliated with each other or the ILEC, including intermodal providers of service**
19 **comparable in quality to that of the ILEC, deployed their own DS1 level dedicated**
20 **transport facilities (including leased, purchased or UNE dark fiber with the**
21 **carrier's own optronics attached to activate the fiber) and are willing to provide**
22 **DS1 level transport immediately over their own facilities on a widely available basis**
23 **to other carriers?**

24

1 Q. HAVE YOU IDENTIFIED ROUTES THAT MEET THE DS1 WHOLESALE
2 FACILITIES TRIGGER? IF SO, PLEASE IDENTIFY THOSE ROUTES.

3

4 A. Yes. The routes that satisfy the wholesale trigger for DS1 transport, and that,
5 therefore, meet the definition in Issue 7, are listed in Exhibit SWP-7. Supporting
6 evidence is presented in Exhibits SWP-6 and SWP-8. Exhibit SWP-8 shows, by
7 route, the carriers that have deployed transport facilities in Florida and the
8 capacities the carrier is capable of providing on that route. Exhibit SWP-6 lists
9 carriers that are willing to offer transport services on a wholesale basis and
10 whether the carrier has provided discovery responses to BellSouth.

11

12 **Issue 8: For any particular route where at least two competing providers will**
13 **provide wholesale DS1 dedicated transport, do both competing providers' facilities**
14 **terminate in collocation arrangements at an ILEC premise or a similar**
15 **arrangement in a non-ILEC premise? If so, can requesting carriers obtain**
16 **reasonable and nondiscriminatory access to those competing providers' termination**
17 **points through a cross-connect to the providers' collocations either at the ILEC**
18 **premise or similar arrangement if located at a non-ILEC premise?**

19

20 Q. DO THE FACILITIES USED TO DETERMINE THE ROUTES IDENTIFIED
21 IN EXHIBIT SWP-7 TERMINATE IN A COLLOCATION ARRANGEMENT?

22

23 A. Yes. The methodology used to identify routes that meet the trigger assures that
24 all the facilities used in the trigger analysis terminate in collocation arrangements
25 on both ends.

1 **Issue 9: Along what particular routes have three or more competing providers, not**
2 **affiliated with each other or the ILEC, including intermodal providers of service**
3 **comparable in quality to that of the ILEC, deployed their own DS3 level dedicated**
4 **transport facilities (including leased, purchased or UNE dark fiber with the**
5 **carrier's own optronics attached to activate the fiber) and are operationally ready to**
6 **use those transport facilities?**

7

8 Q. HAVE YOU IDENTIFIED ROUTES THAT MEET THE DS3 SELF-
9 PROVISIONING TRIGGER? IF SO, PLEASE IDENTIFY THOSE ROUTES.

10

11 A. Yes. The routes that satisfy the self-provisioning trigger for DS3 transport, and
12 that, therefore, meet the definition in Issue 9 are listed in Exhibit SWP-9.
13 Supporting evidence is presented in Exhibits SWP-6 and SWP-8, as described
14 above.

15

16 **Issue 10: For any particular route where at least three competing providers have**
17 **self-provisioned DS3 level dedicated transport facilities, do the competing providers'**
18 **facilities terminate in collocation arrangements at an ILEC premise or similar**
19 **arrangement in a non-ILEC premise?**

20

21 Q. DO THE FACILITIES USED TO DETERMINE THAT THE ROUTES
22 IDENTIFIED IN EXHIBIT SWP-9 TERMINATE IN A COLLOCATION
23 ARRANGEMENT?

24

1 A. Yes. The methodology used to identify routes that meet the trigger assures that
2 all the facilities used in the trigger analysis terminate in collocation arrangements
3 on both ends.

4
5 **Issue 11: Along what particular routes have two or more competing providers, not**
6 **affiliated with each other or the ILEC, including intermodal providers of service**
7 **comparable in quality to that of the ILEC, deployed their own DS3 level dedicated**
8 **transport facilities (including leased, purchased or UNE dark fiber with the**
9 **carrier's own optronics attached to activate the fiber), are operationally ready to**
10 **use those transport facilities, and are willing to provide DS3 level dedicated**
11 **transport immediately over their facilities on a widely available wholesale basis to**
12 **other carriers ?**

13
14 Q. HAVE YOU IDENTIFIED ROUTES THAT MEET THE DS3 WHOLESALE
15 FACILITIES TRIGGER? IF SO, PLEASE IDENTIFY THOSE ROUTES.

16
17 A. Yes. The routes that satisfy the wholesale trigger for DS3 transport, and that,
18 therefore, meet the definition in Issue 11 are listed in Exhibit SWP-9. Supporting
19 evidence is presented in Exhibits SWP-6 and SWP-8, as described above.

20
21 **Issue 12: For any particular route where at least two competing providers will**
22 **provide wholesale DS3 level dedicated transport, do both competing providers'**
23 **facilities terminate in collocation arrangements at an ILEC premise or a similar**
24 **arrangement in a non-ILEC premise? If so, can requesting carriers obtain**
25 **reasonable and nondiscriminatory access to those competing providers' termination**

1 points through a cross-connect to the providers' collocations either at the ILEC
2 premise or similar arrangement if located at a non-ILEC premise?

3

4 Q. DO THE FACILITIES USED TO DETERMINE THAT THE ROUTES
5 IDENTIFIED IN EXHIBIT SWP-9 TERMINATE IN A COLLOCATION
6 ARRANGEMENT?

7

8 A. Yes. The methodology used to identify routes that meet the trigger assures that
9 all the facilities used in the trigger analysis terminate in collocation arrangements
10 on both ends.

11

12 **Issue 14: Along what particular routes have three or more competing providers, not**
13 **affiliated with each other or the ILEC deployed their own dark fiber dedicated**
14 **transport facilities?**

15

16 Q. HAVE YOU IDENTIFIED ROUTES THAT MEET THE DARK FIBER SELF-
17 PROVISIONING TRIGGER? IF SO, PLEASE IDENTIFY THOSE ROUTES.

18

19 A. Yes. The routes that satisfy the self-provisioning trigger for dark fiber transport,
20 and that, therefore, meet the definition in Issue 9 are listed in Exhibit SWP-10.
21 Supporting evidence is presented in Exhibits SWP-6 and SWP-8, as described
22 above.

23

24 **Issue 15: For any particular route where at least three competing providers have**
25 **self-provisioned dark fiber dedicated transport facilities, do the competing**

1 providers' facilities terminate in collocation arrangements at an ILEC premise or
2 similar arrangement in a non-ILEC premise?

3

4 Q. DO THE FACILITIES USED TO DETERMINE THAT THE ROUTES
5 IDENTIFIED IN EXHIBIT SWP-10 TERMINATE IN A COLLOCATION
6 ARRANGEMENT?

7

8 A. Yes. The methodology used to identify routes that meet the trigger assures that
9 all the facilities used in the trigger analysis terminate in collocation arrangements
10 on both ends.

11

12 **Issue 16: Along what particular routes have two or more competing providers, not**
13 **affiliated with each other or the ILEC, deployed their own dark fiber transport**
14 **facilities (including dark fiber obtained from an entity other than the ILEC), are**
15 **operationally ready to lease or sell those transport facilities to provide transport**
16 **along the route, and are willing to provide dark fiber immediately over their**
17 **facilities on a widely available wholesale basis to other carriers?**

18

19 Q. HAVE YOU IDENTIFIED ROUTES THAT MEET THE DARK FIBER
20 WHOLESALE FACILITIES TRIGGER? IF SO, PLEASE IDENTIFY THOSE
21 ROUTES.

22

23 A. Yes. The routes that satisfy the wholesale trigger for dark fiber transport, and
24 that, therefore, meet the definition in Issue 16 are listed in Exhibit SWP-10.

1 Supporting evidence is presented in Exhibits SWP-6 and SWP-8, as described
2 above.

3

4 **Issue 17: For any particular route where at least two competing providers will**
5 **provide wholesale dark fiber, do both competing providers' facilities terminate in**
6 **collocation arrangements at an ILEC premise or a similar arrangement in a non-**
7 **ILEC premise? If so, can requesting carriers obtain reasonable and**
8 **nondiscriminatory access to those competing providers' termination points through**
9 **a cross-connect to the providers' collocations either at the ILEC premise or similar**
10 **arrangement if located at a non-ILEC premise?**

11

12 Q. DO THE FACILITIES USED TO DETERMINE THAT THE ROUTES
13 IDENTIFIED IN EXHIBIT SWP-10 TERMINATE IN A COLLOCATION
14 ARRANGEMENT?

15

16 A. Yes. The methodology used to identify routes that meet the trigger assures that
17 all the facilities used in the trigger analysis terminate in collocation arrangements
18 on both ends.

19

20 **Issue 18: For any particular route where at least two competing providers will**
21 **provide such wholesale dark fiber, do these providers have sufficient quantities of**
22 **dark fiber available to satisfy current demand along that route? If not, should the**
23 **wholesale trigger for dark fiber be determined to be satisfied along that route?**

24

1 Q. DO THE PROVIDERS USED TO DETERMINE THAT THE ROUTES
2 IDENTIFIED IN EXHIBIT SWP-10 HAVE SUFFICIENT QUANTITIES OF
3 DARK FIBER AVAILABLE TO SATISFY DEMAND ALONG THAT
4 ROUTE?

5

6 A. Yes. For the reasons explained above, we assume that there is enough spare fiber
7 to wholesale unless carriers tell us otherwise through discovery. In those
8 instances, the transport facility is not included in Exhibit SWP-10. Therefore I
9 believe that there are sufficient quantities of dark fiber in all routes in Exhibit
10 SWP-10 to satisfy current demand.

11

12 **Issue 20: If unbundling requirements for loops at customer-specific locations or**
13 **dedicated transport along a specific route are eliminated, what are the appropriate**
14 **transition period and requirements, if any, after which a CLEC no longer is entitled**
15 **to these loops or transport under Section 251(c)(3)?**

16

17 Q. FOR LOCATIONS AND ROUTES WHERE ONE OR MORE OF THE
18 TRIGGERS IS MET, AND THERE IS THEREFORE NO IMPAIRMENT AT
19 THOSE LOCATIONS AND ALONG THOSE ROUTES, WHAT IS THE
20 APPROPRIATE TRANSITION PERIOD?

21

22 A. BellSouth will continue to offer loops and transport at a market rate so a transition
23 period is unnecessary. However, if the Commission determines that a transition
24 period is required, 90 days is reasonable.

25

1 **IV. CONCLUSION**

2

3 Q. ARE YOU SUBMITTING THE FINAL LIST OF ROUTES AND BUILDINGS
4 WHERE YOU CLAIM THE TRIGGERS FOR DEDICATED TRANSPORT OR
5 LOOPS, RESPECTIVELY, HAVE BEEN SATISFIED?

6

7 A. No. We reserve the right to expand list of locations and routes based on further
8 discovery responses from carriers.

9

10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

11

12 A. Yes.

13

1 **BELLSOUTH TELECOMMUNICATIONS, INC.**
2 **SUPPLEMENTAL DIRECT TESTIMONY OF SHELLEY W. PADGETT**
3 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
4 **DOCKET NO. 030852-TP**
5 **JANUARY 9, 2004**

6
7 Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8 TELECOMMUNICATIONS, INC. (“BELLSOUTH”) AND YOUR BUSINESS
9 ADDRESS.

10
11 A. My name is Shelley W. Padgett. I am employed by BellSouth as Manager –
12 Regulatory and Policy Support in the Interconnection Services organization. My
13 business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

14
15 Q. ARE YOU THE SAME SHELLEY W. PADGETT THAT FILED DIRECT
16 TESTIMONY IN THIS PROCEEDING ON DECEMBER 22, 2003?

17
18 A. Yes.

19
20 Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT
21 TESTIMONY?

22
23 A. This supplemental direct testimony updates the exhibits that were attached to my
24 Direct Testimony filed on December 22, 2003. I have attached supplemental

1 exhibits SWP-1 through SWP-10, which replace the exhibits that were attached to
2 my direct testimony.

3

4 Q. PLEASE DESCRIBE THE CHANGES YOU HAVE MADE TO EXHIBITS
5 SWP-1 THROUGH SWP-10 AND THE REASONS FOR THE CHANGES.

6

7 A. I have made the following changes to exhibits SWP-1 through SWP-10:

- 8 • I revised the customer locations and routes that were not in my original
9 exhibits based upon my review of the responses filed with this Commission to
10 its 2003 Triennial Review Data Requests.
- 11 • I deleted certain buildings that were inadvertently included in my prior
12 exhibits that are not actually located within BellSouth's serving territory and
13 for which BellSouth is not challenging impairment.

14

15 Q: WHAT IS THE OVERALL IMPACT OF YOUR MODIFICATIONS?

16 A: My revised exhibits show there are 81 customer locations where the triggers have
17 been met for DS1 loops, 83 customer locations where the triggers have been met
18 for DS3 loops, and 82 customer locations where the triggers have been met for
19 dark fiber loops. There remain 648 interoffice routes where the triggers have
20 been met for DS1 dedicated transport. In addition, the triggers have been met for
21 DS3 dedicated transport and dark fiber transport on 718 interoffice routes.

22

23 Q: CAN YOU DESCRIBE IN MORE DETAIL WHY YOUR ORIGINAL
24 EXHIBITS DID NOT INCLUDE THE INFORMATION CONTAINED IN
25 YOUR SUPPLEMENTAL EXHIBITS?

1 A. Yes. The supplemental exhibits result from the ongoing discovery process in this
2 proceeding. In Florida the Commission's website reflects 410 total certificated
3 Competitive Local Exchange Carriers ("CLECs") and 41 total certificated
4 Alternative Access Vendors ("AAVs"). BellSouth understands that the
5 Commission sent data requests to all CLECs and AAVs, meaning a total of 451
6 data requests were sent. As of January 8, 2004, BellSouth's review of the
7 Commission's website indicates only 102 responses have been filed. The most
8 recent response was filed on January 8, 2004, well after the December 22, 2003
9 direct testimony filing date. Moreover, in some instances carriers supplemented
10 their original responses.

11

12 Q. ARE YOU SUBMITTING THE FINAL LIST OF ROUTES AND BUILDINGS
13 WHERE YOU CLAIM THE TRIGGERS FOR DEDICATED TRANSPORT OR
14 LOOPS, RESPECTIVELY, HAVE BEEN SATISFIED?

15

16 A. I am not. BellSouth continues to pursue discovery to ensure that it has included
17 all such routes and buildings and reserves the right modify the list of locations and
18 routes. It is entirely possible that additional responses may be filed with this
19 Commission that impact the customer locations and routes where the triggers
20 established by the FCC have been satisfied and where CLECs are not impaired
21 without access to unbundled high-capacity loops or dedicated transport.

22

23

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BELLSOUTH TELECOMMUNICATIONS, INC.
REBUTTAL TESTIMONY OF SHELLEY W. PADGETT
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030852-TP
JANUARY 21, 2004

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is Shelley W. Padgett. I am employed by BellSouth as Manager – Regulatory and Policy Support in the Interconnection Services organization. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. ARE YOU THE SAME SHELLEY W. PADGETT THAT FILED DIRECT TESTIMONY IN THIS PROCEEDING ON DECEMBER 22, 2003, AND SUPPLEMENTAL DIRECT TESTIMONY ON JANUARY 9, 2004?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony addresses the revised direct testimony of Florida Competitive Carriers Association (FCCA) witness Gary Ball and portions of NewSouth Communications Corp. witness Jake Jennings' testimony. Mr.

1 Jennings' testimony is, in large measure, a brochure for NewSouth and the only
2 substantive issue he addresses concerns Issue 20, the transition period. BellSouth
3 has filed a Motion to Strike the remainder of the direct testimony of Mr. Jennings
4 and the original direct testimony of Mr. Ball.

5

6 Q. DO YOU HAVE ANY OVERALL COMMENTS CONCERNING MR. BALL'S
7 REVISED DIRECT TESTIMONY?

8

9 A. Yes, I do. Although Mr. Ball has inserted the issue numbers that his testimony
10 claims to address, his testimony is still not relevant to the identification of the
11 customer locations and transport routes where CLECs are not impaired without
12 unbundled access to high-capacity loops and transport, which is the goal of this
13 proceeding. Indeed, most of Mr. Ball's testimony simply discusses the FCC's
14 *Triennial Review Order* ("TRO"), describing his interpretation of its policy
15 objectives and applications. As I described in my direct testimony, however, the
16 TRO is quite clear in specifying how the self-provisioning and wholesale triggers
17 tests should be correctly applied, and most of Mr. Ball's interpretations are
18 substantially incorrect. Furthermore, Mr. Ball erroneously suggests that the ILECs
19 bear the burden of proof in this case (p. 4), which is contradicted by TRO, ¶ 92, in
20 which the FCC states that "[w]e do not adopt a 'burden of proof' approach that
21 places the onus on either incumbent LECS or competitors to prove or disprove the
22 need for unbundling."

