

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

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

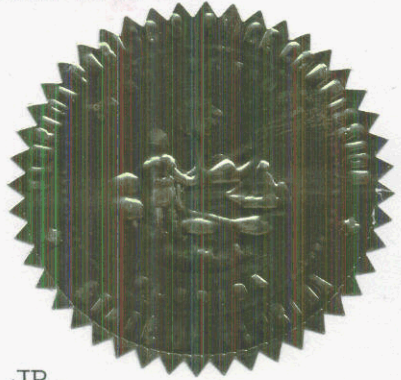
-----  
In the Matter of : DOCKET NO. 990649-TP  
: :  
INVESTIGATION INTO PRICING :  
OF UNBUNDLED NETWORK :  
ELEMENTS. :  
-----

\*\*\*\*\*  
\* \* \* \* \*  
\* ELECTRONIC VERSIONS OF THIS TRANSCRIPT \*  
\* ARE A CONVENIENCE COPY ONLY AND ARE NOT \*  
\* THE OFFICIAL TRANSCRIPT OF THE HEARING \*  
\* AND DO NOT INCLUDE PREFILED TESTIMONY. \*  
\* \* \* \* \*  
\*\*\*\*\*

PHASE TWO

VOLUME 8

Pages 1130 through 1292



PROCEEDINGS: HEARING  
BEFORE: CHAIRMAN J. TERRY DEASON  
COMMISSIONER E. LEON JACOBS, JR.  
COMMISSIONER LILA A. JABER  
DATE: Tuesday, September 19, 2000  
TIME: Commenced at 9:30 a.m.  
PLACE: Betty Easley Conference Center  
Room 148  
4075 Esplanade Way  
Tallahassee, Florida  
REPORTED BY: KORETTA E. STANFORD, RPR  
Official Commission Reporter  
FPSC Bureau of Reporting

APPEARANCES:  
  
(As heretofore noted.)

DOCUMENT NO.  
11925  
9-21-00

1 I N D E X

2 WITNESSES: PAGE NO.

3 D. DAONNE CALDWELL

4 Direct Examination by Mr. Ross 1132

5 Prefiled Direct Testimony

6 Inserted 1136

7 Prefiled Rebuttal Testimony

8 Inserted 1197

9

10

11 EXHIBITS

12 NUMBER: ID ADMTD.

13 93 DDC-1, DDC-3 through DDC-10 1134

14 94 (Confidential) DDC-2 1134

15 95 Cost Model Revisions 1135

16 96 (Confidential) Cost Model  
17 Revisions 1135

18 CERTIFICATE OF REPORTER 1292

19

20

21

22

23

24

25

## P R O C E E D I N G S

(Transcript continues in sequence from Volume 7.)

CHAIRMAN DEASON: And Ms. Caldwell is on the stand; is that correct?

MR. ROSS: That's correct, Mr. Chairman.

CHAIRMAN DEASON: Okay. Please proceed.

D. DAONNE CALDWELL

was called as a witness on behalf of BellSouth Telecommunications, Inc. and, having been duly sworn, testified as follows:

## D I R E C T E X A M I N A T I O N

BY MR. ROSS:

Q Could you please state your full name and business address for the record, please.

A Yes. My name is Doris Daonne Caldwell. My business address is 675, West Peachtree Street, Atlanta, Georgia.

Q By whom are you employed, Ms. Caldwell?

A BellSouth Telecommunications.

Q Ms. Caldwell, did you cause to be filed, in this case, revised direct testimony dated August 18th, 2000, consisting of 7 pages?

A Yes, I did.

Q Do you have any corrections to that revised direct testimony?

FLORIDA PUBLIC SERVICE COMMISSION

1 A I do not.

2 Q Were there also attached to your revised  
3 testimony revised exhibits, specifically revised direct  
4 Exhibits DDC-1, DDC-2, DDC-4, and DDC-6?

5 A Correct.

6 Q Did you also cause to be filed in this case,  
7 Ms. Caldwell, rebuttal testimony dated August 21st, 2000,  
8 consisting of 54 pages?

9 A Yes.

10 Q Do you have any corrections to that testimony?

11 A I do not.

12 Q Were there four exhibits attached to your  
13 rebuttal exhibit -- rebuttal testimony, Exhibits DDC-7  
14 through DDC-10?

15 A Yes.

16 Q If I were to ask you questions in your  
17 testimony, would your answers be the same from the stand  
18 today?

19 A Yes, they would.

20 MR. ROSS: Mr. Chairman, we would ask that  
21 Ms. Caldwell's prefiled testimony be introduced into the  
22 record and the exhibits be marked -- ask that  
23 nonproprietary exhibits be marked as Exhibit 93. DDC-2 is  
24 proprietary, and we would ask that that exhibit be treated  
25 accordingly.