23

24

25

1 Q. HOW IS YOUR TESTIMONY ORGANIZED?

2

3 A. There are at least two primary areas of the TRO that Mr. Ball interprets
4 incorrectly: the definition of a route and the definition of a customer location.
5 Both Mr. Ball and Mr. Jennings address, albeit incorrectly, the transition period. I
6 will address each of these in turn.

7

8

(1) The definition of a route

9

10 Q. WHAT DOES MR. BALL SAY ABOUT THE DEFINITION OF A "ROUTE"?

11

12 A. Mr. Ball claims that, for a CLEC to count towards the transport triggers on a
13 given route, the CLEC must provide service directly connecting the two central
14 offices at each end of the route, stating that to support a trigger claim, the ILEC
15 must produce evidence that "the CLEC self-provisions transport service (...)
16 between the two wire centers and that each collocation arrangement in question is
17 being used as an endpoint for a transport route at the specific capacity level
18 between two wire centers." (p. 21)

19

20 Q. IS THIS INTERPRETATION CORRECT?

21

22 A. No. Mr. Ball's interpretation of a transport route is puzzling, at best. Mr. Ball
23 apparently believes that even if a carrier can indirectly send traffic between two
24 ILEC central offices, this carrier does not count toward the triggers test for that
25 route. Mr. Ball further argues that most CLEC networks are constructed such that

1 collocation arrangements are used as a traffic aggregation point that can only
2 route back to the CLEC's switch and that the CLEC is incapable of routing traffic
3 from its switch to the ILEC's central office across those same facilities (pp. 14-
4 15).

5
6 However, as the FCC has explained, passing through an intermediate wire center
7 or an intermediate switch – ILEC or CLEC – does not prevent the connection of
8 two central offices to form a route. Rule 319(e) clearly provides that “a *route* is a
9 transmission path between one of an incumbent LEC's wire centers or switches
10 and another of the incumbent LEC's wire centers or switches. A route between
11 two points (e.g., wire center or switch “A” and wire center or switch “Z”) may
12 pass through one or more intermediate wire centers or switches (e.g., wire center
13 or switch “X”). Transmission paths between identical end points (e.g., wire
14 center or switch “A” and wire center or switch “Z”) are the same *route*,
15 irrespective of whether they pass through the same intermediate wire centers or
16 switches, if any.”

17
18 Q. WHAT SHOULD BE ASSUMED ABOUT CLECS' ABILITIES TO PROVIDE
19 TRANSPORT BETWEEN ILEC WIRE CENTERS?

20
21 A. As explained by Mr. Gray in his direct testimony (p. 8), it is reasonable to assume
22 that a carrier has a “route” between any pair of incumbent LEC wire centers in the
23 same LATA where it has operational collocation arrangements. Indeed, FPL
24 FiberNet, Time Warner Telecom and Level 3 indicated that any point on their
25 network can be connected to any other point on the network. FPL FiberNet's

1 response to the Staff's Discovery states, "All on-net locations are accessible (*sic*)
2 to all other on-net locations and are not limited to the existing circuits
3 documented below." Time Warner's response to the Staff's Discovery contains a
4 note that states, "TWTC has or can provision over its own facilities transport
5 routes from any of its cages to any of its cages." Another note says, "In Florida
6 where TWTC has its own intercity network, TWTC is able to provision high
7 capacity transport circuits between all cage locations in the state." Level 3's
8 response to Staff's Discovery explains that, "[t]he Level 3 Gateway . . . is
9 connected to every other Level 3 facility via the Level 3 intercity network."
10 In short, it is logical and reasonable to assume that a carrier's network within a
11 LATA is fully interconnected.

12

13 Q. ARE THERE ANY OTHER PROBLEMS WITH MR. BALL'S DEFINITION?

14

15 A. Yes. Mr. Ball claims the FCC requires that a CLEC must be "providing transport
16 service between the two ILEC wire centers" for a route to be counted (p.21).

17

18 Q. WHY IS THIS INCORRECT?

19

20 A. The FCC's rules do not require that for a CLEC to qualify for the triggers it has to
21 currently provide service between the two ILEC central offices at the ends of the
22 route, but only that the "competing provider has deployed its own transport
23 facilities and is operationally ready to use those transport facilities to provide
24 dedicated (...) transport along the particular route" ((47 C.F.R.
25 §51.319(e)(2)(i)(A)(1)). Therefore, the statements made in Mr. Ball's testimony

1 regarding the need to show evidence that a CLEC is “providing service between
2 the two ILEC wire centers” are inconsistent with the TRO and should be
3 disregarded by this Commission.

4
5 As stated in the FCC’s rules, the qualifying condition is that the CLEC has to be
6 “operationally ready” to use those facilities to provide transport along the specific
7 route, which a CLEC clearly is when it has operational fiber-based collocation
8 arrangements at both ILEC central offices. Establishing a connection between
9 two operationally ready collocations via a switch or hub typically requires only a
10 software-based configuration of a circuit. Thus, even if a CLEC does not
11 ordinarily use its interoffice facilities to provide transport between ILEC central
12 offices, this fact is irrelevant for the proceeding since they are operationally ready
13 to do so.

14
15 **(2) The definition of a customer location**

16 .
17 Q. HOW DOES MR. BALL DEFINE A “CUSTOMER LOCATION”?

18
19 A. Mr. Ball claims in his testimony that in multi-tenant buildings, the customer
20 location is defined as the tenant unit rather than the building. (p. 20). The
21 implication of this assertion is that meeting the self-provisioning trigger for loops
22 would require an individual end user to be served by two or more competing
23 providers in order for the trigger to apply, and, even then, the unbundling relief
24 would only apply to the facilities serving that particular end user.

25

1 Q. IS MR. BALL'S INTERPRETATION CORRECT?

2

3 A. No. Mr. Ball's interpretation is contrary to the rules, which distinguish between
4 "customer locations" and "individual unit[s] within that location". 47 C.F.R. §
5 51.319(a)(4)(ii), (5)(i)(B). This distinction indicates that a customer location is a
6 building, not an individual unit or suite in a multi-unit building.

7

8 Indeed, based on their discovery responses, the CLECs in Florida agree. The
9 Commission's discovery specifically asked the CLECs to identify the "customer
10 locations" to which they have deployed loop facilities and, in response, the
11 CLECs generally provided the addresses of specific buildings.

12

13 Further, Mr. Ball contradicts his own position when he says on p. 19 that "the
14 loop must permit the CLEC to access all units within a customer location, such as
15 all tenants in a multi-tenant building," indicating that the "customer location" is
16 the building rather than the tenant unit.

17

18 **(3) The transition period (Issue 20)**

19

20 Q. SHOULD THE COMMISSION ADDRESS THE TRANSITION PERIOD IN
21 ANOTHER PROCEEDING FOLLOWING THIS PROCEEDING AS MR.
22 BALL AND MR. JENNINGS SUGGEST?

23

24 A. No. Any transition period should be addressed in this proceeding. It would make
25 little sense to expend additional time and resources later and further delay opening

1 the market on routes or to locations for which the Commission has already found
2 that competing carriers are not impaired.

3

4 Q. MR. BALL AND MR. JENNINGS APPEAR TO CLAIM THAT A LONG
5 TRANSITION PERIOD IS NECESSARY BECAUSE CLECS HAVE
6 ENTERED INTO CONTRACTS WITH CUSTOMERS BASED ON UNE
7 COSTS AND COULD NOT TOLERATE "SUDDEN COST INCREASES".
8 (BALL, P. 39; JENNINGS, P. 15). PLEASE ADDRESS THIS ARGUMENT.

9

10 A. First, the FCC's initiated its Triennial Review in December 2001. Consequently,
11 all carriers have been on notice at least for the past two years that some unbundled
12 network elements may be delisted. That NewSouth has apparently failed to make
13 contingency plans for this eventuality is no basis for a protracted delay or further
14 proceedings to address transitional issues.

15

16 Second, and more importantly, if this Commission finds that CLECs are not
17 impaired along a route or to a customer location, such a finding means there are
18 alternatives to UNEs available. While a carrier may take time to evaluate its
19 options and negotiate terms with other carriers, including the ILEC, a long
20 transition period would only delay the movement of carriers toward the goal of
21 promoting facilities-based competition as rapidly as possible. A long transition
22 period would also require ILECs to continue to subsidize competitors in areas in
23 which no impairment exists. A more reasonable time frame to allow carriers to
24 make such alternative arrangements is 90 days.

25

1 Q. MR. BALL RECOMMENDS THAT THIS COMMISSION INSTITUTE A
2 MUTLI-TIERED TRANSITION PROCESS. (P. 41). PLEASE RESPOND.

3

4 A. Mr. Ball's plan apparently relies upon the switching and line sharing plans
5 established by the FCC. Without commenting on the merits of such plans, I
6 disagree with Mr. Ball's reliance. This Commission may determine that CLECs
7 are not impaired in competing along specific routes or to specific customer
8 locations, not an entire market. There is absolutely no reason for a phased in
9 approach.

10

11 Q. MR. BALL CLAIMS THAT PARAGRAPH 584 OF THE TRO MANDATES
12 THAT COMPETING CARRIERS MAY CONTINUE TO HAVE ACCESS TO
13 COMBINATIONS OF LOOP AND TRANSPORT EVEN IF ONE OF THE
14 ELEMENTS OF A PARTICULAR COMBINATION HAS BEEN DELISTED.
15 (PP. 40-41). PLEASE RESPOND.

16

17 A. Mr. Ball has inaccurately interpreted the FCC's intentions. Paragraph 584 was
18 modified in the FCC's Errata, released September 17, 2003, to remove any
19 reference to network elements made available to competing carriers pursuant to
20 Section 271 of the Telecommunications Act of 1996 (the Act). In note 1990, the
21 FCC explicitly stated its intentions with regard to such network elements. It
22 states, "[w]e decline to require BOCs, pursuant to section 271, to combine
23 network elements that no longer are required to be unbundled under section 251.
24 Unlike section 251(c)(3), items 4-6 and 10 of section 271's competitive checklist
25 contain no mention of 'combining' and, as noted above, do not refer back to the

1 combination requirement set forth in section 251(c)(3).” The FCC does not
2 appear to agree with Mr. Ball.

3

4 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

5

6 A. Yes.

7

8 [522855]

PUBLIC DISCLOSURE DOCUMENT

1 **BELLSOUTH TELECOMMUNICATIONS, INC.**
2 **SURREBUTTAL TESTIMONY OF SHELLEY W. PADGETT**
3 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
4 **DOCKET NO. 030852-TP**
5 **FEBRUARY 4, 2004**
6

7 Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8 TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS
9 ADDRESS.

10

11 A. My name is Shelley W. Padgett. I am employed by BellSouth as Manager –
12 Regulatory and Policy Support in the Interconnection Services organization. My
13 business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

14

15 Q. ARE YOU THE SAME SHELLEY W. PADGETT THAT FILED DIRECT
16 TESTIMONY IN THIS PROCEEDING ON DECEMBER 22, 2003,
17 SUPPLEMENTAL DIRECT TESTIMONY ON JANUARY 9, 2003, AND
18 REBUTTAL TESTIMONY ON JANUARY 21, 2004?

19

20 A. Yes.

21

22 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?
23

24

24 A. This surrebuttal testimony addresses certain statements made by witnesses
25 Anderson, Ball, Bradbury, Brownworth, Dickerson, Falvey, Hand, Hardin, and

PUBLIC DISCLOSURE DOCUMENT

1 Johnson in their rebuttal testimonies. The first part of my testimony addresses
2 changes made to my exhibits, which exhibits are included with this testimony.
3 The second part of my testimony discusses issues that apply to both the loop and
4 transport analyses. I then discuss loops issues (part III), transport issues (part IV),
5 and transition issues (part V).

6

7 **I. Triggers Exhibit Changes**

8 Q. MANY OF THE CLEC WITNESSES ASSERT THAT THE CUSTOMER
9 LOCATIONS AND ROUTES REFLECTED ON YOUR EXHIBITS DO NOT
10 SATISFY THE FCC'S TRIGGERS. HAVE YOU MADE CHANGES TO
11 THESE EXHIBITS, AND IF SO, PLEASE EXPLAIN WHY.

12

13 A. I have modified my exhibits and have carefully reviewed the testimony of the
14 CLEC witnesses. My changes are as follows. First and foremost, I included new
15 discovery evidence that was received too late to include in my prior analyses. It
16 has always been, and remains, BellSouth's desire to use accurate data provided by
17 carriers, which data is consistent with the FCC's rules. Second, in some
18 instances, information in the CLEC witness's testimony resulted in changes.
19 Third, I excluded a few small carriers in BellSouth territory as well as some
20 wholesale loop facilities where BellSouth decided it was not worth pursuing
21 additional clarification through further discovery. Fourth, facilities that were
22 previously owned by carrier Network Plus have been excluded as we have learned
23 this carrier is exiting the Southeast. Fifth, the triggers analysis has been updated
24 to ensure that buildings in which the carrier claims not to have access to the entire
25 building are excluded from consideration.

PUBLIC DISCLOSURE DOCUMENT

1 Q. PLEASE DESCRIBE THE NEW EVIDENCE AND ANY OTHER CHANGES
2 YOU HAVE MADE IN THE TRIGGER ANALYSIS FOR LOOPS.

3

4 A. The following changes were made to the trigger analysis for loops:

5 - Discovery answers from KMC, Qwest, Nuvox/Trivergent, 360 Networks and
6 Allegiance were included in the trigger analysis.

7 - Loops where a carrier said in discovery that it does not have access to all units in
8 a building were excluded from wholesale trigger analysis for DS1 and DS3 loops.

9 - Several carriers with a small number of loops in BellSouth territory and for
10 which we had no discovery were excluded (e.g., BroadWing, Global NAPs,
11 Focal, Yipes, Enron Broadband, Flatel, TMC Telecom, Broadview, Verizon). In
12 order to rely on discovery to the maximum extent possible, I also excluded a few
13 small carriers that BellSouth had not received discovery from and for which data
14 from GeoResults was previously used. The exclusion of these carriers resulted in
15 the loss of only one loop where the triggers had been met, while simplifying the
16 analysis.

17

18 The revised lists of customer locations where triggers are met, together with the
19 supporting evidence as described in my direct testimony, are presented in Exhibits
20 SWP-1 to SWP-5.

21

22 Q. PLEASE DESCRIBE THE NEW EVIDENCE AND ANY OTHER CHANGES
23 YOU HAVE MADE IN THE TRIGGER ANALYSIS FOR DEDICATED
24 TRANSPORT.

25

PUBLIC DISCLOSURE DOCUMENT

1 A. The following changes were made to the trigger analysis for transport:
2 - Discovery answers from Allegiance, AT&T (including Media One), SBC¹ and
3 Sprint were considered in the trigger analysis.

4 - Network Plus was excluded from the triggers analysis since BellSouth learned
5 that this carrier is leaving the Southeast.

6 The revised lists of routes where triggers are met, together with the supporting
7 evidence described in my direct testimony, are presented in Exhibits SWP-6 to
8 SWP-10.

9

10 **II. General Issues Affecting Both Loops and Transport**

11 Q. FCCA WITNESS BALL (P. 9, P. 20, AND P. 39) CLAIMS THAT
12 BELL SOUTH DID NOT CONDUCT A CAPACITY-SPECIFIC ANALYSIS.
13 PLEASE RESPOND.

14

15 A. BellSouth examined the evidence provided through discovery to determine what
16 types of facilities a carrier has provisioned to a specific customer location or
17 along a specific route. If the carrier indicated that it had provisioned only DS1
18 capacity and indicated a willingness to wholesale, the facility was counted toward
19 the DS1 Wholesale Trigger only. If the carrier indicated that it had a DS3, OCn
20 or fiber facility in place, BellSouth concluded that the carrier is capable of
21 providing DS1 and DS3 capacity services. Finally, when using data from the
22 GeoLIT™ Plus Report that indicates the existence of fiber-based facilities or from
23 BellSouth's internal records indicating the existence of fiber-based collocation,
24 then BellSouth has reasonably concluded that such carriers can provide DS1 and

¹ BellSouth has used SBC's data responses filed with the Commission and is in the process of clarifying a question relating to SBC's responses to Verizon's discovery.

PUBLIC DISCLOSURE DOCUMENT

1 DS3 capacity services. Such conclusions are the only way to conduct a
2 reasonable, capacity-specific analysis as instructed by the TRO.

3

4 As BellSouth witness Wayne Gray discusses in his testimony, carriers typically
5 deploy fiber-optic facilities that can operate at a range of capacities determined by
6 the electronics attached to them. For example, when laying fiber it makes sense
7 to deploy high-capacity OCn facilities so that there will always be enough
8 bandwidth to handle the traffic on a given loop. The carrier then attaches
9 electronics to subdivide (or “channelize”) the available capacity, activating the
10 amount of capacity and number of channels needed along the loop. Indeed, this
11 channelization is extremely common given that the vast majority of retail loops
12 sold are at the DS3 level or below – according to the market research firm IDC,
13 more than 99% of dedicated enterprise loops, excluding switched voice lines, are
14 provided at DS3 or lower capacity.