1 CHAIRMAN DEASON: Okay. Let's just make sure  
2 the record is complete. You want the prefiled exhibits,  
3 the nonproprietary prefiled exhibits, identified as  
4 Exhibit 93?

5 MR. ROSS: I believe that's the next exhibit,  
6 Mr. Chairman.

7 CHAIRMAN DEASON: Okay. And that's the exhibits  
8 accompanying both the direct and rebuttal?

9 MR. ROSS: Yes, sir.

10 CHAIRMAN DEASON: Very well.

11 (Exhibit 93 marked for identification.)

12 CHAIRMAN DEASON: Now, the proprietary exhibit,  
13 do you wish for it to have an exhibit number?

14 MR. ROSS: Yes, I think, we need to treat that  
15 separately, and we'd ask that it be marked as Exhibit 94.

16 CHAIRMAN DEASON: That will be so identified.

17 (Exhibit 94 marked for identification.)

18 MR. ROSS: Mr. Chairman, one other housekeeping  
19 matter. BellSouth filed revised cost studies on August  
20 16th, 2000. Because of the volume of the filing, they  
21 were not attached to Ms. Caldwell's testimony, but do want  
22 to make sure they are considered as part of the record in  
23 this case, for obvious reasons.

24 CHAIRMAN DEASON: Staff, how do we do that?

25 MS. KEATING: I suggest that we identify them as

1 an exhibit.

2 CHAIRMAN DEASON: Okay. Exhibit 95.

3 MR. ROSS: There's a proprietary and  
4 nonproprietary version of that. So, I would suggest,  
5 Mr. Chairman, with the permission of the Commission, that  
6 we identify the nonproprietary version as being Exhibit 95  
7 and the proprietary version as being Exhibit 96.

8 CHAIRMAN DEASON: They will be so identified.

9 (Nonproprietary Exhibit 95 and proprietary  
10 Exhibit 96 marked for identification.)

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ORIGINAL  
1136

1                   **BELLSOUTH TELECOMMUNICATIONS, INC.**  
2           **REVISED DIRECT TESTIMONY OF D. DAONNE CALDWELL**  
3           **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
4                   **DOCKET NO. 990649-TP**  
5                           **(PHASE II)**  
6                           **AUGUST 18, 2000**

7  
8 **Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.**

9  
10 A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree  
11 St., N.E., Atlanta, Georgia. I am a Director in the Finance Department of  
12 BellSouth Telecommunications, Inc. (hereinafter referred to as "BellSouth").  
13 My area of responsibility relates to the development of economic costs.

14  
15 **Q. ARE YOU THE SAME D. DAONNE CALDWELL THAT FILED**  
16 **DIRECT TESTIMONY AND PHASE I REBUTTAL TESTIMONY IN**  
17 **THIS DOCKET?**

18  
19 A. Yes.

20  
21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

22  
23 A. The purpose of my testimony is to address the revisions BellSouth has made  
24 to its cost studies. I will also explain why these updates were necessary.

25

1        Additionally, I will summarize the impact of the changes on the cost results at  
2        the statewide level.

3

4        **Q. WHY DID BELLSOUTH DECIDE TO UPDATE ITS COST STUDIES**  
5        **AT THIS TIME?**

6

7        A. There were several reasons. First, BellSouth has had on-going discussions  
8        with AT&T concerning enhancements to the BellSouth Telecommunications,  
9        Inc. Loop Model or BSTLM<sup>®</sup>. After consultations with AT&T, BellSouth  
10       made numerous enhancements to the model, which are described in greater  
11       detail in the testimony of Jim Stegeman. BellSouth's August 16<sup>th</sup> filing  
12       incorporates these enhancements.

13

14       Second, since the original April 17<sup>th</sup> filing, BellSouth has revised its  
15       nonrecurring provisioning process for Digital Subscriber Line ("xDSL")  
16       elements. Originally, BellSouth conducted the cost study under the  
17       assumption that a manual service inquiry and loop make-up would be required  
18       for xDSL loops to ensure that specific transmission parameters are met.  
19       However, with the FCC's 319 rules concerning loop qualification, it was  
20       necessary for BellSouth to revisit the provisioning process and modify some  
21       of the underlying assumptions. Specifically, paragraph 427 of the FCC's  
22       Third Report and Order states:

23

24       

---

  
25       <sup>®</sup> 1999 INDETEC International and BellSouth Corporation, All Rights  
Reserved



1

2

an incumbent LEC must provide the requesting carrier with

3

nondiscriminatory access to the same detailed information about

4

the loop that is available to the incumbent, so that the requesting

5

carrier can make an independent judgement about whether the loop

6

is capable of supporting the advanced services equipment the

7

requesting carrier intends to install. (Emphasis added)

8

9

Thus, BellSouth will be offering both a manual and a mechanized

10

provisioning process to support service inquiry and access to loop make-up

11

information. BellSouth has revised its cost study to reflect these new

12

processes, which give the ALEC the option of ordering xDSL loops either

13

with loop make-up information (manual) or without loop make-up

14

information (mechanized). In the manual mode, BellSouth will provide a

15

loop make-up to the ALEC as part of the provisioning process. In the

16

mechanized option, it is assumed that the ALEC has already determined that

17

the loop is qualified by accessing BellSouth's loop makeup records. Of

18

course, the ALEC can gain access to the loop make-up records either through

19

a manual means or via a mechanized database look-up.

20

21

Third, during the revisions to the xDSL nonrecurring costs, BellSouth

22

reviewed all of the nonrecurring inputs for all types of loops to ensure

23

consistency of work time estimates and the correctness of the underlying

24

assumptions. Several inputs were modified as part of this process.

25

1 Fourth, BellSouth identified certain corrections that needed to be made to its  
2 original study. These included changes to the Synchronous Optical Network  
3 ("SONET") vendor mix, material prices for some items, and the gross receipts  
4 tax factor. Additionally, an update to the Switching Cost Information System/  
5 Model Office ("SCIS/MO") software was made. These changes are discussed  
6 in greater detail in BellSouth's filing with the Commission on August 7, 2000.

7

8 **Q. HAS BELL SOUTH CHANGED THE ELEMENTS FOR WHICH IT**  
9 **HAS PREPARED COST STUDIES FROM THE ORIGINAL FILING?**

10

11 A. Yes. As discussed above, BellSouth has added elements to allow the ALEC  
12 the ability to independently "qualify" a loop; i.e., the ALEC makes the  
13 determination if the loop meets the desired transmission standards, not  
14 BellSouth. For example, instead of just having one nonrecurring cost  
15 developed for a 2-Wire Copper Loop-Short, there are two nonrecurring  
16 elements -- 2-Wire Copper Loop-Short (Nonrecurring w/ Loop Make-up  
17 ("LMU") and 2-Wire Copper Loop-Short (Nonrecurring w/o LMU). Attached  
18 to this testimony is Exhibit DDC-6, which is a chart detailing the elements  
19 that were added with this filing.

20

21 BellSouth also has introduced two "new" elements -- the Universal Digital  
22 Channel ("UDC") and 2-wire DID Ports to be used in combinations. The  
23 costs for the UDC are identical to an ISDN loop, but the methods and  
24 procedures ("M&Ps") associated with the provisioning process are different.  
25 Thus, BellSouth needed an additional element to reflect these different M&Ps.

1 An additional combination that required a 2-wire DID port was identified  
2 subsequent to the original filing. Thus, the 2-wire DID Port for combinations  
3 was added to eliminate main distribution frame ("MDF") costs from the port.

4  
5 Exhibit DDC-6 also reflects the fact that some elements have been deleted.  
6 Again, this occurred mostly because the nonrecurring costs for xDSL loops  
7 were restructured. Disconnect elements were eliminated. Let me note that a  
8 few elements were deleted because they were redundant (A.2.22, A.2.23) or  
9 there was no demand for the element (A.1.8). BellSouth also removed all  
10 reference to Line Sharing, elements J.4.

11

12 **Q. DOES BELL SOUTH'S UPDATED COST STUDY IMPACT THE**  
13 **EXHIBITS ORIGINALLY FILED WITH YOUR DIRECT**  
14 **TESTIMONY?**

15

16 A. Yes, it impacts three of the four exhibits originally filed. Attached to this  
17 testimony are Revised Exhibits DDC-1, DDC-2, and DDC-4, which reflect the  
18 updated information. These exhibits should replace the ones previously filed  
19 in their entirety. Exhibit DDC-1 defined the characteristics of the various  
20 types of loops. Modifications to the services selected for some of the  
21 Unbundled Network Element ("UNE") loops have been made. Exhibit DDC-  
22 2 displayed the inputs into the BSTLM. As I mentioned previously, changes  
23 to the SONET vendor mix and some material prices have been made and  
24 inputs, that increase the flexibility of the model, have been added. The inputs  
25 that changed have been specifically identified in the revised file. Exhibit