15

16 Q. SPRINT WITNESS DICKERSON (P. 18) IMPLIES THAT SPARE DARK
17 FIBER MUST BE PRESENT IN ORDER FOR THE DARK FIBER TRIGGERS
18 TO BE MET. DOES THE TRO REQUIRE COMPETITIVE FACILITIES TO
19 HAVE UNLIT FIBER STRANDS IN ORDER TO QUALIFY FOR THE DARK
20 FIBER TRIGGERS?

21

22 A. Only in the wholesale trigger for dark fiber transport (note that there is no
23 wholesale trigger for dark fiber loops) – there is no such requirement for any self-
24 provisioning trigger. The language of the TRO is clear on this point. For
25 example, in the case of the self-provisioning trigger for dark fiber transport, the

PUBLIC DISCLOSURE DOCUMENT

1 TRO says that as long as a competitive carrier has deployed fiber transmission
2 facilities to a collocation arrangement, it should qualify for the dark fiber trigger
3 in that wire center (TRO ¶408). Specifically, the FCC's rules require that "the
4 competing provider has deployed its own dark fiber facilities, which may include
5 dark fiber facilities that it has obtained on a long-term, indefeasible-right of use
6 basis." (47 C.F.R. § 51.319(e)(3)(i)(A)(1), emphasis added). There is no
7 condition on the existence of extra dark fiber strands that have not yet been lit.
8 The language of the TRO for self-provisioning dark fiber loops is similar to
9 transport and has no condition requiring the existence of unused fiber strands.

10

11 Q. AT&T WITNESS BRADBURY (P. 8-12) AND FCCA WITNESS BALL (P. 46
12 AND P. 49) CLAIM THAT FACILITIES THAT ARE PROVISIONED BY
13 CARRIERS WITH MORE THAN 12 DS3S ON THE ROUTE IN QUESTION
14 OR MORE THAN 2 DS3S TO THE CUSTOMER LOCATION SHOULD NOT
15 BE INCLUDED IN THE TRIGGER ANALYSIS. CAN YOU ADDRESS THIS?

16

17 A. This is nothing more than an attempt by CLECs to add imaginary requirements to
18 those outlined in the TRO in order to make the triggers more difficult to meet.
19 The rules are quite clear as to the requirements for meeting the triggers and they
20 do not mention any capacity ceilings for competitive facilities to qualify for the
21 trigger. (See 47 C.F.R. § 51.319(a)(4), (5) and (6) for loops and 47 C.F.R. §
22 51.319(e)(1), (2) and (3) for dedicated transport). The TRO does not allow room
23 for additional criteria to be added, and this Commission should resist the call to
24 do so.

25

PUBLIC DISCLOSURE DOCUMENT

1 Q. XSPEDIUS WITNESS FALVEY (P. 7), MCI WITNESS HARDIN (P. 15), AND
2 SPRINT WITNESS DICKERSON (P. 13) CLAIM THAT BELLSOUTH DOES
3 NOT PROVIDE THE LOCATION OR ROUTE-SPECIFIC ANALYSIS
4 CONTEMPLATED BY THE WHOLESALE TRIGGERS. DOES BELLSOUTH
5 PROVIDE LOCATION-SPECIFIC EVIDENCE THAT THE WHOLESALE
6 TRIGGER HAS BEEN MET?

7
8 A. Yes. BellSouth does in fact provide route- and location-specific evidence that the
9 wholesale trigger, as described by the FCC in the TRO, is met. Wherever relief is
10 claimed, granular evidence is presented that at least two competitive carriers who
11 are willing to offer wholesale service are present at each customer location or
12 along each route at the specific capacity level.

13
14 A carrier only counts towards the trigger at a given customer location or route if it
15 has deployed its own facilities to that specific location *and* is a wholesaler. Thus,
16 contrary to the claims of ITC^DeltaCom witness Mr. Brownworth (Rebuttal, p.
17 3), BellSouth is not including as wholesale routes those routes which
18 ICT^DeltaCom is reselling capacity that it buys from a third party.

19
20 BellSouth uses data from discovery and the GeoLIT™ Plus Report to obtain
21 granular evidence that carriers have deployed their own facilities on a location-
22 by-location basis. For transport, BellSouth uses data from discovery and from its
23 own internal records to show where carriers have deployed facilities on a route-
24 by-route basis. Carriers are classified as wholesalers at the carrier level based on
25 the evidence from discovery and other evidence that indicate a carrier's

PUBLIC DISCLOSURE DOCUMENT

1 willingness to wholesale. This evidence is presented in summary form in Exhibits
2 SWP-11 and SWP-12.

3

4 The classification of a carrier as a wholesaler is made at the carrier level since the
5 willingness to sell wholesale to other carriers is part of each carrier's commercial
6 strategy rather than a decision that is made at a granular level for each route and
7 customer location. The wholesale trigger defined by the FCC in the TRO is
8 consistent with this standard since it does not require the carrier to currently
9 provide wholesale service in the customer location, but only that it be willing to
10 offer access to its loop or transport facilities on a wholesale basis (e.g., see TRO
11 ¶337).

12

13 It would be bizarre for a wholesaler to selectively refuse to provide wholesale
14 service on part of its facilities since this would create serious problems in terms of
15 relationship with customers, marketing strategy, and even internal operations to
16 differentiate facilities that can and cannot be offered on a wholesale basis.

17

18 All the evidence that BellSouth collected, including advertisements, public
19 statements and industry reports, supports the conclusion that carriers willing to
20 sell their own facilities on a wholesale basis do not selectively refuse to provide
21 wholesale service on part of their transport and loop facilities. Any criterion that
22 required evidence of willingness to wholesale at the route or customer location
23 level would be impossible to meet – carriers do not advertise wholesale service on
24 a location-by-location or route-by-route basis, but rather indicate general
25 willingness to do so.

PUBLIC DISCLOSURE DOCUMENT

1 Q. KMC WITNESS JOHNSON (P. 13) POINTS OUT THAT FOR A CARRIER TO
2 COUNT TOWARDS THE WHOLESALE TRIGGER, IT MUST “OFFER ITS
3 WHOLESALE SERVICES BROADLY.” DID BELL SOUTH INCLUDE AS
4 WHOLESALERS CARRIERS WHO DO NOT HAVE “WIDELY
5 AVAILABLE” WHOLESALE OFFERINGS?
6

7 A. No. As my direct testimony states (p. 20 and p. 9) explains, BellSouth used
8 discovery responses, BellSouth’s experiences, analyst and industry reports about a
9 carrier, and the carrier’s public statements and advertisements about its own
10 offerings. Using these sources is a reasonable approach to ensuring that the
11 wholesale offering is widely available.
12

13 Q. KMC WITNESS JOHNSON (P. 23 - P. 26) LISTS “ADDITIONAL CRITERIA”
14 THAT APPLY TO THE WHOLESALE LOOP TRIGGER SIMILAR TO
15 THOSE FCCA WITNESS BALL OUTLINES FOR WHOLESALING
16 TRIGGERS (P. 32 AND P. 35). PLEASE ADDRESS THESE CRITERIA.
17

18 A. This is, again, an attempt by the CLECs to add requirements for meeting the
19 trigger to those set forth by the FCC. The FCC’s rules are clear. Ms. Johnson
20 formulates her list based on statements by the FCC that are not even in the rules
21 and are taken out of context.
22

23 First, Ms. Johnson expands the term “widely available” to include a host of issues
24 that have nothing to do with whether or not a carrier offers access to its loops to
25 other carriers on a widely available basis. For instance, Ms. Johnson apparently

PUBLIC DISCLOSURE DOCUMENT

1 doesn't believe that public statements made by a carrier of its willingness to
2 wholesale are sufficient evidence that the carrier counts toward the wholesale
3 trigger. She would have this Commission examine the availability of a contract,
4 the availability of capacity for future growth, operational support systems, and a
5 series of additional cross-connect requirements. Such an examination would be
6 exceedingly time-consuming and would add little to the issue at hand – what
7 could be clearer evidence that a carrier is a wholesaler than that it is offering
8 wholesale products in the marketplace?

9
10 Second, Ms. Johnson advocates a financial viability test (p. 25-26). The FCC
11 specifically instructed that “states should not undertake a financial viability
12 analysis with respect to each provider [used in meeting the wholesale trigger]”
13 (§338, emphasis added). Ms. Johnson does correctly relay the need to have “some
14 reasonable expectation” of the continuing availability of wholesale loops, but she
15 presents it in such a way as to mislead this Commission as to the requirements of
16 the trigger. In fact, the FCC even says that

17 *carriers operating under chapter 11 bankruptcy are still capable of*
18 *providing service while they reorganize their operations. Relatedly, in the*
19 *case of a chapter 7 liquidation, the physical transmission facility assets of*
20 *a competitive provider will continue to exist at that location as the*
21 *purchaser of those assets will likely provide similar wholesale service or*
22 *use such facilities to self-provide retail service. Under either scenario, the*
23 *triggers which resulted in a finding of no impairment at that location will*
24 *continue to be met. (TRO, footnote 989)*

PUBLIC DISCLOSURE DOCUMENT

1 The language of the TRO is clearly very different from the test of financial
2 viability advocated by Ms. Johnson.

3

4 Third, Ms. Johnson makes an entirely fictional claim that for dark fiber to be
5 counted toward the wholesale trigger, there is some requirement for “each
6 competitor [to have] the ability to attach electronics that permit it to provide
7 service at the level of its choosing” (p. 26). Ms. Johnson implies that the carrier
8 must have a means to allow its carrier customer to attach its own optronics at
9 some point in the future. This condition was invented by Ms. Johnson and is not
10 contained within the FCC’s rule s.

11

12 **III. High-Capacity Loops**

13 Q. PLEASE COMMENT ON XSPEDIUS WITNESS FALVEY’S (P. 10) CLAIMS
14 THAT BELLSOUTH INCLUDED BUILDINGS IN ITS SELF-PROVISIONING
15 TRIGGER ANALYSIS WHERE XSPEDIUS DOES NOT HAVE ACCESS TO
16 ALL CUSTOMERS IN A BUILDING.

17

18 A. The requirement that each “competing provider has access to the entire customer
19 location, including each individual unit within that location” (47 C.F.R. §§
20 51.319(a)(4)(ii)(B), (a)(5)(i)(B)(2)) applies only to the wholesale triggers for DS1
21 and DS3 loops. No such requirement exists for any of the self-provisioning
22 triggers for high-capacity loops. (See 47 C.F.R. § 51.319(a)(5)(i)(A), (6)(i)). As
23 such Mr. Falvey’s claim is irrelevant.

24

PUBLIC DISCLOSURE DOCUMENT

1 Q. XSPEDIUS WITNESS FALVEY (P. 8) AND FCCA WITNESS BALL (P. 20)
2 CLAIM THAT BELLSOUTH LISTED BUILDINGS AS MEETING THE
3 WHOLESALE TRIGGER WHEN THE CARRIER CLAIMS NOT TO HAVE
4 ACCESS TO THE ENTIRE BUILDING. PLEASE RESPOND.

5

6 A. As I discussed above, revised exhibits SWP-2 through SWP-4 remove from
7 consideration for the wholesale DS1 and DS3 triggers buildings in which carriers
8 have indicated limited access to the building.

9

10 Q. XSPEDIUS WITNESS FALVEY (P. 10) CLAIMS THAT BELLSOUTH
11 INCLUDED BUILDINGS IN ITS TRIGGER ANALYSIS WHERE XSPEDIUS
12 HAS NO SPARE ELECTRONICS. PLEASE RESPOND.

13

14 A. Mr. Falvey is apparently confused. There are five buildings listed in exhibits
15 SWP-4 and SWP-5 as being served by Xspedius. On December 22, 2003,
16 Xspedius provided revised discovery responses, where the only building shown as
17 lacking electronics in the building is *** BEGIN CONFIDENTIAL -----
18 -----END CONFIDENTIAL *** This building does not
19 appear in any of my exhibits.

20

21 Q. KMC WITNESS JOHNSON, AT&T WITNESS BRADBURY, XSPEDIUS
22 WITNESS FALVEY AND FCCA WITNESS BALL CLAIM THAT A LOOP
23 HAS TO TERMINATE AT AN ILEC CENTRAL OFFICE TO COUNT
24 TOWARD THE WHOLESALE TRIGGERS. DO YOU AGREE?

25

PUBLÍC DISCLOSURE DOCUMENT

1 A. No. Nothing in the TRO supports that conclusion. When the provider of a loop
2 facility is the ILEC, as it is the case for UNEs, the loop obviously terminates at
3 the ILEC central office. However, in the context of the triggers for high-capacity
4 loops, the loops in question are alternative loops provided by CLECs. The
5 objective of the self-provisioning triggers is to identify if “two or more
6 competitive LECs have self-provisioned loop transmission facilities, either
7 intermodal or intramodal facilities, to a particular customer location” and are
8 “serving customers at that location at the relevant loop capacity level.” (TRO,
9 ¶332). Clearly, whether the other side of the loop goes to an ILEC central office
10 or some other point in the CLEC’s network is completely immaterial to the
11 showing of a CLEC’s ability to serve customers in that location over their own
12 loop facilities, and it is therefore irrelevant for purposes of meeting the trigger.
13 The discovery responses of numerous carriers included lists of “self-provisioned
14 loops” that do not terminate at a BellSouth central office, demonstrating that
15 carriers agree that for purposes of the trigger analysis, the “owner” of the central
16 office is irrelevant.

17

18 The FCC did not differentiate its use of the term “loop” in the context of the
19 wholesale trigger from its use in the self-provisioning trigger. The TRO describes
20 both tests using the same language without any distinction between what qualifies
21 as a loop for each of the triggers and without adding any extra condition to the
22 wholesale trigger specifying that loops have to terminate at an ILEC central
23 office. In Paragraph 329 of the TRO, the FCC says that “incumbent LEC
24 unbundling obligation[s] can be eliminated ...where two or more unaffiliated
25 competitive providers have deployed transmission facilities to the location and are

PUBLIC DISCLOSURE DOCUMENT

1 offering alternative loop facilities to competitive LECs on a wholesale basis at the
2 same capacity level (Competitive Wholesale Facilities Trigger).” (Emphasis
3 added) The important point is that both triggers demonstrate that CLECs can
4 provide service to customers at a location using alternative facilities.

5

6 Q. THE SAME WITNESSES ALSO CLAIM THAT BELLSOUTH IS COUNTING
7 KMC, AT&T AND XSPEDIUS TOWARD THE WHOLESale TRIGGERS
8 EVEN THOUGH THESE CARRIERS TOLD BELLSOUTH IN DISCOVERY
9 THAT THEY DO NOT WHOLESale LOOPS AS DEFINED IN THE TRO.
10 PLEASE COMMENT.

11

12 A. These carriers are using their own incorrect definition of “loop” (claiming it has
13 to terminate at an ILEC central office) and then deny that they wholesale “loops.”
14 BellSouth disagrees with the definition that these carriers adopted and has
15 therefore used other evidence to classify these carriers as wholesalers. This
16 evidence is presented in summary form in Exhibits SWP-11 and SWP-12.

17

18 Q. FCCA WITNESS BALL (P. 18) AND SPRINT WITNESS DICKERSON (P. 20)
19 EXPRESS RESERVATIONS AS TO THE USE OF EVIDENCE OF LOOP
20 DEPLOYMENT FROM GEORESULTS. PLEASE RESPOND.

21

22 A. As explained in my direct testimony, using the GeoResults data is the best
23 alternative BellSouth had to overcoming the lack of discovery data. I have used
24 this data only in instances where a carrier has not provided us with information
25 through discovery. As shown in attached Exhibit SWP-13, there are only five

PUBLIC DISCLOSURE DOCUMENT

1 carriers remaining for which BellSouth relies upon data from GeoResults, and
2 BellSouth is in the process of obtaining additional discovery from these carriers.
3 BellSouth reserves the right to modify Exhibits SWP-1 to SWP-5 to incorporate
4 the discovery responses from these remaining carriers.

5

6 **IV. Transport**

7 Q. SEVERAL WITNESSES HAVE TESTIFIED THAT THE CARRIERS THEY
8 REPRESENT DO NOT SELF-PROVIDE OR WHOLESALE DEDICATED
9 TRANSPORT. WHY ARE THEY INCLUDED IN THE TRANSPORT
10 TRIGGERS ANALYSIS?

11

12 A. Each of the carriers used in the transport trigger analysis is operationally ready to
13 transport traffic between the central offices as listed in Exhibits SWP-8. The
14 CLEC witnesses have not denied that CLECs have deployed transport facilities to
15 collocation arrangements in BellSouth central offices. They simply claim that
16 their facilities do not qualify as transport routes for purposes of the trigger
17 analysis. These witnesses have attempted to redefine "route" to avoid admitting
18 where their facilities actually do meet the FCC's triggers.

19

20 These carriers deny that their transport facilities qualify as dedicated transport and
21 also deny that they wholesale dedicated transport -- because they do not have the
22 facilities in the first place. Thus, BellSouth used other evidence, as explained in
23 my direct testimony and detailed in the exhibits to this testimony, to qualify
24 carriers as transport wholesalers. This evidence is presented in summary form in
25 Exhibit SWP-12.