1 DDC-4 compared the recurring results by zone and statewide and thus, had to  
2 be revised.

3

4 **Q. DO YOU HAVE AN EXHIBIT THAT SHOWS THE IMPACT OF**  
5 **BELLSOUTH'S REVISIONS?**

6

7 A. Yes. Exhibit DDC-6 displays the differences from the original results. The  
8 vast majority of the recurring costs decreased. In fact, only 17 of the elements  
9 studied increased by more than 1%. All nonrecurring costs for non-loop  
10 elements decreased due to the decrease in gross receipts tax. Nonrecurring  
11 costs associated with service level ("SL")1 and SL2 loops increased mainly as  
12 a result of an increase in the dispatch rate. The sub-loop feeder has been re-  
13 classified as a designed loop, which involves more provisioning activities and  
14 thus increased nonrecurring costs. Other elements that increased in cost  
15 include Cross Box Facility Set-up, Network Interface Device ("NID") Cross  
16 Connect, and Integrated Services Digital Network ("ISDN") loops. These  
17 increases resulted from a truing-up of the inputs and provisioning processes.

18

19 BellSouth also has changed its cost recovery for xDSL loops and Unbundled  
20 Loop Modification ("ULM"). This change, by itself, would not have impacted  
21 the total cost of loop provisioning and loop modification; however, other input  
22 changes were also made. Originally, the Unbundled Loop Modification  
23 ("ULM") element included 100% of service inquiry activity. The savings  
24 obtained when the xDSL loop and ULM were ordered together were reflected  
25 in the cost of the loop. Additionally, the manually ordered xDSL loops (with

1 loop make-up) increased due to the inclusion of 100% costs associated with  
2 service inquiry activity. Now, the savings are reflected in the ULM rather  
3 than the loop. BellSouth has also restructured the input files for the  
4 nonrecurring cost development associated with loops in order to display  
5 calculations which previously were only visible if the file was opened  
6 electronically.

7

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

9

10 A. Yes.

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5 REPORTER'S NOTE: Pages 1143 through 1196 were reserved  
6 for numbering prefiled testimony and were not needed.

7 Transcript follows in sequence on Page 1197.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1                   **BELLSOUTH TELECOMMUNICATIONS, INC.**  
2                   **REBUTTAL TESTIMONY OF D. DAONNE CALDWELL**  
3                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
4                   **DOCKET NO. 990649-TP**  
5                   **(PHASE II)**  
6                   **AUGUST 21, 2000**

7

8 **Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.**

9

10 A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,  
11 N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth  
12 Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of  
13 responsibility relates to the development of economic costs.

14

15 **Q. ARE YOU THE SAME D. DAONNE CALDWELL THAT FILED DIRECT**  
16 **TESTIMONY AND PHASE I REBUTTAL TESTIMONY IN THIS**  
17 **DOCKET?**

18

19 A. Yes.

20

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

22

23 A. My testimony addresses the issues that the Florida Public Service Commission  
24 ("Commission") intends to consider in Phase II of this proceeding. Thus, my  
25 testimony is devoted to responding to cost development issues raised in the

1 testimony filed by intervening parties. Specifically, I respond to allegations made  
2 by Sprint witnesses, Steven M. McMahon, Talmage O. Cox, James W. Sichter, and  
3 Kent W. Dickerson, Broadslate/ClearTel/FL Digital/Network Telephone ("The  
4 Coalition") witness, Mark Stacy, FCTA witness, William J. Barta, FCCA witness,  
5 Joseph P. Gillan, AT&T/MCI WorldCom witnesses, Brenda J. Kahn, John C.  
6 Donovan, Brian F. Pitkin, Greg Darnell, and Jeffrey King,  
7 BlueStar/Covad/Rhythms Links ("Data ALECs") witnesses, Joseph P. Riolo and  
8 Terry L. Murray.

9

10 **REBUTTAL OF TESTIMONY**

11 **Q. CAN YOU SUMMARIZE THE COMMENTS MADE BY INTERVENING**  
12 **PARTIES WITH RESPECT TO COST DEVELOPMENT?**

13

14 A. Yes. The main thrust of the criticism can be divided into the following areas:

15

16 1) Nonrecurring Cost Development – especially for xDSL loops, loop  
17 modification, and access to BellSouth's loop make-up databases. Additionally,  
18 there appears to be an underlying implication that BellSouth is seeking to  
19 double recover labor costs in both its recurring and nonrecurring costs.

20

21 2) Models - BSTLM assumptions, engineering rules, and network design and the  
22 SST<sup>®</sup> model. (BellSouth witness Joe Page is filing rebuttal testimony in response

23

24

---

© 2000 BellSouth Corporation, All Rights Reserved

25



1 to AT&T/MCI witness Catherine Pitts' comments concerning BellSouth's SST  
2 model. Additionally, Jim Stegeman, on behalf of BellSouth, will address the  
3 BSTLM. BellSouth witness Keith Milner will address the underlying  
4 engineering assumptions utilized in the BSTLM.)

5  
6 3) Factors – shared and common cost factors, inflation, in-plant factors, and  
7 loadings. (BellSouth witness Walter Reid is addressing the common cost factor  
8 in his rebuttal testimony.)

9  
10 4) Deaveraging – which elements display cost variation by geographic location and  
11 thus, should be deaveraged. It appears as if Sprint is the only party advocating  
12 deaveraging anything but the loop. (BellSouth witness Al Varner will support  
13 BellSouth's proposed deaveraging methodology in his rebuttal testimony.)

14  
15 5) Network Terminating Wire/Intrabuilding Network Cable ("NTW/INC") –  
16 several parties are questioning BellSouth's proposed method of access and the  
17 associated costs. BellSouth witness Keith Milner will respond to the comments  
18 concerning the provisioning of NTW/INC. I will discuss the cost development.

19  
20 **Q. BOTH THE FEDERAL COMMUNICATIONS COMMISSION ("FCC")**  
21 **AND THE EIGHT CIRCUIT COURT HAVE ISSUED ADDITIONAL**  
22 **RULINGS THAT AFFECT THIS PROCEEDING. PLEASE COMMENT.**

23  
24 A. Since the last proceeding in which the Commission established cost-based rates, the  
25 FCC issued its UNE Remand Order. While the FCC's UNE Remand Order did not

1 alter the Total Element Long Run Incremental Cost ("TELRIC") methodology, it  
2 basically expanded the universe of elements BellSouth is obligated to offer to  
3 Alternative Local Exchange Carriers ("ALECs"). On July 18, 2000 the United  
4 States Court of Appeals for the Eighth Circuit issued an opinion that struck down  
5 the FCC's TELRIC pricing rules. The Court held that unbundled network element  
6 ("UNE") costs should be determined using forward-looking costs of the Incumbent  
7 Local Exchange Company's ("ILEC's") existing network rather than on the costs  
8 of a hypothetical network of an imaginary carrier.

9  
10 BellSouth has not fully evaluated the impacts of the Court's decision on the cost  
11 methodology for UNEs, further, the full impacts will not be known until the FCC  
12 issues new rules consistent with the Eighth Circuit's decision. Therefore, BellSouth  
13 has not made any changes to the underlying TELRIC methodology, used in the  
14 August 16th filing, to reflect the affect of the Eighth Circuit Court's decision.  
15 Thus, BellSouth's costs are forward-looking but are conservative (low) based on  
16 the Eight Circuit's opinion.

17  
18 Several parties have dusted off their crystal balls and are making predictions as to  
19 the impact of the recent Eighth Circuit Court's Ruling with respect to cost  
20 development. As I stated previously, BellSouth feels it is premature to anticipate the  
21 full impact or the eventual outcome of this decision. However, let me state that Ms.  
22 Murray's belief that this ruling can somehow be construed to exclude consideration  
23 of shared and common costs in the rate setting process is not supported by the  
24 Court's decision. (Murray Testimony, Page 13)

25

1 Additionally, FCCA witness Mr. Gillan's belief that the Court's decision advances  
2 the exclusion of "fixed" costs such as costs associated with land and buildings is  
3 unsupported. (Gillan Testimony, Page 13) In fact, this short-run methodology is  
4 in direct violation of the long-run principle of cost development.

5  
6 Supra witness Mr. Nilson also offers another short-run approach he claims follows  
7 the Eighth Circuit's intent. At page 5, he states that because of the Eighth Circuit's  
8 ruling, "ILECs should be required to provide the current time in service of each and  
9 every piece of equipment comprising the UNEs to be priced." In other words, as I  
10 understand Mr. Nilson's point, BellSouth should determine the remaining life of  
11 every piece of equipment and every facility that comprise the network being  
12 unbundled. This would be a daunting task to say the least, and is an absurd  
13 proposition on its face. Furthermore, using remaining lives to establish forward-  
14 looking costs is inconsistent with a forward-looking cost approach since all costs  
15 are variable in the long run.