PUBLIC DISCLOSURE DOCUMENT

1 Q. HOW HAVE THESE WITNESSES REDEFINED "ROUTE"?

2

3 A. Although there are variations in wording, the basic premise appears to be that a
4 route cannot pass through a CLEC switch; a carrier must provide service directly
5 connecting the two central offices at each end of the route in order for its transport
6 facilities to count towards the transport triggers on that route. They also state that
7 to support a trigger claim, the ILEC must produce evidence that the CLEC self-
8 provisions transport service between the two ILEC wire centers and that each
9 collocation arrangement in question is being used as an endpoint for a transport
10 route.

11

12 These carriers say that most CLEC networks follow a hub and spoke architecture
13 and are constructed such that collocation arrangements are used as a traffic
14 aggregation point that can only backhaul traffic to the CLEC's switch. They
15 apparently believe that even if a CLEC can indirectly send traffic between two
16 ILEC central offices, this CLEC does not count toward the triggers test for that
17 route. For instance, Xspedius witness Falvey admits that Xspedius has
18 collocations and uses them to "collect and return ... traffic to the Xspedius
19 network and switch." (page 12) MCI witness Hardin states that on-net
20 collocations are physically connected to MCI's network on MCI-owned facilities
21 and are used by MCI to aggregate traffic and "transmit [it] to MCI's switch." (see
22 generally page 7). AT&T witness Bradbury states that "AT&T's local fiber
23 networks are not configured to enable it to carry traffic from its collocation
24 facilities in one ILEC wire center to its collocation facilities in another ILEC wire
25 center...AT&T's fiber transport network is configured to flow traffic between an

PUBLIC DISCLOSURE DOCUMENT

1 AT&T switch and (1) either an ILEC tandem or end office switch... or (2) an
2 AT&T collocation arrangement at an ILEC wire center.” (pp. 15, 16). None of
3 these carriers deny having deployed transport facilities to collocation
4 arrangements in BellSouth central offices; they would simply have this
5 Commission believe that it is irrelevant where their facilities are because they
6 connect through a CLEC office or switch.

7
8 However, as the FCC has explained, passing through an intermediate wire center
9 or an intermediate switch – ILEC or CLEC – does not prevent the connection of
10 two central offices to form a route. Rule 319(e) clearly includes “transmission
11 paths between identical points...irrespective of whether they pass through the
12 same intermediate wire centers or switches” in the definition of a route. This
13 misuse of the term “route”, then, clearly is not in agreement with the rules set
14 forth by the FCC.

15
16 Q. HOW WOULD THIS INTERPRETATION OF A “ROUTE” SUBVERT THE
17 FCC’S OBJECTIVE IN CREATING THE TRANSPORT TRIGGERS?

18
19 A. The FCC found, in the course of its Triennial Review proceeding, that
20 competitive facilities are available and designed the triggers to identify where
21 competitive facilities are already available. Paragraph 360 of the TRO states,
22 “The record ...indicates... that competitive DS1, DS3, and dark fiber transport
23 facilities are available on a wholesale basis in some areas, and that competing
24 carriers have deployed their own transport networks in some areas. Because the
25 record is not sufficiently detailed concerning exactly where these facilities have

PUBLIC DISCLOSURE DOCUMENT

1 been deployed, and because the nature of transport facilities requires a highly
 2 granular impairment analysis, we establish specific triggers for states to apply in
 3 conducting such an analysis.” However, contrary to this finding, AT&T and
 4 MCI, the two largest CLECs in the country claim they have no facilities in any of
 5 BellSouth’s nine states that would qualify under either transport trigger. This is
 6 because both carriers use their own, incorrect definition of a “route” to justify
 7 such claims. It defies logic to suggest that the FCC would have set up triggers
 8 specifically to identify where carriers have deployed alternative facilities and then
 9 define the trigger such that the largest CLECs in the country, both of which
 10 acquired large CAPs (Competitive Access Providers) (that existed to provide
 11 alternative transport in the first place), would have no facilities that would qualify.

12

13 Q: IS THERE OTHER EVIDENCE THAT YOU ARE AWARE OF THAT
 14 ILLUSTRATES CLECS ARE MORE INTERESTED IN HIDING BEHIND
 15 DEFINITIONS, THAN IN PRESENTING ACCURATE FACTS TO THIS
 16 COMMISSION?

17

18 A. Yes. In responses to discovery in Georgia Docket No. 17741-U, MCI admitted
 19 that *** BEGIN CONFIDENTIAL *** “-----
 20 -----
 21 -----
 22 ----- *** END CONFIDENTIAL *** (Docket No.
 23 17741-U, MCI’s Responses to BellSouth’s First Set of Interrogatories,
 24 Attachment C, Nos. 4, 5). MCI’s response goes further to state, “MCI has
 25 provided BellSouth with a list of its ‘on-net’ collocations. This list identifies the

PUBLIC DISCLOSURE DOCUMENT

1 BellSouth wire center buildings that are physically on the network owned by
 2 MCI. Once traffic is delivered to MCI at any of its on-net collocation sites it can
 3 be delivered to any other MCI on-net collocation locations without leaving MCI's
 4 network." (Docket No. 17741-U, MCI's response to Interrogatory 4(a)). Yet,
 5 after admitting this in Georgia, MCI witness Hardin claimed that since no more
 6 than one BellSouth central office is on an MCI ring, "it is axiomatic that MCI
 7 does not have transport between collocations in two ILEC wire centers..."
 8 (Hardin, p. 7). Ms. Hardin is obviously adopting an incorrect definition of
 9 "route" in order to deny that MCI has dedicated transport facilities based on a fact
 10 that is totally irrelevant to MCI's operational readiness to route traffic between
 11 BellSouth central offices, as stated in the TRO.

12

13 Q. KMC WITNESS JOHNSON (PP. 5, 6) AND AT&T WITNESS BRADBURY
 14 (P. 15) ARGUE THAT THE TRO'S REDEFINITION OF "DEDICATED
 15 TRANSPORT" PRECLUDES THE INCLUSION OF AN INDIRECT
 16 TRANSPORT ROUTE THROUGH A SWITCH FOR PURPOSES OF THE
 17 TRIGGERS ANALYSIS. PLEASE RESPOND.

18

19 A. Counting indirect routes between ILEC wire centers for the purpose of meeting
 20 the dedicated transport triggers is perfectly consistent with the new definition of
 21 dedicated transport. These carriers are taking out of context the definition of
 22 which elements are subject to an *unbundling* obligation to draw erroneous
 23 conclusions. The FCC says in ¶366 of the TRO that "...the more reasonable
 24 approach...is to not consider those facilities outside of the incumbent LEC's local
 25 network as part of the dedicated transport network element that is subject to

PUBLIC DISCLOSURE DOCUMENT

1 unbundling....Therefore, we find that the dedicated transport network element
2 includes only those ...facilities that coincide with the incumbent LEC's transport
3 network – the transmission links connecting incumbent LEC switches or wire
4 centers.” However, inclusion or exclusion of facilities connecting an ILEC
5 central office and a CLEC switch (i.e., entrance facilities) from the *unbundling*
6 obligation has no bearing on whether or not that “link” is part of the larger “route”
7 connecting ILEC wire centers. In fact, as I will discuss below, the only purpose
8 of a CLEC deploying more than one entrance facility per LATA is to bypass the
9 ILEC interoffice network and to create an alternative to buying dedicated
10 transport from the ILEC. Therefore it is only logical to count these facilities
11 towards the transport triggers.

12

13 To understand how entrance facilities provide an alternative to dedicated transport
14 provided by the ILEC, see, for example, the case in Exhibit SWP-15, Situation A
15 where a CLEC has only one stand-alone entrance facility from its Point of
16 Presence (POP) to ILEC Central Office (CO) 1 and also needs transmission links
17 to CO2, CO3 and CO4 in order to carry traffic from its end users served from
18 these COs. In a typical CLEC hub and spoke architecture, the CLEC purchases
19 dedicated transport from the ILEC between CO1, where it has its stand-alone
20 entrance facility to its POP, and all the other ILEC COs it needs to reach.

21

22 Now, consider the situation presented in Exhibit SWP-15, Situation B where the
23 same CLEC deploys two additional entrance facilities from its POP to CO2 and
24 CO3. The deployment of these entrance facilities allows the CLEC to bypass the
25 ILEC interoffice network and provides the CLEC with a real alternative to

PUBLIC DISCLOSURE DOCUMENT

1 purchasing dedicated transport between ILEC COs (in fact, this is the only
2 purpose of deploying these facilities). In this example, by using the entrance
3 facilities as segments of interoffice routes, the CLEC would have alternative
4 transmission facilities on routes CO1-CO2, CO1-CO3 and CO2-CO3, but would
5 still purchase dedicated transport between CO1 and CO4. No one is arguing that
6 the stand-alone CO to POP facilities should be counted as routes; however, it is
7 obvious that in this scenario “carriers have the ability to use alternatives to the
8 incumbent LEC’s network” (TRO, ¶360) and therefore must be counted towards
9 the transport triggers.

10

11 Q. FCCA WITNESS BALL CLAIMS THAT A CLEC MUST BE PROVIDING
12 SERVICE ON A GIVEN TRANSPORT ROUTE TO MEET THE SELF-
13 PROVISIONING TRIGGER (P. 11). PLEASE COMMENT.

14

15 A. Mr. Ball’s claim is incorrect. Unlike for loops, where the FCC requires that “each
16 competing provider has (...) deployed its own DS3 facilities at that specific
17 customer location and is serving customers via those facilities at that location,”
18 (47 C.F.R. § 51.319(a)(5)(i)(A), emphasis added), the self-provisioning trigger for
19 transport only requires that “the competing provider has deployed its own
20 transport facilities and is operationally ready to use those transport facilities to
21 provide dedicated DS3 transport along the particular route.” (47 C.F.R. §
22 51.319(e)(2)(i)(A), emphasis added). Realizing that in most cases CLECs do not
23 use their transport facilities to provide transport between ILEC central offices, the
24 FCC does not require that the CLEC currently provides transport on each specific
25 route, but only that it is operationally ready to do so.

PUBLIC DISCLOSURE DOCUMENT

1 Q. AT&T WITNESS BRADBURY CLAIMS THAT BELLSOUTH'S RELIANCE
2 ON DATA OTHER THAN DISCOVERY RESPONSES IN SOME CASES
3 "CREATES A SERIOUS CONCERN REGARDING THE ACCURACY AND
4 RELIABILITY" OF BELLSOUTH'S CASE. PLEASE EXPLAIN WHY
5 BELLSOUTH USED DATA THAT DIFFERED FROM SOME CARRIERS'
6 DISCOVERY RESPONSES.

7
8 A. Some CLECs responded to BellSouth's discovery requests by stating that they did
9 not have transport facilities. However, as explained above, these carriers rely on a
10 misinterpretation of "route" in order to make this claim. In the absence of
11 responses to discovery that comply with the definitions used by the FCC,
12 BellSouth had no other choice than to use its own data indicating that CLECs
13 have deployed fiber-based collocations in BellSouth central offices. Since most
14 CLECs, even when they disagree about the definition of dedicated transport, have
15 provided BellSouth with data on fiber-based collocations, there are only a few
16 cases BellSouth's records rather than some information gathered through
17 discovery responses have been used. As shown in Exhibit SWP-14, there are six
18 carriers from whom BellSouth is seeking discovery and there are four carriers that
19 provided incomplete data, which has been supplemented with BellSouth's
20 records. Finally, KMC, Xspedius and ITC^Deltacom refuse to provide BellSouth
21 with any collocation data arguing that their facilities do not qualify as dedicated
22 transport has defined in the TRO. Since BellSouth may receive additional
23 discovery responses, it reserves the right to amend Exhibits SWP-6 to SWP-10
24 accordingly.

PUBLIC DISCLOSURE DOCUMENT

1 Q. HOW DO YOU RESPOND TO MR. DICKERSON'S TESTIMONY THAT
2 CLECS MAY NOT OWN PIECE PARTS OF A GIVEN ROUTE (P. 9)?

3

4 A. It is possible that a particular CLEC may not own an entire interoffice segment.
5 BellSouth does not disagree that the serving arrangement Mr. Dickerson describes
6 *may* exist. However routes where this is demonstrated (none have to date) will be
7 excluded from our analysis, and as we will of course incorporate new information
8 as it becomes available through discovery. Mr. Dickerson is merely attempting to
9 throw out hypotheticals in order to divert attention from the facts.

10

11 Q. IS THERE ANY CLEC FOR WHICH YOU MAY CHANGE THE NETWORK
12 ARCHITECTURE CONCLUSION THAT IS DETAILED IN YOUR DIRECT
13 TESTIMONY?

14

15 A. There is one. After examining the discovery responses and rebuttal testimony of
16 FDN witness Hand, it is possible that FDN's specific architecture may require
17 modification. The conclusion set forth in my direct testimony is that every fiber-
18 based collocation is connected to every other fiber-based collocation in the same
19 LATA, which connectivity assumption remains valid with FDN. The difference
20 is that, contrary to the other CLECs, which use hub and spoke architectures,
21 FDN's network apparently follows a daisy chain architecture in which certain
22 links are leased from BellSouth, but not on a long-term basis. Notwithstanding
23 that full connectivity may exist, there may be situations in which FDN routes
24 traffic from one fiber-based collocation to another fiber-based collocation using a
25 link that does not qualify under the FCC's triggers analysis. BellSouth has served

PUBLIC DISCLOSURE DOCUMENT

1 FDN with additional discovery and intends to participate in Mr. Hand's
2 deposition, with the objective of gaining a fuller understanding of FDN's network
3 architecture. Based upon the outcome of the pending discovery and the
4 deposition testimony, it may be necessary to modify Exhibits EXP-8 to EXP-10
5 accordingly, and BellSouth reserves the right to do so.

6

7 **V. Transition**

8 Q. XSPEDIUS WITNESS FALVEY (P. 23) STATES THAT ACCESS TO UNES
9 "SHOULD BE GRANDFATHERED WHERE FACILITIES ARE ALREADY
10 IN PLACE." PLEASE RESPOND.

11

12 A. The purpose of this proceeding is to determine where CLECs are not impaired
13 without access to UNES. It therefore makes no sense to find that a CLEC is not
14 impaired, especially in cases where there are alternatives already available, yet
15 still require ILECs to provide access to UNES.

16

17 Q. PLEASE ADDRESS THE PROPOSAL BY KMC WITNESS JOHNSON (P. 32,) AND FCCA WITNESS BALL (PP. 68 - 69) THAT THE COMMISSION
18 ESTABLISH A TRANSITION FROM UNE RATES TO MARKET RATES BY
19 OCTOBER 2006 AND THE PROPOSAL OF ITC^DELTACOM WITNESS
20 BROWNORTH (P. 7) AND ALLEGIANCE WITNESS ANDERSON (P. 13)
21 THAT A YEAR-LONG TRANSITION PERIOD IS APPROPRIATE.

22

23
24 A. The multi-tiered approaches rely on the examples of transition plans set forth by
25 the FCC. However, transitioning facilities to a specific building or along a

PUBLIC DISCLOSURE DOCUMENT

1 specific route when there are alternatives available already does not require such a
2 complex approach. As explained in my rebuttal testimony, the fact that a carrier
3 may want to take time to evaluate its options and negotiate terms with other
4 carriers should not be cause for lengthy delays, or continued ILEC subsidization
5 in areas in which no impairment exists. Protracted delays will only further
6 postpone facilities-based competition.

7

8 Q. KMC WITNESS JOHNSON (P. 29 - P. 31) AND FCCA WITNESS BALL (P.
9 69) SUGGEST THAT THE COMMISSION ESTABLISH A "CERTIFICATION
10 PROCESS" THAT WOULD APPARENTLY ALLOW INDIVIDUAL CLECS
11 ACCESS TO UNES AT LOCATIONS OR ALONG ROUTES WHERE A
12 TRIGGER HAS BEEN MET. PLEASE ADDRESS.