16

17 **NONRECURRING COST DEVELOPMENT**

18 **Q. PLEASE EXPLAIN THE DIFFERENCES BETWEEN CAPITALIZED**  
19 **LABOR AND NONRECURRING LABOR EXPENSE.**

20

21 A. Since the majority of the parties' testimony centers on the loop, I will use it as an  
22 example. The labor associated with the installation of the loop (i.e., the  
23 construction of the loop) is capitalized based on accounting rules. Part 32 of the  
24 FCC's Code of Federal Regulations states: "In accounting for construction costs,  
25 the utility shall charge to the telephone plant accounts, all direct and indirect costs."

1 Included in the direct and indirect costs are the “wages and expenses of employees  
2 directly engaged in or in direct charge of construction work.” Thus, BellSouth has  
3 appropriately included these labor-related costs (construction costs) in the  
4 calculation of the investment; i.e., as part of the capitalized plant account. The  
5 costs associated with the investment (material plus installation costs) are expressed  
6 on a recurring (monthly) basis and are comprised of capital costs and operating  
7 expenses.

8  
9 Nonrecurring costs, on the other hand, include activities associated with  
10 provisioning the service after the loop has been installed. In other words, these are  
11 costs BellSouth incurs as a result of a service request.

12

13 **Q. SEVERAL WITNESSES SEEM TO BE CONFUSED BY THIS**  
14 **DEFINITION OF NONRECURRING COSTS AND ASSERT THAT**  
15 **BELLSOUTH INAPPROPRIATELY REFLECTS ITS LABOR COSTS**  
16 **IN ITS STUDY. PLEASE COMMENT.**

17

18 A. Ms. Murray’s statement on page 55 that “the recurring cost that new entrants  
19 incur already includes costs for all installation work that BST also seeks to  
20 include in its nonrecurring cost study” is false. As I mentioned previously, the  
21 nonrecurring costs BellSouth incurs to provision an unbundled loop for an  
22 ALEC are incremental to BellSouth’s capitalized costs associated with  
23 installing the facilities in the first place. The nonrecurring costs reflect the  
24 activities required to activate the circuit, such that it is working for the ALEC  
25 and only once BellSouth receives a service request from the ALEC. Examples

1 of nonrecurring activities include running the jumpers at the cross-box, making  
2 the physical connection at the Network Interface Device ("NID"), and testing  
3 the circuit to ensure that it meets the transmission requirements set for the  
4 specific loop ordered. None of the costs of these activities are included in  
5 BellSouth's recurring costs and therefore, there is no double recovery of costs.

6

7 **Q. SEVERAL OF THE WITNESSES FEEL THAT ACTIVITIES**  
8 **BELLSOUTH CATEGORIZED AS NONRECURRING ARE**  
9 **ALREADY RECOVERED IN THE RECURRING MAINTENANCE**  
10 **FACTOR. ARE THEY CORRECT?**

11

12 A. No. Joseph Riolo's contention that loop conditioning costs are included in  
13 BellSouth's plant maintenance costs is false. (Riolo Testimony at Page 12)  
14 Mr. Riolo feels that load coil removal is part of BellSouth's modernization  
15 program and thus, the costs associated with that activity are captured as part of  
16 BellSouth's maintenance budget, ultimately ending up in BellSouth's plant  
17 specific expense. However, BellSouth is not aggressively removing load coils  
18 as part of any rehabilitation initiative.<sup>1</sup> The load coils that are currently on  
19 loops less than 18 Kft have been placed for a purpose at some point in time and  
20 unless specific trouble occurs in the cable, they are not removed. It is the  
21 ALEC's service request that causes BellSouth to incur the cost to remove load  
22 coils or bridged tap. Thus, BellSouth is justified in charging the ALEC for the

23

24 <sup>1</sup> Ms. Murray's discussion, at page 46, of SBC's "Project Pronto" is  
25 illustrative of such a modernization initiative. BellSouth has not  
evaluated such a project. Furthermore, costs of such a magnitude (\$6  
billion) have not been considered in BellSouth's cost study.

1 activity.

2

3 Sprint witness Steven McMahon, makes a similar mistake on page 26 of his  
4 testimony in equating trouble resolution activities to maintenance activities that are  
5 considered in the recurring cost of the loop. Again, this is a misrepresentation of  
6 the correct classification of labor costs. BellSouth cannot close the ALEC's service  
7 request until all troubles are cleared and the circuit is available for the ALEC's  
8 desired use. The costs associated with clearing a trouble as part of a service  
9 request are obviously not part of the routine maintenance costs included in the  
10 recurring cost component and are appropriately calculated as a nonrecurring  
11 expense.