13

14 A. Mr. Ball and Ms. Johnson are misrepresenting what the TRO says. In fact, in the
15 discussion of the application of self-provisioning triggers for loops, the FCC says
16 that:

17 *state commissions may believe notwithstanding satisfaction of this trigger*
18 *for a particular customer location, that continued access to unbundled*
19 *loops at the capacity level under analysis should be maintained at the*
20 *customer location because impairment, in fact, remains due to the*
21 *existence of a barrier to further competitive facilities deployment at that*
22 *location. An example of such a situation might be where a municipality*
23 *has imposed a long-term moratorium on granting additional rights-of-way*
24 *permits along the routes necessary to serve the particular customer*
25 *location. In these circumstances, a state commission may file a petition*

PUBLIC DISCLOSURE DOCUMENT

1 *for waiver with the Commission to maintain the incumbent LEC's*
2 *unbundling obligation at that location until the barrier identified in the*
3 *waiver petition no longer exists. (TRO ¶336, emphasis added)*
4

5 In the discussion of the application of self-provisioning triggers for dedicated
6 transport, the FCC describes a similar situation, but says that it only applies when
7 “deploying additional facilities is entirely foreclosed.” (TRO ¶441). Thus, even
8 though the FCC describes circumstances under which CLECs may be impaired
9 despite the self-provisioning trigger having been met, it is clear from the language
10 of the TRO (i.e., deployment of facilities is entirely foreclosed or the existence of
11 a barrier to further facilities deployment) and from the example provided (i.e.,
12 long-term moratorium on rights of way) that such circumstances are extremely
13 rare. Furthermore, it is important to understand that, contrary to what is suggested
14 by Mr. Ball and Ms. Johnson, these situation would only apply for self-
15 provisioning triggers, but not for wholesale triggers, and that the state commission
16 would have to petition for a waiver with the FCC to maintain the ILEC’s
17 unbundling obligation. Obviously it makes this whole lengthy and complicated
18 proceeding rather pointless if at the end, even a finding of no-impairment merely
19 results in continued unbundling.
20

21 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

22

23 A. Yes.

24

Errata for Shelley Padgett Direct Testimony filed on December 22, 2003
Surrebuttal Testimony filed on February 4, 2004 Docket No. 030852-TP

Direct

p. 8, line 10 Change "fiber-base loop" to "fiber-based loop"

Surrebuttal

p. 18, line 4 Insert a comma after "country"

p. 19, line 10 Change "operationally readiness" to "operational readiness"

p. 23, line 7 Delete "as" so that it reads "excluded from our analysis, and we will of course incorporate new information"

p. 24, line 4 Change "Exhibits EXP-8 to EXP-10" to "Exhibits SWP-6 to SWP-10"

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR FULL NAME AND BUSINESS ADDRESS.**

3 A. My name is Orville D. Fulp. My business address is 600 Hidden Ridge Drive,
4 Irving, Texas 75038.

5

6 **Q. BY WHOM ARE YOU EMPLOYED, AND IN WHAT CAPACITY?**

7 A. I am employed by Verizon as Director - Regulatory.

8

9 **Q. PLEASE BRIEFLY OUTLINE YOUR EDUCATIONAL BACKGROUND
10 AND EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY.**

11 A. I have a Bachelor of Arts degree in Economics from the University of California,
12 San Diego, and a Master of Science degree in Economics from the University of
13 Wyoming.

14

15 In 1981, I began working at the Illinois Commerce Commission in the Economics
16 and Rates Department as Senior Economist, where I analyzed filings and testified
17 in utility rate proceedings in the areas of pricing, cost of service, and demand
18 analysis. In January of 1984, I transferred to the Policy Analysis and Research
19 Division as Director of the Pricing Program. My responsibilities included
20 developing policy concerning pricing in the telecommunications and energy
21 fields.

22

23 In 1985, I joined Contel as Manager — Revenue Requirements/Pricing for the
24 company's eastern region, and was responsible for rate case activity, tariff
25 maintenance, surveillance of regulatory activities, and pricing of local exchange,

1 toll and access services in six states.

2

3 In 1991, I assumed the position of Manager – Access Pricing for GTE Telephone
4 Operations, and was responsible for the development of access pricing plans and
5 rates for interstate and intrastate purposes in 40 states. In 1994, I became
6 Director of Product Management Network Services (Wholesale Markets). Since
7 then, I have held various positions in GTE and Verizon involving pricing and
8 product management and operations. In December 2001, I assumed my current
9 position of Director – Regulatory. My current responsibilities include national
10 public policy and pricing matters.

11

12 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE STATE UTILITY**
13 **COMMISSIONS?**

14 A. Yes. I have testified on national public policy and pricing matters, including
15 several generic access charge dockets and other pricing related dockets over the
16 last 15 years, on behalf of various Verizon telephone companies before state
17 commissions in California, Florida, Illinois, North Carolina, South Carolina,
18 Georgia, Alabama, Maine, Vermont, New Hampshire, Pennsylvania, and
19 Washington.

20

21 **Q. MR. WHITE, PLEASE STATE YOUR FULL NAME AND BUSINESS**
22 **ADDRESS.**

23 A. My name is John White. My business address is Sunset Drive, North Salem,
24 New York.

25

1 **Q. BY WHOM ARE YOU EMPLOYED, AND IN WHAT CAPACITY?**

2 A. I am a principal of 8 Degree Research and Consulting, Inc.

3

4 **Q. PLEASE BRIEFLY DESCRIBE YOUR EXPERIENCE IN THE**
5 **TELECOMMUNICATIONS INDUSTRY AND EDUCATIONAL**
6 **BACKGROUND.**

7 A. I was employed by Verizon, or by its affiliates and predecessor companies,
8 from 1966 to November 2003. Before joining Verizon, I worked for a number
9 of engineering and construction firms. During my first 12 years at Verizon, I
10 was involved in virtually every aspect of Outside Plant telephone engineering.
11 From 1979 to 1994, I held managerial positions in Construction, Installation
12 and Maintenance, and Engineering, in both line and staff capacities. I was
13 appointed Executive Director for Transport Technology Planning in 1994, and
14 became Executive Director Wholesale Services in June 2000 with responsibility
15 for introduction of wholesale digital services. In March of 2003, I was
16 appointed Executive Director for Fiber to the Premises.

17

18 I began undergraduate engineering studies at the University of Buffalo and
19 went on to receive a Bachelors Degree in Business Administration and a
20 Masters in Business Administration from Pace University. I have also
21 continued graduate work at Pace University in Finance and Economics as part
22 of Doctorate of Professional Studies Program.

23

24 In November 2003, I left Verizon and started my own consulting company, 8
25 Degree Research and Consulting, Inc.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE STATE UTILITY**
2 **COMMISSIONS?**

3 A. Yes, I have testified before the FCC and state commissions in connection with
4 Verizon's applications for long distance entry (*i.e.*, 271 proceedings) for New
5 York, Massachusetts, Pennsylvania, New Jersey, Vermont, New Hampshire,
6 Maine, Virginia, Maryland, District of Columbia and West Virginia. I also
7 testified in UNE proceedings in New York, Massachusetts, the District of
8 Columbia, Maryland, New Jersey and Pennsylvania. I have also been involved
9 in a number of arbitrations related to DSL services and line sharing in New
10 York, Massachusetts, Maryland and Pennsylvania.

11

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

13 A. The first portion of our testimony addresses dedicated transport. According to the
14 FCC's *Triennial Review Order* ("TRO"), a state commission must find that
15 competing carriers are not impaired without access to Verizon's unbundled
16 dedicated interoffice transmission (or transport) facilities if Verizon meets either
17 of two objective "triggers." We describe the FCC's transport triggers and explain
18 how they are applied. Then, we present Verizon's evidence, drawn from internal
19 and public sources, that other carriers have deployed fiber transport routes in
20 LATA 952 meeting one or both of the FCC's triggers.

21

22 The second portion of our testimony addresses high capacity loops. The FCC in
23 its *Triennial Review Order* established two triggers for state commissions to apply
24 to determine whether competing carriers are impaired without access to Verizon's
25 unbundled high capacity loops. We explain that because information about where

1 carriers other than Verizon have deployed high capacity loops is almost
2 exclusively within the control of those other carriers, Verizon cannot present a
3 triggers case for high capacity loops until it receives and analyzes information
4 from those carriers through the discovery process.

5
6 Verizon specifically reserves the right to supplement its testimony because it has
7 not received responses to the Florida Public Service Commission Staff's ("Staff")
8 TRO data request issued on November 12, 2003 to CLECs and Alternative Access
9 Vendors. The responses to the Staff's data request are critical to Verizon's ability
10 to pursue its dedicated transport and high capacity loop triggers cases. Once
11 Verizon has received and analyzed the data, it may need to supplement this
12 testimony. In addition, while the *Triennial Review Order* authorizes Verizon to
13 present a potential deployment case, it will not do so at this time.

14
15 **II. DEDICATED INTEROFFICE TRANSPORT TRIGGERS**

16 **A. Description of the Triggers for Dedicated Interoffice Transport**

17 **Q. WHAT ARE DEDICATED INTEROFFICE TRANSPORT FACILITIES?**

18 A. "Dedicated interoffice transmission facilities (transport) are facilities dedicated to
19 a particular customer or competitive carrier that it uses for transmission among
20 incumbent LEC central offices and tandem offices." TRO ¶ 361. The FCC's
21 definition excludes "shared transport," which are transmission facilities shared by
22 more than one carrier. TRO ¶ 361, n.1100, ¶ 533, n.1633. Therefore, the CLEC
23 facilities that are of interest for purposes of this trigger are those dedicated
24 transport facilities that directly or indirectly connect Verizon wire centers or
25 switches.

1 Q. PLEASE DESCRIBE THE FCC'S TWO OBJECTIVE TRIGGERS FOR
2 IDENTIFYING WHERE CLECS ARE NOT IMPAIRED WITHOUT
3 ACCESS TO VERIZON'S UNBUNDLED DEDICATED TRANSPORT
4 FACILITIES?

5 A. In its *Triennial Review Order*, the FCC found that requesting carriers are impaired
6 on a nationwide basis without access to unbundled dark fiber, DS1, and DS3
7 dedicated transport facilities. TRO ¶ 359. The FCC recognized, however, that
8 competing carriers often self-provision dedicated transport facilities or obtain
9 them on a wholesale basis from carriers other than the incumbent LEC. The FCC
10 authorized state commissions to determine the specific routes that meet one or
11 both of two objective triggers – which show that CLECs are already providing
12 non-ILEC transport facilities, either to themselves (self-provisioning trigger) or to
13 other carriers (wholesale trigger). If a state commission finds that either trigger is
14 met for a route, the state commission “must make a finding of non-impairment,”
15 and “the incumbent LEC will no longer be required to unbundle that transport
16 along that route[.]” TRO ¶¶ 400, 411; *see also* TRO ¶ 405. In other words, when
17 a transport route meets one or both of the FCC's triggers, the state commission
18 conducting the route-specific review *must* find that the FCC's national finding of
19 impairment has been overcome.

20

21 The first of the FCC triggers looks at whether competing carriers have *self-*
22 *deployed* or *self-provisioned* dark fiber and DS3 capacity transport facilities.
23 Under the self-provisioning trigger, the Commission must find no impairment if
24 *three or more* unaffiliated competing carriers have deployed along a particular
25 route their own dark fiber or DS3 transport facilities. TRO ¶¶ 405-411. The FCC

1 has also determined that the self-provisioning trigger is satisfied if, on a particular
2 route and for dark fiber and DS3 facilities, there are at least two unaffiliated
3 competing carriers using their own interoffice transport facilities, and at least one
4 additional carrier willing to provide transport facilities at wholesale. TRO ¶ 408
5 n.1264. Leased “dark fiber” is considered to be that carrier’s own fiber for
6 purposes of applying the self-provisioning trigger. If the carrier has attached its
7 own electronics to activate the leased dark fiber at a DS3 level, the activated fiber
8 is also considered the carrier’s own. TRO ¶ 408.

9
10 The second FCC trigger looks at whether dark fiber, DS1, and DS3 interoffice
11 transport facilities are available from other carriers on a *wholesale* basis. Under
12 this test, competing carriers are not impaired without access to Verizon’s transport
13 facilities if there are “two or more alternative transport providers, not affiliated
14 with each other or the incumbent LEC, immediately capable and willing to
15 provide transport at a specific capacity of transport on a route.” TRO ¶ 400. Dark
16 fiber that is leased from a carrier other than the incumbent LEC, and then offered
17 on a wholesale basis, is considered to be the buying carrier’s own dark fiber.
18 Similarly, dark fiber obtained as an unbundled network element from Verizon
19 counts as the buying carrier’s own fiber if that carrier attaches its own electronics
20 and offers the activated fiber at wholesale. TRO ¶ 416.

21
22 **Q. WHAT IS A ROUTE?**

23 A. As defined by the FCC, a “route” is any direct *or indirect* connection between two
24 Verizon wire centers or switches. In other words, “a ‘route’ may connect Verizon
25 wire centers or switches that are not directly connected to each other.” TRO ¶ 402

1 n.1246. Thus, under the FCC’s definition of a route, if a pair of Verizon wire
2 centers meets either of the FCC’s two triggers, competing carriers are not entitled
3 to unbundled access to Verizon dedicated interoffice transmission facilities that
4 directly or indirectly connect that pair of wire centers.

5
6 **Q. WHAT DOES THE FCC REQUIRE AS FAR AS OPERATIONAL**
7 **READINESS?**

8 A. To count toward the triggers, the FCC requires the transmission facility to be
9 “operationally ready” to provide transport between Verizon wire centers. This
10 condition is satisfied if a carrier has an operational collocation arrangement and
11 has pulled fiber into that arrangement (generally known as “fiber-based
12 collocation”). The FCC made clear in its *Triennial Review* order that
13 “[c]ollocation may be in a more traditional collocation space or fiber can be
14 terminated on a fiber distribution frame.” TRO ¶ 406 n.1257.

15
16 **Q. PLEASE SUMMARIZE THE FCC’S RULES CONCERNING ITS TWO**
17 **OBJECTIVE TRIGGERS FOR DEDICATED INTEROFFICE**
18 **TRANSPORT?**

19 A. To summarize the FCC’s regulations:

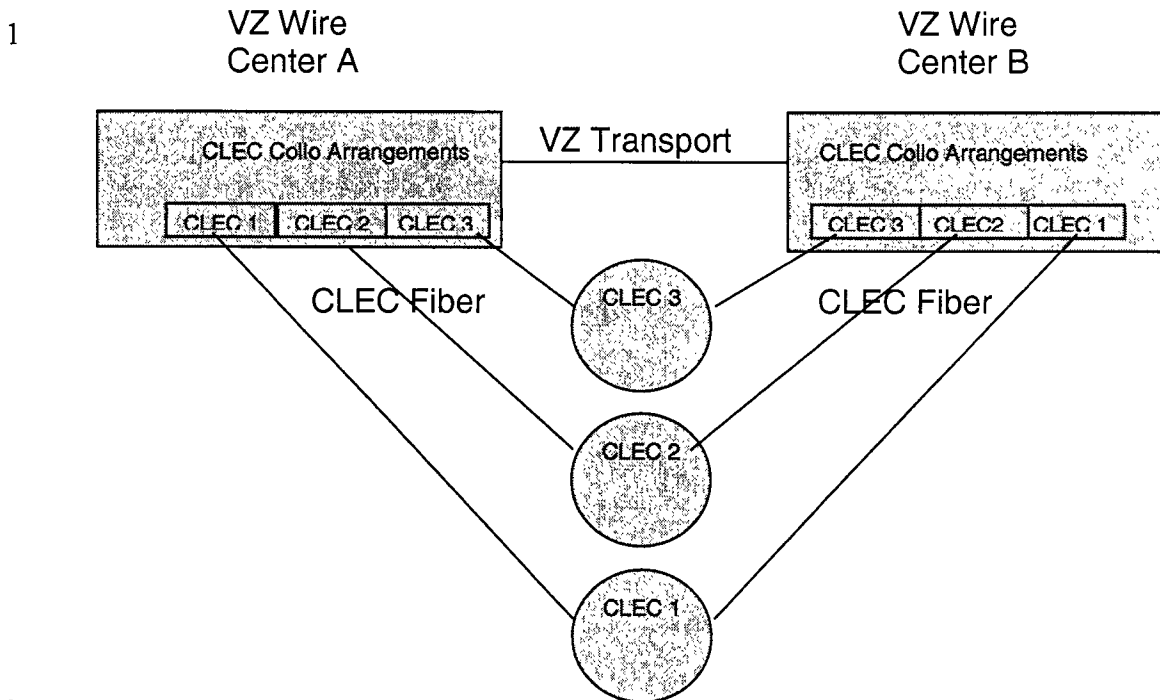
- 20 • The self-provisioning transport trigger requires that a route direct or
21 indirectly connecting a pair of Verizon wire centers have at least the
22 same three competing carriers (or at least the same two competing
23 carriers and a wholesale provider), with operational, fiber-based
24 collocation arrangements, and that these carriers have deployed dark
25 fiber or DS3 level transport facilities.

- 1 • The wholesale transport trigger requires that a route directly or
2 indirectly connecting a pair of Verizon wire centers have at least two
3 wholesale providers, with operational, fiber-based collocation
4 arrangements, offering dark fiber, DS1 or DS3 level transport facilities
5 to other carriers.
- 6 • If either trigger is met, Verizon is no longer required to make available
7 unbundled dedicated transport on any Verizon transmission routes that
8 directly or indirectly connect that pair of Verizon wire centers.

9

10 In the diagram below, we illustrate how local exchange carriers, both incumbent
11 LECs and CLECs, typically connect to Verizon wire centers using dedicated
12 interoffice transport. In this diagram, three CLECs have dedicated interoffice
13 transport on operational fiber between their respective collocation arrangements in
14 Verizon Wire Centers A and B. Each of these CLECs has dark fiber in their
15 transport facilities, and each has channelized their facilities to provide DS3 and
16 DS1 level services. The FCC's self-provisioning trigger is met in this example
17 because CLECs 1, 2, and 3 have deployed their own operational fiber with dark
18 fiber and DS3 level services on the route between Verizon Wire Centers A and B.
19 And if we assume that CLECs 1 and 2 offer their transport facilities to other
20 carriers, then the arrangement also meets the FCC's wholesale trigger for dark
21 fiber, DS1, and DS3.