12

13 One important aspect that distinguishes a nonrecurring cost from a recurring cost is  
14 that a nonrecurring cost reflects a one-time activity; i.e., it is not part of a recurring  
15 on-going routine. The conditioning and testing activities discussed by Mr. Riolo  
16 and Mr. McMahon are one-time tasks undertaken only after a service request is  
17 received.

18

19 **Q. SEVERAL OF THE WITNESSES HAVE ARGUED THAT A NETWORK**  
20 **BASED ON A FORWARD-LOOKING DESIGN WOULD NOT HAVE**  
21 **LOAD COILS AND BRIDGED TAP AND THUS, BELL SOUTH SHOULD**  
22 **NOT BE ENTITLED TO RECOVER ANY COSTS ASSOCIATED WITH**  
23 **CONDITIONING. PLEASE RESPOND.**

24

25 A. I agree with the postulate that a forward-looking network being designed today

1 would not include load coils. In fact, load coils are not included in BellSouth's  
2 forward-looking loop recurring cost studies. However, the fact remains that  
3 ALECs are requesting unloaded copper loops from BellSouth's existing network,  
4 which contains both load coils and bridged tap. The removal of these elements is a  
5 very real on-going cost that BellSouth will incur each and every time that an ALEC  
6 requests that BellSouth condition a loop. As long as BellSouth is required to  
7 remove load coils and bridged tap at the ALEC's request, BellSouth must be  
8 allowed to recover those costs. This is completely consistent with the FCC's views  
9 that, "under our rules, the incumbent should be able to charge for conditioning such  
10 loops." (§193, FCC CC Docket 96-98 UNE Remand Order)

11

12 On pages 85-86 of her testimony, Ms. Murray attempts to interpret the FCC's  
13 intent. First, I agree with Ms. Murray that "a state commission may require an  
14 incumbent to recover any nonrecurring costs through recurring charges." This is an  
15 issue addressed in Phase I of this proceeding, and both the Tennessee Regulatory  
16 Authority and the North Carolina Utilities Commission have adopted this approach  
17 for certain nonrecurring costs. It is this Commission's decision as to how costs  
18 should appropriately be charged, constrained by practical considerations, such as,  
19 the ability to bill. It is Ms. Murray's second point, however, that requires  
20 comment. She asserts that "the incumbent's *recurring* costs and charges for  
21 unbundled loops will completely capture the forward-looking costs for providing  
22 loops free of load coils, excessive bridged tap and other devices." As I have  
23 discussed previously, this is simply not the case. Further, the loop portion of the  
24 cost study provides costs for loops free of load coils and bridged tap, but does not  
25 include costs for removing them.

1

2 **Q. ON PAGE 72, MR. RIOLO ALLEGES THAT LOOP CONDITIONING IS**  
3 **PROVIDED AT NO CHARGE FOR BELLSOUTH'S RETAIL ADSL**  
4 **SERVICE. IS HE CORRECT?**

5

6 A. No. BellSouth offers two distinct retail ADSL services, Industrial Class and  
7 Business Class. As the document from which Mr. Riolo quotes states, "Industrial  
8 Class service is provisioned as a non-design 'as-is' service." (Page 7, 915-800-  
9 019PR -- Outside Plant Engineering Methods and Procedures for BellSouth® ADSL  
10 Service). The Industrial Class service was intended for the residential market, and  
11 BellSouth does not ordinarily condition a loop in order to make the service work  
12 for that customer. The efforts Mr. Riolo lists in his testimony are made only in  
13 limited cases and only in the event BellSouth mistakenly told the customer that the  
14 loop would meet ADSL parameters when in fact it could not. Thus, BellSouth felt  
15 obligated to attempt to make the loop work and absorb the cost of doing so. On  
16 the other hand, for Business Class service, BellSouth will make an effort to make  
17 the loop compliant with ADSL standards. The cost associated with this  
18 conditioning effort was reflected in the cost study for BellSouth's retail ADSL  
19 service and allocated to all Business Class ADSL loops.

20

21 **Q. ON PAGE 54 OF HER TESTIMONY, MS. MURRAY CONTENDS THAT**  
22 **BELLSOUTH "INAPPROPRIATELY PRESUMES THAT IT SHOULD**  
23 **BUNDLE MANUAL LOOP QUALIFICATION AND CONDITIONING**  
24 **RELATED COSTS INTO THE COST TO PROVISION DSL-CAPABLE**  
25 **LOOPS." PLEASE RESPOND.**



1

2 A. As discussed in my revised direct testimony filed on August 18, 2000, BellSouth  
3 has revised its nonrecurring costs in its August 16<sup>th</sup> filing to separate the costs  
4 associated with producing a manual loop make-up from the provisioning of the  
5 xDSL loop. Rebuttal Exhibit DDC-7 outlines the impact of the revised  
6 nonrecurring costs for xDSL loops. This change should address at least part of Ms.  
7 Murray's concerns.