22
23
24
25



2
3

4

5 **Q. THE FCC'S TWO TRIGGERS APPLY TO DIFFERENT**
 6 **"CAPACITIES" OF TRANSPORT. WHAT DETERMINES THE**
 7 **CAPACITY OR CAPACITIES AT WHICH FIBER TRANSPORT**
 8 **FACILITIES OPERATE?**

9 **A.** The capacity of fiber optic cable is almost exclusively based on the equipment that
 10 a carrier attaches to activate or "light" the fiber. As the FCC found in its Triennial
 11 Review Order, when carriers deploy new transport facilities, they deploy fiber
 12 optic facilities, and those facilities can operate at a wide range of capacities, from
 13 DS0 to OC192. TRO ¶ 372. Fiber optic cable is also "channelized" – that is,
 14 larger capacity facilities are subdivided into smaller capacity facilities – by
 15 attaching the appropriate electronics at both ends of the fiber cable to provide
 16 these various capacities. For example, lower capacity DS1 and DS3 facilities are
 17 channelized simultaneously within the larger capacity OC12 or OC48 facility.

1 The electronic equipment used to activate these various levels of capacity is
2 widely available.

3

4 **Q. WHAT DOES IT MEAN TO OPERATE A FIBER OPTIC TRANSPORT**
5 **FACILITY AT OCN, DS1, OR DS3 LEVELS OF CAPACITY?**

6 A. OCn transport refers to the technical distinction (*i.e.*, Optical Carrier or “OC”) and
7 the capacity (*i.e.*, “n”) of fiber optic cable. For example, an optical carrier-level 3
8 – or OC3 capacity circuit – is capable of transporting up to three DS3 circuits (an
9 OC3 is approximately 155 Mbps, while three DS3s are 135 Mbps), but terminates
10 on a different type of electronic interface.

11

12 DS1 and DS3 transport likewise refer to the technical distinction (*i.e.*, Digital
13 Signal or “DS”) and capacity. The elemental speed is a DS0, which is a voice
14 grade line with a bandwidth of 64 Kbps. A DS1 capacity circuit contains the
15 equivalent of 24 voice-grade or DS0 channels. A DS3 capacity circuit contains
16 the equivalent of 28 DS1 channels or 672 DS0 channels.

17

18 **Q. THE FCC’S DEDICATED TRANSPORT TRIGGERS ARE**
19 **SEPARATELY APPLIED TO DARK FIBER FACILITIES. WHAT IS**
20 **DARK FIBER?**

21 A. Dark fiber is fiber optic strands of cable that have been deployed, but have not
22 been activated or “lit” through connections to electronics (which would make the
23 fiber capable of carrying communications). *See, e.g.*, TRO ¶¶ 359 n.1097, 381.

24

25

1 **B. Verizon's Evidence Of Routes Meeting The Triggers**

2 **Q. PLEASE DESCRIBE VERIZON'S EVIDENCE OF INTEROFFICE**
3 **TRANSPORT ROUTES IN TAMPA THAT MEET THE FCC'S**
4 **TRANSPORT TRIGGERS?**

5 **A.** Verizon has evidence that 67 pairs of Verizon wire centers -- that is, 67 direct
6 routes -- in the Tampa LATA meet one or both of the FCC's transport triggers.
7 Specifically, there are 29 direct routes meeting the FCC's self-provider trigger,
8 and 67 routes meeting the FCC's wholesale provider trigger.

9
10 Attached to our testimony as Exhibit A is a map presenting the direct transport
11 routes in the Tampa LATA meeting one or both of the FCC's dedicated transport
12 triggers. The direct transport routes (or pairs of Verizon wire centers) are shown
13 as blue lines. Notably, although there are scores of Verizon wire centers in the
14 Tampa LATA, based just on internal and publicly available data, Verizon seeks
15 relief for direct routes that originate or terminate in only 16 wire centers. CLEC
16 responses to the Commission Staff's TRO Data Request could reveal more direct
17 routes that meet the FCC's transport triggers. The blue lines in downtown Tampa
18 and the St. Petersburg area illustrate the many direct routes meeting the FCC's
19 triggers and reflect the vast amount of fiber that carriers other than Verizon have
20 deployed over the last decade. As you would expect, the wire centers with
21 multiple competing carriers with operational, fiber-based collocation
22 arrangements tend to be clustered in these highly populated urban areas, namely,
23 downtown Tampa, the suburban area just northwest of downtown Tampa, St.
24 Petersburg, and Sarasota.

25

1 **Q. PLEASE DESCRIBE VERIZON'S EVIDENCE OF DIRECT**
2 **TRANSPORT ROUTES IN THE TAMPA LATA MEETING THE SELF-**
3 **PROVISIONING TRIGGER?**

4 A. Verizon's evidence shows that there are 29 pairs of Verizon wire centers -- or 29
5 direct routes -- in the Tampa LATA meeting the FCC's *self-provisioning* trigger
6 for dark fiber and DS3 capacity facilities. Each pair of Verizon wire centers has
7 (at least) the same three unaffiliated competing carriers with operational, fiber-
8 based collocation facilities. In fact, in the Tampa LATA, approximately 18 pairs
9 of Verizon wire centers have four or more unaffiliated competing carriers with
10 operational, fiber-based collocation arrangements, and 10 pairs have 5 or more
11 unaffiliated carriers -- well exceeding the FCC's self-provisioning trigger.

12
13 Verizon's evidence on the direct transport routes in the Tampa LATA meeting the
14 FCC's self-deployment trigger is presented in Exhibit B. The proprietary version
15 of Exhibit B identifies the competing carriers with operational, fiber-based
16 collocation arrangements in the Verizon wire centers. CLEC names are removed
17 from the public version of Exhibit B.

18
19 The first Verizon wire center in the pair of wire centers -- Beach Park
20 (BHPKFLXA) -- is shown in the first two columns of Exhibit B (which are
21 labeled "Wire Center 1" and "Wire Center 1 Name"). The third and fourth
22 columns show that 6 other Verizon wire centers in the Tampa LATA -- Clearwater
23 (CLWRFLXA), Sweetwater (SWTHFLXA), Tampa Tandem (TAMPFLXA),
24 Tampa East (TAMPFLXE), Tampa Main (TAMPFLXX), and Tampa Westside
25 (WSSDFLXA) -- have at least three CLECs in common with the Verizon Beach

1 Park wire center.

2

3 The next pair of Verizon wire centers identified in Exhibit B is Clearwater
4 (CLWRFLXA) and Countryside (CNSDFLXA). In addition to Countryside, the
5 Verizon Clearwater wire center has at least three competing carriers in common
6 with five other Verizon wire centers: Pinellas (PNLSFLXA), St. Petersburg Main
7 (SPBGFLXA), Sweetwater (SWTHFLXA), Tampa East (TAMPFLXE), and
8 Tampa Westside (WSSDFLXA).

9

10 **Q. PLEASE DESCRIBE VERIZON'S EVIDENCE OF DIRECT**
11 **TRANSPORT ROUTES MEETING THE FCC'S WHOLESALE**
12 **PROVIDER TRIGGER?**

13 A. In the Tampa LATA, 67 pairs of Verizon wire centers meet the FCC's *wholesale*
14 *provider* trigger for dark fiber, and DS1 and DS3 capacity facilities. Each pair of
15 Verizon wire centers has (at least) the same two or more carriers that offer
16 transport services to other carriers, i.e., at wholesale. Approximately 24 pairs of
17 Verizon wire centers have three or more unaffiliated wholesale providers of
18 transport services, and 15 pairs of Verizon wire centers have 4 or more
19 unaffiliated wholesale providers of transport services.

20

21 The evidence Verizon has developed from internal and public sources on the
22 direct transport routes meeting the FCC's wholesale provider trigger is shown,
23 by Verizon wire center and wholesale provider, in Exhibit C. For example,
24 Exhibit C shows that the Verizon Bayou wire center (BAYUFLXA) has the
25 same two wholesale providers in common with the Clearwater, Countryside,

1 Pinellas, St. Petersburg Main, and Sarasota Main wire centers (respectively,
2 CLWRFLXA, CNSDFLXA, PNLSFLXA, SPBGFLXA, and SRSTFLXA).

3
4 The vast majority of competing carriers that have deployed fiber transport
5 facilities for their own use have indicated in their website materials and other
6 public statements that they will lease those facilities to other carriers. For this
7 reason, based on the criteria that Verizon used to identify which carriers offer
8 transport facilities at wholesale (described below), most pairs of Verizon wire
9 centers that meet the self-deployment trigger also meet the wholesale provider
10 trigger.

11
12 Exhibit D depicts the pairs of Verizon wire centers that meet either of the FCC's
13 two transport triggers.

14
15 Some companies have deployed fiber transport facilities primarily, if not
16 exclusively, for use by other carriers. In the Tampa LATA, these companies
17 include FPL FiberNet and Progress Telecom. This explains why there are 38
18 pairs of Verizon wire centers that meet the FCC's wholesale provider trigger, but
19 not the self-provisioning trigger.

20
21 **Q. ARE THE DEDICATED TRANSPORT FACILITIES THAT VERIZON**
22 **HAS IDENTIFIED AS MEETING THE FCC'S TRIGGERS**
23 **OPERATIONAL, AND DO THEY CONTAIN FIBER?**

24 A. Yes. To count toward either of the FCC's triggers, the CLEC transport
25 facility must be "operationally ready to provide transport into or out of" the

1 Verizon wire centers, *i.e.*, the carrier's collocation facility must be provisioned
2 and powered, and its fiber must have been pulled into the collocation arrangement.
3 TRO ¶ 406 nn.1256, 1257. We are confident that the transport facilities that
4 Verizon has identified as meeting one or both of the FCC's triggers both meet the
5 FCC's definition of "operationally ready" and use fiber optics. We have reached
6 this conclusion because, last summer, Verizon conducted visual inspections of *all*
7 collocation arrangements included in this triggers case. Inspectors checked each
8 collocation facility in those Verizon wire centers to verify that there is powered
9 equipment in place (*i.e.*, it is operational), and that the collocating carrier had non-
10 Verizon fiber optic cable that both terminated at its collocation facility and left the
11 wire center. Verizon adopted rigorous controls to ensure the reliability of these
12 data, including supervision by the director in charge of provisioning collocation
13 throughout Verizon, written procedures for each step of the visual inspection
14 process, standard forms that were filled out by each inspector, signed statements
15 by the inspectors verifying the accuracy and reliability of the information provided
16 and the inspector's compliance with the written procedures, and signed statements
17 by each inspector's supervisor confirming that the inspector followed the
18 appropriate procedures. A collocation arrangement is included in Verizon's
19 triggers case *only* if, through this rigorous process of visual inspection and
20 verification, it was found to be operational and to have non-Verizon fiber.

21
22 Verizon's approach in this initial testimony has been conservative. Of the 90
23 Verizon wire centers in Florida, Verizon visually inspected 29 wire centers (or
24 32%) and seeks relief from this Commission for routes that originate and
25 terminate in an even lower percentage of Verizon wire centers. Put differently,

1 there are *over 4000 possible intraLATA direct transport routes* in Florida, but
2 Verizon is asking the Commission for relief for only *67 direct routes* or pairs of
3 Verizon wire centers (less than 2%).
4

5 **Q. IF A CARRIER HAS OPERATIONAL FIBER IN TWO VERIZON**
6 **WIRE CENTERS IN THE TAMPA LATA, IS IT REASONABLE FOR**
7 **THE COMMISSION TO ASSUME THAT THE CARRIER HAS A**
8 **TRANSPORT ROUTE DIRECTLY OR INDIRECTLY CONNECTING**
9 **THOSE VERIZON WIRE CENTERS?**

10 A. Yes. When carriers in Verizon's territories deploy their own fiber transport
11 facilities, they typically deploy fiber optic rings that connect to their points-of-
12 presence (or "POPs") in the LATA and various customer premises, in addition to
13 connecting to Verizon's wire centers. Therefore, if the same carrier has fiber-
14 based facilities in two Verizon wire centers in a LATA, it is very reasonable to
15 assume that those fiber facilities are part of a CLEC-operated ring and that traffic
16 can be directly or indirectly routed from one Verizon wire center to the other. It is
17 also reasonable to assume that these CLEC-operated fiber rings connect to the
18 CLEC's POP, and that traffic can flow to and from all parts of the carrier's
19 network through the POP.
20

21 Given that it is widely recognized that CLECs that deploy their own fiber tend to
22 build fiber rings, the burden is now properly put on competing carriers if they
23 wish to attempt to show that a specific route cannot in fact be connected within
24 their network. Absent such particularized, route-specific evidence, however, the
25 Commission should rely on Verizon's evidence that these carriers' networks

1 connect together the transport facilities we have shown exist at each end of each
2 identified route.

3

4 **Q. DO YOU BELIEVE THAT THESE FIBER TRANSPORT FACILITIES**
5 **DEPLOYED BY OTHER CARRIERS ARE USED FOR DS1 AND DS3**
6 **TRANSPORT?**

7 A. Yes. In identifying the routes meeting the FCC's triggers, Verizon made the
8 reasonable assumption that when competing carriers deploy fiber and attach OCn
9 electronics (*e.g.*, OC48 multiplexers), they then subdivide -- *i.e.*, channelize -- the
10 OCn system into the lower transport levels required by their customers, including
11 DS3s and DS1s. There is no doubt that fiber transport facilities are *capable* of
12 operating at various levels of capacity, as evidenced by the carriers' own
13 statements on their company websites. The capacity of the fiber is almost entirely
14 a function of the electronics that a carrier attaches, not something inherent in the
15 fiber itself. Once the fiber is deployed, it is operated at a DS1, DS3, OC48 or
16 higher level – or at all of these levels simultaneously – simply by changing the
17 electronics. It is also beyond dispute that the electronics used to channelize the
18 OCn system to DS1 and DS3 transport levels are commonly available. For
19 example, Level 3 describes its (3)Hub service for allowing customers to activate
20 and control circuits as follows:

21 “For example, a single OC-48 (3) Hub facility might consist of one
22 OC-3 circuit on Tuesday—then get upgraded by the customer to
23 six OC-3s and two DS-3s the following Wednesday.” [Exhibit E.
24 4: www.level3.com/2234.html]

25

1 Verizon's assumption that competing carriers who deploy fiber optics generally
2 build OCn level transport facilities, capable of channelization to DS1 or DS3, is
3 also consistent with standard industry practices. Few if any carriers deploy
4 transport facilities to accommodate *only* a DS1 or *only* a DS3. TRO ¶¶ 386, 391.
5 To the contrary, as the FCC found in its *Triennial Review Order*, carriers
6 deploying fiber transport facilities almost always build at an OCn speed. TRO ¶
7 382 ("The record indicates that when competing carriers self-deploy transport
8 facilities, they often deploy fiber optic facilities that are activated at OCn levels.").
9 AT&T reports that it, along with "most carriers, including incumbent LECs,"
10 TRO ¶ 372 n.1144, generally constructs its interoffice transport networks at an
11 OC48 capacity. Verizon's interoffice transport facilities likewise are generally
12 built at an OC48 capacity.

13
14 These CLEC-deployed OCn facilities are then subdivided or channelized to a DS1
15 or DS3 level because these are the levels at which transport is typically requested
16 by end user customers. There is considerable public evidence from competing
17 carriers' websites that they deploy DS3 and DS1 circuits over their OC transport
18 facilities. This evidence is appended to this testimony as Exhibit E, and separately
19 numbered within that exhibit, as follows.

20 • AT&T: Exhibit E.1

21 AT&T offers private line services with bandwidth options including
22 "Single Channel, Fractional T1, T1 and High-Speed Services including
23 Fractional T3, T3, Reserve T3, SONET OC3 and OC12, and OC48 and
24 OC192 Wavelengths." [www.business.att.com]

25 • FPL FiberNet: Exhibit E.2

1 FPL FiberNet provides “wholesale fiber optic service with bandwidth
2 capacity from DS-3 to OC-192 for long distance companies, CLECs,
3 BLECs, ISPs, ASPs, and other communications related businesses within
4 the major metropolitan areas of Florida.” [www.fplfibernet.com]

5 • KMC Telecom: Exhibit E.3

6 KMC Telecom offers “DS-1 to OC-n access hubs”.
7 [www.kmctelecom.com]

8 • Exhibit E.4: Level 3

9 Level 3 provides (3)Hub facilities and Private Line Metro service at
10 speeds from DS-3 to OC-48. The individual circuits within the (3)Hub
11 facility are available from DS-1 through OC-48, and E-1 to STM-16
12 bandwidths.” [www.level3.com]

13 • Progress Telecom: Exhibit E.5

14 Progress Telecom is a wholesale provider offering private line services
15 ranging from E-1, DS-3, OC-3 through OC-192, STM-1 through STM-64.
16 [www.progresstelecom.com]

17 • SBC Telecom: Exhibit E.6

18 SBC Telecom’s “Private Line Service offers several transport options with
19 bandwidth ranging from 1.5Mbps (DS1) to 622 Mbps (OC12).”
20 [www.sbctelecom.com]

21 • TelCove: Exhibit E.7

22 TelCove (Adelphia Business Solutions) advertises transport at a full range
23 of capacities, from DS1 to OC48. [www.telcove.com]

24 • Time Warner: Exhibit E.8

25 Time Warner claims to be “the leading provider of metro-area broadband

1 optical networks and services to businesses” and offers “dedicated high
 2 capacity services (DS1/DS3), digital trunks, and ISDN PRI.”
 3 [www.twtelecom.com]

- 4 • MCI WorldCom: Exhibit E.9

5 MCI claims to have “the most scalable IP network available,” and offers
 6 end users “speeds from dial to OCn48.” [http://global.mci.com]

- 7 • XO: Exhibit E.10

8 XO offers carrier private line services at bandwidth from DS1 (1.5 Mbps)
 9 to DS3 (45 Mbps)to OC-n.. [www.xo.com]

- 10 • Xspedius: Exhibit E.11

11 Xspedius provides special access, ISDN-PRI and collocation services.
 12 [www.xspedius.com]

13

14 The assumptions underlying Verizon’s self-deployment trigger case are entirely
 15 consistent with the way transport facilities commonly are constructed and
 16 operated. The Commission therefore should find that self-provisioned fiber optic
 17 transport facilities carry individual DS3 circuits unless a carrier shows, for a
 18 particular route, that it is not carrying DS3 circuits over its fiber facility.

19

20 **Q. DO THESE FIBER TRANSPORT FACILITIES ALSO CONTAIN DARK**
 21 **FIBER?**

22 **A.** Yes. It is virtually certain that self-provisioned transport facilities have dark fiber.
 23 Dark fiber is simply fiber optic cable “that has not been activated through
 24 connections to optronics that light it, and thereby render it capable of carrying
 25 communications.” TRO ¶ 381. It is a truism, therefore, that all fiber transport

1 facilities, regardless of the capacities at which they now operate, once consisted
2 entirely of dark fiber. Put differently, evidence of “lit” fiber automatically is
3 evidence that a carrier has self-provisioned dark fiber.

4
5 Additionally, as a matter of basic network engineering and sound economics, the
6 vast majority of self-provisioned fiber transport facilities will have spare fibers. It
7 is simply inconceivable that a carrier would incur the “large fixed and sunk costs
8 [] required to self-provision fiber transport facilities,” including the costs of
9 obtaining rights of way, digging up the streets and attaching cable to poles, and
10 deploying the fiber, without leaving even a single strand of dark fiber. Fiber
11 transport facilities are always installed with extra fiber to meet projected demand
12 growth. Furthermore, fiber cables are commonly manufactured and deployed in
13 increments of 12 fiber strands (*i.e.*, 12, 24, 48, etc., fibers per cable), but OCn
14 electronics (*e.g.*, fiber multiplexers) generally require only 4 fibers to activate
15 (“light”) the fiber to provide dedicated transport.

16
17 Here again, Verizon has come forward with evidence showing that these carriers’
18 fiber transport facilities almost certainly also include dark fiber as shown in
19 Exhibits E.1 through E.11. For example:

- 20 • FPL FiberNet advertises its product offering to include “metro **dark**
21 **fiber**, inter- and intra-city transport, DS3 and optical hubs, metro
22 wavelengths, co-location services and gigabit Ethernet.” (emphasis
23 added) [Exhibit E.2]
- 24 • Level 3 advertises its services to include “wholesale internet access
25 services, managed modem dial-up services, broadband transport, IP-

1 centric voice services, private packet-switched services, DSL
2 aggregation, collocation, metropolitan and intercity **dark fiber**, [and]
3 managed services.” (emphasis added) [Exhibit E.4]

- 4 • Xspedius provides **dark fiber** and inventory conduit in six core Tier I
5 markets across the United States, has access to assets in over 30
6 additional Tier II and III cities, and long haul in Florida and Texas.
7 [Exhibit E.11]

8 The burden is now on competing carriers to show that a specific route in fact has
9 no dark fiber on it. Absent such particularized, route-specific evidence, however,
10 the Commission should rely on Verizon’s evidence that these carriers’ fiber
11 networks also include available dark fiber on each identified route.

12

13 **Q. HOW DID VERIZON IDENTIFY CARRIERS OFFERING DEDICATED**
14 **TRANSPORT FACILITIES ON A WHOLESALE BASIS, AND THE**
15 **CAPACITIES AT WHICH THOSE FACILITIES ARE OFFERED?**

16 A. There is considerable public evidence that allows Verizon to identify carriers that
17 are likely to offer dedicated transport at to other carriers.

- 18 • If a carrier holds itself out as a wholesale provider on its website -- and
19 does not limit its representation to particular routes -- Verizon identified
20 the carrier as a wholesale provider.

- 21 • Carriers that supply transport facilities to Universal Access, Inc. are
22 wholesale providers, and Verizon has identified them as such.
23 Universal Access is a broker of transport services, and is a certificated
24 carrier in all of Verizon’s territories, including Florida. *All* carriers that
25 sell transport facilities to Universal Access are selling to another carrier,

1 and, therefore, are appropriately considered wholesale providers. In
2 addition, Universal Access indicates in its web site materials that many
3 of its customers are carriers, further supporting Verizon's conclusion
4 that Universal Access' suppliers are wholesale providers. [Exhibit E.12]

- 5 • Verizon identified a carrier as a wholesale provider if it is listed in the
6 New Paradigm CLEC Report 2003 as offering dedicated access
7 transport, unless the offering is limited to particular routes, and unless
8 the carrier indicates that it will not provide its dedicated access transport
9 to other carriers. The New Paradigm Resources Group ("NPRG"),
10 which prepared the New Paradigm CLEC Report, provides, among
11 other things, business planning advice to CLECs. NPRG reports that it
12 gets information from the CLECs themselves, and provides these
13 carriers with the opportunity to provide direct input on coverage.

14
15 The vast majority of the carriers that Verizon has identified as offering wholesale
16 meet more than one of these criteria. For example, MCI WorldCom is identified
17 in the *New Paradigm Report* as offering dedicated access transport (and there is
18 no indication that MCI WorldCom will not sell to another carrier), and also
19 advertises its wholesale services on its website. In addition, a number of the
20 carriers that Verizon has identified as wholesale providers, such as Telecove, have
21 filed competitive access tariffs in Florida.

22
23 Verizon has offered the Commission evidence showing that these carriers hold
24 themselves out as offering transport facilities on a wholesale basis. The burden is
25 now on competing carriers to show that a specific route is not available at

1 wholesale. Absent such particularized, route-specific evidence, however, the
2 Commission should rely on Verizon's evidence of a carrier's general willingness
3 to offer its transport facilities on a wholesale basis and treat all such carrier's
4 transport facilities as available for leasing at wholesale.

5 Finally, Verizon assumes that a carrier that has deployed fiber transport facilities
6 and is willing to provide transport over those facilities to other carriers is
7 providing (or is willing to provide) various levels of capacity at wholesale,
8 including dark fiber, DS1, and DS3. This assumption is supported by substantial
9 public evidence, which is appended to this testimony as Exhibit E and separately
10 numbered within that Exhibit. For example:

- 11 • FPL FiberNet offers its wholesale customers metro dark fiber, inter- and
12 intra-city transport, DS3 to OC192 circuits, optical hubs, metro
13 wavelengths and collocation services in most metropolitan cities
14 throughout Florida, including Tampa.
- 15 • Level 3 offers dark fiber and (3)Hub facilities at speeds from DS-3 to
16 OC-48. The individual circuits within the (3)Hub facility are available
17 from DS-1 through OC-48, and E-1 to STM-16 bandwidths.
18 (www.level3.com/2234.html)
- 19 • XO offers transport with high capacity bandwidth from DS-1 (1.5
20 Mbps) to DS-3 (45 Mbps) to OC-n.

21 Therefore, unless there is specific evidence that a carrier has refused to sell to
22 other carriers specific capacities and dark fiber on a particular transport route, the
23 Commission should find that a wholesale provider will sell DS1 and DS3
24 transport over its fiber facilities, as well as dark fiber.

25

1 **C. Conclusion Regarding Dedicated Transport Triggers**

2
3 **Q. PLEASE SUMMARIZE THE CONCLUSIONS YOU DRAW FROM**
4 **YOUR TESTIMONY ON DEDICATED TRANSPORT?**

5 A. Verizon has presented compelling evidence that 67 direct routes (or pairs of
6 Verizon wire centers) in the Tampa LATA one or both the FCC's two objective
7 triggers for dedicated transport. Because Verizon has taken a very conservative
8 approach in this proceeding by limiting its presentation to only Verizon wire
9 centers that it visually inspected to confirm the existence of fiber-based
10 collocation, there may be many more transport routes that meet the FCC's
11 triggers. Verizon takes no position on those routes at this time. Verizon may
12 seek relief on other routes based upon information disclosed through the
13 discovery process.

14
15 **III. VERIZON'S HIGH CAPACITY LOOPS TRIGGERS CASE**

16 **Q. IS VERIZON PRESENTING EVIDENCE OF THE HIGH CAPACITY**
17 **LOOPS DEPLOYED BY OTHER CARRIERS THAT MEET THE FCC'S**
18 **TWO TRIGGERS?**

19 A. Not at this time. Verizon does not know the specific buildings to which other
20 carriers have deployed high capacity loops; this information is in the hands of
21 those other carriers. Verizon has requested copies of the responses filed by
22 CLECs and Alternative Access Vendors to the Staff's 2003 TRO Data Request
23 and has also submitted its own discovery to carriers. The discovery responses that
24 Verizon has received to date indicate that CLECs have deployed high capacity
25 loops in Florida. Verizon may submit supplemental evidence on buildings

1 meeting the high capacity loop triggers once it has received the necessary
2 information from other carriers through the discovery process.

3

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 A. Yes.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 **I. INTRODUCTION AND OVERVIEW**

2 **Q. PLEASE IDENTIFY THE MEMBERS OF THIS PANEL.**

3 A. The members of this panel are Orville D. Fulp and John White.

4

5 **Q. IS THIS THE SAME VERIZON PANEL THAT SUBMITTED TESTIMONY**
6 **ON DECEMBER 22, 2003?**

7 A. Yes.

8

9 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY.**

10 A. The purpose of the supplemental testimony is to show that, under the FCC's
11 objective triggers, Verizon is not required to provide unbundled access to dedicated
12 transport along certain routes and high capacity loops to certain customer locations.
13 Pursuant to Commissioner Davidson's December 19, 2003 letter, this testimony
14 relies on additional evidence provided by competitive carriers in response to the
15 Commission Staff's discovery requests to fulfill its purpose.

16

17 **II. DEDICATED TRANSPORT**

18 **Q. PLEASE GIVE A BRIEF OVERVIEW OF THE EVIDENCE USED TO**
19 **SHOW THAT CERTAIN DEDICATED TRANSPORT ROUTES IN**
20 **FLORIDA MEET ONE OR BOTH OF THE FCC'S TRIGGERS.**

21 A. Verizon has combined the CLECs' discovery responses, where appropriate, with the
22 information used in its initial testimony, which was drawn largely from public and
23 internal sources. In a number of cases, Verizon has also adjusted the information it
24 used in its initial testimony to reflect the CLECs' responses. This combined and
25 adjusted evidence is presented in Exhibits F.1 through F.4. Exhibit F.1 presents the

1 direct transport routes meeting the FCC's self-provisioning trigger for dark fiber;
2 Exhibit F.2 presents the direct transport routes meeting the self-provisioning trigger
3 for DS-3 capacity; Exhibit F.3 presents the direct transport routes meeting the
4 wholesale trigger for DS1s and DS3s; and Exhibit F.4 presents the direct transport
5 routes meeting the wholesale trigger for dark fiber. The proprietary versions of
6 Exhibits F.1 through F.4 identify the competitive carriers with operational, fiber-based
7 collocation arrangements in the Verizon wire centers. Competitive carriers' names
8 are removed from the public versions of these exhibits.

9
10 **Q. PLEASE DESCRIBE THE DIRECT TRANSPORT ROUTES MEETING THE**
11 **FCC'S TRIGGERS.**

12 A. When the CLECs' discovery responses are combined with Verizon's information,
13 there are (1) 25 direct transport routes (or pairs of Verizon wire centers) meeting the
14 FCC's self-provisioning trigger for dark fiber (Exhibit F.1); (2) 25 direct routes
15 meeting the FCC's self-provisioning trigger for DS3-level capacity (Exhibit F.2); (3)
16 67 direct routes meeting the FCC's wholesale trigger for DS1 and DS3 capacities
17 (Exhibit F.3); and (4) 67 direct routes meeting the FCC's wholesale trigger for dark
18 fiber (Exhibit F.4).

19
20 When combined with Verizon's internal information, the CLEC responses to the
21 Commission Staff's 2003 TRO discovery requests expand the number of dedicated
22 transport routes meeting one or both of the FCC's triggers.

23
24
25

1 Q. DID ALL CLECS RESPOND FULLY AND APPROPRIATELY TO THE
2 STAFF'S DISCOVERY REQUESTS CONCERNING DEDICATED
3 TRANSPORT?

4 A. No. First, not every competitive carrier identified by Verizon as having
5 operational, fiber-based collocation arrangements at a Verizon wire center has
6 responded to the Staff's transport discovery requests as of the date of this filing.
7 Those carriers include KMC, Xspedius and Progress. Of the CLECs who did
8 respond to Staff's discovery, some have failed to provide their confidential
9 responses to Verizon.¹

10

11

12 Second, Verizon has identified numerous problems and inadequacies with the
13 responses it received from many of the competitive carriers. For example, a few
14 competitive carriers claim to be unable to respond to discovery requests that are
15 essential to the application of the FCC's triggers, and still other carriers did not
16 respond fully and adequately to certain of the Staff's requests. Verizon will
17 continue its efforts to obtain complete, detailed information from all carriers in
18 Florida, including identification of additional direct routes. Verizon reserves the
19 right to combine any new data that it receives from these carriers through its efforts
20 with the information presented here and to submit further supplemental testimony
21 to the Commission.

22

23

¹ Time Warner did not provide Verizon its confidential response to Staff's TRO discovery request until the afternoon of Jan. 8, 2004, too late for inclusion in this supplemental filing.

1 **Q. FOR THOSE COMPETITIVE CARRIERS THAT DID RESPOND TO THE**
2 **STAFF'S DISCOVERY REQUESTS ON DEDICATED TRANSPORT,**
3 **WHAT DO THE DATA SHOW?**

4 A. Although not all competitive carriers have responded to the Commission's data
5 requests as of this filing date and many did not respond fully or adequately, the
6 responses that we did receive help to provide a more complete assessment of the
7 dedicated transport routes in Florida that meet one or both of the FCC's triggers.
8 The competitive carriers' discovery responses confirm a key assumption in Verizon's
9 initial triggers case: that competitive carriers build OCn-level transport facilities
10 capable of channelization to DS1 or DS3 capacity services. In fact, the overwhelming
11 majority of CLECs responding to the Commission's discovery requests acknowledged
12 that, where they deployed their own transport facilities, they deployed fiber optic
13 cable and then (unless the fiber remained dark) attached OCn optronics (*e.g.*, OC48
14 multiplexers) and other electronic multiplexing equipment, to subdivide -- *i.e.*,
15 channelize -- the OCn system into the transport levels, such as DS1s and DS3s,
16 required by their customers.

17

18 **III. HIGH CAPACITY LOOPS**

19 **Q. WHAT SUPPLEMENTAL EVIDENCE DOES VERIZON HAVE FOR THE**
20 **ANALYSIS OF HIGH CAPACITY LOOP FACILITIES?**

21 A. In its *Triennial Review Order* ("TRO"), the FCC established that a state commission
22 must find that competing carriers are not impaired without access to Verizon's
23 unbundled dark fiber, DS1, and DS3 loop facilities (or hi-cap loops) at specific
24 customer locations if Verizon meets one of two objective "triggers." In its December
25 22, 2003 testimony, Verizon indicated that it was unable to identify customer

1 locations meeting the hi-cap loop triggers because information on CLEC loop
2 deployment was in the hands of the CLECs. Since that time, Verizon has reviewed
3 responses to the Commission's hi-cap loop discovery questions, and can identify
4 customer locations in Florida that satisfy the hi-cap loop triggers.

5

6 **Q. PLEASE DESCRIBE THE FCC'S OBJECTIVE HI-CAP LOOP TRIGGERS.**

7 A. In the *Triennial Review Order*, the FCC found that requesting carriers are impaired on
8 a nationwide basis without access to unbundled dark fiber, DS1, and DS3 hi-cap loop
9 facilities serving the enterprise market. *Triennial Review Order* ¶¶ 311-14, 320-27.
10 The FCC recognized, however, that competing carriers often self-provision hi-cap
11 facilities or obtain them on a wholesale basis from carriers other than the ILEC. *Id.*
12 Consequently, the FCC authorized state commissions to determine the specific
13 customer locations that meet one of two objective triggers that show CLECs are
14 already providing non-ILEC hi-cap loop facilities, either to themselves (self-
15 provisioning trigger) or to other carriers (wholesale trigger). If a state commission
16 finds that either trigger is met for a specific loop capacity at a specific customer
17 location, the state commission must make a finding of non-impairment, and the ILEC
18 will no longer be required to unbundle that loop capacity to that customer location.
19 *Triennial Review Order* ¶ 328-329; *see also* 47 C.F.R. §51.319(a)(4)-(6). In other
20 words, when a customer location meets one of the FCC's triggers, the state
21 commission conducting the customer location-specific review *must* find that the
22 FCC's national finding of impairment has been overcome for the relevant loop
23 capacity at that location.

24

25 The first of the FCC triggers looks at whether competing carriers have *self-deployed*

1 or *self-provisioned* dark fiber or DS3 capacity loop facilities. Under the self-
2 provisioning trigger for dark fiber, the Commission must find no impairment if *two or*
3 *more* unaffiliated competing carriers have deployed to a particular customer location
4 their own dark fiber facilities. 47 C.F.R. § 51.319(a)(6)(i). Dark Fiber obtained under
5 a long-term indefeasible right of use is considered to be that carrier's own fiber for
6 purpose of applying the self-provisioning trigger. *Id.* ; *see also Triennial Review*
7 *Order* ¶ 333 n. 981. Under the self-provisioning trigger for DS3 loop facilities, the
8 Department must find no impairment if *two or more* unaffiliated competing carriers
9 have (i) deployed to a particular customer location their own dark fiber facilities and
10 are serving customers via those facilities at that location, or (ii) deployed DS3
11 facilities by attaching its own optronics to activate dark fiber facilities obtained under
12 a long-term indefeasible right of use and is serving customers via those facilities at
13 that location. *Triennial Review Order* ¶¶ 332-334; 47 C.F.R. § 51.319(a)(5)(i)(A).

14
15
16 The second FCC trigger looks at whether DS1 or DS3 loop facilities are available
17 from other carriers on a *wholesale* basis. Under this test, competing carriers are not
18 impaired without access to Verizon's DS1 or DS3 facilities if there are *two* or more
19 competing providers (including intermodal providers of service comparable in quality
20 to the ILEC) not affiliated with each other or the ILEC each of which (i) has deployed
21 its own DS1 or DS3 facilities; (ii) offers a DS1 or DS3 loop over its own facilities on
22 a widely available wholesale basis to other carriers desiring to serve customers at that
23 location; and (iii) has access to the entire customer location (including each individual
24 unit within that location). 47 C.F.R. § 51.319(a)(4)(ii), 47 C.F.R. §
25 51.319(a)(5)(i)(B). Dark fiber obtained on an unbundled, leased, or purchased basis

1 from another carrier counts as the buying carrier's own DS1 or DS3 loop facility if
2 that carrier attaches its own electronics and offers the activated fiber at wholesale. *Id.*

3

4 **Q. WHAT IS A CUSTOMER LOCATION?**

5 A. The FCC distinguishes between "customer locations" and individual units within that
6 location. *See* 47 C.F.R. §§ 51.319(a)(4)(ii), (5)(i)(B). This distinction indicates that a
7 customer location is a building, not an individual unit or suite in a multi-unit building.
8 Based on their discovery responses, the CLECs in Florida agree. The Commission's
9 discovery specifically asked the CLECs to identify the "customer locations" to which
10 they have deployed loop facilities, and in response, the CLECs provided the addresses
11 of specific buildings.

12

13 **Q. THE FCC'S TWO TRIGGERS APPLY TO DIFFERENT "CAPACITIES"**
14 **OF LOOPS. WHAT DETERMINES THE CAPACITY AT WHICH FIBER**
15 **LOOP FACILITIES OPERATE?**

16 A. The capacity of a fiber optic loop is almost exclusively based on the equipment that a
17 carrier attaches to activate or "light" the fiber. *See Triennial Review Order* ¶311. As
18 the FCC found in its *Triennial Review Order*, carriers that self-deploy fiber
19 predominantly do so at the OCn level. *Id.* ¶ 298. Indeed, the underlying capacity of a
20 strand of dark fiber is comparable in total capacity to an OCn loop, which can operate
21 at a wide range of capacities. *See id.* ¶ 311. Many CLECs that serve customers over
22 their own DS1 loops have previously deployed an OCn level facility that they are
23 using to serve other customers at lower loop capacity levels. *Id.* n. 859. Fiber optic
24 cable is also "channelized" (*i.e.*, larger capacity facilities are subdivided into smaller
25 capacity facilities) by attaching the appropriate electronics at both ends of the fiber

1 cable to provide these various capacities. For example, lower capacity DS1 and DS3
 2 facilities are channelized simultaneously within the larger capacity OC12 or OC48
 3 facility. The electronic equipment used to activate these various levels of capacity is
 4 widely available.

5
 6 **Q. WHAT DOES IT MEAN TO OPERATE A FIBER OPTIC LOOP FACILITY
 7 AT OCN, DS1, OR DS3 LEVELS OF CAPACITY?**

8 A. As with transport, OCn loops refer to the technical distinction (*i.e.*, Optical Carrier or
 9 “OC”) and the capacity (*i.e.*, “n”) of fiber optic cable. For example, an optical carrier-
 10 level 3 — or OC3, capacity circuit contains the equivalent of up to three DS3 circuits
 11 (an OC3 is approximately 155 Mbps, while three DS3s are 135 Mbps), but terminates
 12 on a different type of electronic interface.

13
 14 DS1 and DS3 loops likewise refer to the technical distinction (*i.e.*, Digital Signal or
 15 “DS”) and capacity. The elemental speed is a DS0, which is a voice grade line with a
 16 bandwidth of 64 Kbps. A DS1 capacity circuit contains the equivalent of 24 voice-
 17 grade or DS0 channels. A DS3 capacity circuit contains the equivalent of 28 DS1
 18 channels or 672 DS0 channels.

19
 20 **Q. THE FCC’S LOOP TRIGGERS ARE SEPARATELY APPLIED TO DARK
 21 FIBER FACILITIES. WHAT IS DARK FIBER?**

22 A. Dark fiber is the unused fiber within an existing fiber optic cable that has not yet been
 23 activated through optronics to render it capable of carrying communications services.
 24 *Triennial Review Order* ¶ 311. Dark fiber has virtually unlimited capacity, and it is
 25 the electronics that define the capacity. *Id.* n. 909.

1 **Q. DID ALL OF THE CLECS PROVIDE THE INFORMATION REQUESTED**
2 **IN THE COMMISSION'S HI-CAP LOOP DISCOVERY REQUESTS?**

3 A. No, not all the CLECs served with the Commission Staff's 2003 TRO data request
4 provided the loop information requested. Furthermore, many of the CLECs who did
5 respond provided incomplete or inadequate responses. Confidential copies of the
6 CLEC responses that Verizon was able to obtain as of January 7, 2004 are included as
7 Exhibit G.

8

9 **Q. PLEASE DESCRIBE VERIZON'S EVIDENCE OF CUSTOMER**
10 **LOCATIONS IN FLORIDA THAT MEET THE FCC'S HI-CAP LOOP**
11 **TRIGGERS.**

12 A. Verizon presents evidence that 12 customer locations meet one or both of the FCC's
13 triggers. There are 4 customer locations that meet the DS1 wholesale trigger. With
14 respect to DS3 loops, 5 customer location meets the self-provisioning trigger, and 4
15 meet the wholesale trigger. Finally, there are 12 customer locations meeting the dark
16 fiber self-provisioning trigger. Exhibit F.5 identifies each customer location meeting
17 the triggers. The proprietary version of this attachment identifies the CLECs with
18 loop facilities at each customer location. CLEC names are removed from the public
19 version of Exhibit F.5.

20

21 **Q. DOES VERIZON'S TRIGGER ANALYSIS COVER THE ENTIRE STATE**
22 **OF FLORIDA?**

23 A. No. Verizon limited its analysis only to its service territory, and excluded those cities
24 in which it does not serve any customers.

25

1 **Q. CAN ANY FIBER LOOP FACILITY DEPLOYED BY A CLEC BE USED**
2 **TO PROVIDE A DS1 OR DS3 LOOP?**

3 A. Yes. In identifying the customer locations meeting the FCC's triggers, Verizon made
4 the reasonable assumption that when competing carriers deploy fiber and attach OCn
5 electronics (e.g., OC48 multiplexers), the carriers then subdivide (i.e., channelize) the
6 OCn system into the lower transport levels required by their customers, including
7 DS3s and DS1s. This is consistent with the FCC's finding (discussed above)

8
9 While fiber loop facilities are capable of operating at various levels of capacity, the
10 capacity of the fiber is almost entirely a function of the electronics that a carrier
11 attaches, not something inherent in the fiber itself. Once the fiber is deployed, it is
12 operated at a DS1, DS3, OC48 or higher level — or at all of these levels
13 simultaneously — simply by changing the electronics. The electronics used to
14 channelize the OCn system to DS1 and DS3 transport levels are widely available.

15
16 Verizon's assumption that competing carriers who deploy fiber optics generally build
17 OCn level transport facilities, capable of channelization to DS1 or DS3, is consistent
18 with standard industry practice. Few if any carriers deploy fiber loop facilities to
19 accommodate *only* a DS1 or *only* a DS3. To the contrary, as the FCC found in the
20 *Triennial Review Order*, carriers deploying fiber predominantly do so at the OCn
21 level. *Triennial Review Order* ¶ 289. These OCn facilities are then subdivided or
22 channelized to a DS1 or DS3 level because these are the levels at which service is
23 typically requested by end user customers that use hi-cap facilities.

24

25 The assumptions underlying Verizon's self-deployment trigger case are entirely

1 consistent with the way fiber loop facilities commonly are constructed and operated.
2 The Commission therefore should find that CLECs who have deployed fiber optic
3 loop facilities have the ability to provision DS1 and DS3 circuits — unless a carrier
4 shows, for a particular customer location, that it cannot deploy DS1 or DS3 circuits at
5 that location.

6
7 **Q. DO THESE FIBER LOOP FACILITIES ALSO CONTAIN DARK FIBER?**

8 A. Absent evidence to the contrary, it reasonably can be assumed that all self-provisioned
9 fiber loop facilities have dark fiber. Since dark fiber is simply fiber optic cable “that
10 has not been activated through connections to optronics that light it, and thereby
11 render it capable of carrying communications,” (*Triennial Review Order* ¶ 311), all
12 fiber loop facilities, regardless of the capacities at which they now operate, once
13 consisted entirely of dark fiber. Put differently, evidence of “lit” fiber is also evidence
14 that a carrier has self-provisioned dark fiber.

15
16 Additionally, as a matter of standard industry network engineering design and sound
17 economics, the vast majority of self-provisioned fiber loop facilities will have spare
18 dark fibers. As the FCC recognized, dark fiber exists in a carrier’s network as unused
19 fiber available because that carrier has deployed fiber in the first instance for the
20 express purpose of lighting certain strands of it to serve a particular customer location.
21 *Triennial Review Order* ¶ 312. The FCC explained,

22 When a fiber build decision is made, carriers take advantage
23 of the fact that they are already incurring substantial fixed
24 costs to obtain the rights-of-way, dig up streets, and trench
25 cable, to lay more fiber than they immediately need. Once

1 the significant fiber construction cost is incurred, the record
2 reflects that it is relatively easy and inexpensive to install
3 fiber strands in excess of current demand at that time to
4 maximize the use of conduit and avoid the need to incur
5 duplicate costs to retrench the same location in the future if
6 demand for additional fiber facilities occurs.

7 *Id.*

8

9 Thus, fiber facilities are always installed with extra fiber to meet projected demand
10 growth. Furthermore, fiber cables are commonly manufactured and deployed in
11 increments of 12 fiber strands (i.e., 12, 24, 48, etc., fibers per cable), which means that
12 there are likely to be additional unused fibers available to fill up the standard cable
13 size the carrier deployed. Verizon therefore assumed (and the Commission should
14 find) that CLECs who have deployed fiber optic loop facilities also have dark fiber
15 deployed at that location— unless a carrier shows, for a particular customer location,
16 that it does not have any dark fiber.

17

18 **Q. HOW DID VERIZON IDENTIFY CARRIERS OFFERING LOOP**
19 **FACILITIES ON A WHOLESALE BASIS, AND THE CAPACITIES AT**
20 **WHICH THOSE FACILITIES ARE OFFERED?**

21 A. Verizon primarily relied on carriers to self-identify themselves as wholesale providers
22 in response to the Commission Staff's TRO loop discovery requests. ** ** and
23 ** ** identified themselves as wholesale providers.

24 Verizon also found evidence of CLEC wholesale providers from public sources. As
25 with its transport evidence, Verizon identified carriers that hold themselves out as

1 wholesale providers on their websites. For example:

- 2 • FPL Fibernet provides “wholesale fiber optic service with bandwidth
3 capacity from DS-3 to OC-192 for long distance companies, CLECs,
4 BLECs, ISPs, ASPs and other communications related businesses
5 within the major metropolitan areas of Florida.”²
- 6 • MCI offers DS-1 and DS-3’s at wholesale.³
- 7 • Progress provides “wholesale fiber bandwidth to long distance,
8 international and wireless carriers, Internet service providers (ISPs),
9 competitive local exchange carriers (CLECs), and other strategic
10 customers through its extensive fiber-optic network in the Southeast...”⁴
- 11 • XO offers “Wholesale Dial Up,” which allows CLECs “rapidly expand
12 [their] nationwide dial capacity and increase [their] coverage area,
13 without building or managing [their] own *nationwide* dial network.”⁵

14 If a carrier publicly holds itself out as a wholesale provider of loop facilities or
15 telecommunications services generally, Verizon identified that carrier as a wholesale
16 provider.

17
18 Finally, Verizon assumes that a carrier that has deployed fiber loop facilities and is
19 willing to provide those facilities to other carriers is providing (or is willing to
20 provide) various levels of capacity at wholesale, including dark fiber, DS1, and DS3.

² www.fplfibernet.com (See Joint Direct Testimony of Fulp/White, Exhibit E.2)

³ www.mci.com/telecom_wholesale/index.jsp,
http://global.mci.com/publications/service_guide/products/, and
http://global.mci.com/publications/service_guide/products/products_currently_available/ (included as
Exhibit F.8).

⁴ www.progresstelecom.com/5_389.htm (Attached as Exhibit F.6)

⁵ <http://www.xo.com/products/carrier/wholesaledial/index.html>
(emphasis added) (Attached as Exhibit F.7).

1 Therefore, unless there is specific evidence that a carrier refuses to sell other carriers
2 specific capacities and dark fiber on a particular transport route, the Commission
3 should find that a wholesale provider will sell DS1 and DS3 transport over its fiber
4 facilities, as well as dark fiber.

5
6 Based on the discovery responses and carrier websites, Verizon has identified **
7 ** and ** ** as counting towards the competitive wholesale trigger in at least one
8 building. If these carriers wish to attempt to show that a specific location is not
9 available at wholesale, the burden is now properly put on them to make such a
10 demonstration. Absent such particularized, location-specific evidence, however, the
11 Commission should rely on Verizon's evidence of a carrier's general willingness to
12 offer its loop facilities on a wholesale basis and treat all such carriers' loop facilities as
13 available for leasing at wholesale.

14
15 **Q. HOW DID VERIZON IDENTIFY WHETHER CLECS HAVE ACCESS TO**
16 **AN ENTIRE CUSTOMER LOCATION?**

17 A. The Commission's hi-cap loop discovery requests include a column entitled
18 "Accessible Y/N". Verizon assumes that this column is asking CLECs whether they
19 have access to the entire customer location. Moreover, in its responses to the
20 Commission's discovery requests, ** ** included a column entitled "Can Serve
21 All At Location." Where CLECs did not provide such information, Verizon
22 assumed that they do have access to the entire location. It is reasonable to assume that
23 a carrier with fiber optic facilities into a large commercial building has access to the
24 entire building.

25

1 **Q. HOW DID VERIZON IDENTIFY WHETHER CLECS SERVE END-USER**
2 **CUSTOMERS OVER DS3 FACILITIES THEY HAVE DEPLOYED?**

3 A. The Commission's hi-cap loop discovery specifically asked the CLECs to indicate
4 whether they could "serve all at location." Verizon primarily relied upon CLEC
5 responses to this question.

6

7 **Q. DID VERIZON EXCLUDE ANY OF THE CUSTOMER LOCATIONS**
8 **IDENTIFIED BY CLECS IN RESPONSE TO DISCOVERY FROM ITS**
9 **TRIGGER ANALYSIS?**

10 A. Verizon also assumed that CLECs are not serving customers in buildings that house
11 Verizon central offices and excluded them from its trigger analysis.

12

13 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT**
14 **TESTIMONY?**

15

16 A. Yes.

17

18

19

20

21

22

23

24

25