8

9 Ms. Murray's second point that BellSouth included conditioning costs in its xDSL  
10 provisioning costs is accurate. As I explained in my rebuttal testimony filed in Phase  
11 I of this proceeding, BellSouth has endeavored to expand the universe of xDSL-  
12 capable loops for short loops by unloading 10 pairs each time conditioning takes  
13 place. The conditioning cost has been allocated among those 10 pairs. It is  
14 projected that of the 10 conditioned loops, an ALEC will purchase 2 and BellSouth  
15 will utilize 4 pairs. That leaves 4 pairs whose conditioning costs will not be  
16 recovered. BellSouth developed an additive that is applied to ADSL-compatible  
17 loops, HDSL-compatible loops, and Unbundled Copper Loops ("UCLs") - Short in  
18 order to compensate BellSouth for the unrecovered costs based on the probability  
19 of xDSL loops requiring conditioning. This additive is displayed on Rebuttal  
20 Exhibit DDC-7 as ULM Additive.

21

22 **Q. REBUTTAL EXHIBIT DDC-7 SHOWS A COST FOR MECHANIZED**  
23 **LOOP MAKE-UP ("LMU"). PLEASE EXPLAIN WHAT THAT COST**  
24 **REFLECTS.**

25

1 A. First, let me state that BellSouth's August 16<sup>th</sup> filing substantially reduced the cost  
2 from \$1.08 per query to \$.69 per query. This reduction was the result of lower  
3 than expected costs for implementing mechanized LMU. Second, the cost  
4 associated with the mechanized loop make-up reflects the investment-related  
5 expenses for the newly installed computer servers and data communications  
6 equipment. The vendor-installed prices and installation costs for the incremental  
7 investments are identified along with their associated hardware maintenance  
8 expenses. This cost also includes software expenses for system development,  
9 contractor expenses for the development, enhancement and implementation for the  
10 computer applications, and ongoing computer application support.

11

12 **Q. MR. RIOLO ASSERTS ON PAGE 50 THAT "THE PRICE FOR THIS**  
13 **FUNCTION SHOULD NOT EXCEED THE INCREMENTAL COST OF**  
14 **THE PROCESSOR TIME ASSOCIATED WITH SUCH A DIP." PLEASE**  
15 **COMMENT.**

16

17 A. Obviously, from reviewing my previous response, BellSouth incurs costs for more  
18 than a mere "dip" into its database. Software must be installed, additional  
19 equipment must be purchased, and programming must be preformed in order for  
20 ALECs to make use of the mechanized LMU. Each of these activities causes  
21 BellSouth to incur a cost, which is caused by the ALECs, and thus, should be  
22 recovered from the ALECs.

23

24 **Q. IN DEVELOPING NONRECURRING COSTS, MR. RIOLO IMPLIES**  
25 **THAT NETWORK PERSONNEL "MERELY AGREED TO ACCEPT THE**

1 **COST ESTIMATES PROVIDED TO [THEM] BY THE COST GROUP.”**  
2 **(PAGE 25) PLEASE RESPOND.**

3

4 A. Let me explain the process BellSouth used to update the nonrecurring cost  
5 information. Existing input information was gathered, and the different activities  
6 for each loop were compared to other loops that had similar provisioning  
7 requirements. This comparison was provided to the product teams for review,  
8 possible update, and final concurrence.

9

10 If Mr. Riolo is alleging that the cost analyst produced the inputs that went into the  
11 study, he is sadly mistaken. As I described previously, the current product teams  
12 were provided then existing inputs that had been provided to the cost group as a  
13 starting point for the product team's review. The product teams could accept,  
14 reject, or modify those inputs. The original inputs also were obtained from  
15 network experts that participated on prior product teams and were in no way,  
16 shape, or form “developed” by the cost analyst.

17

18 **Q. MR. RIOLO ALSO CLAIMS TO HAVE DISCOVERED DISCREPANCIES**  
19 **BETWEEN THE COST STUDY AND SUPPORTING DOCUMENTS. ARE**  
20 **HIS CLAIMS ACCURATE?**

21

22 A. No. On page 16, Mr. Riolo claims that BellSouth's cost study inappropriately  
23 includes two test procedures and thus, overstated the costs. The real problem is  
24 one of terminology and perspective. From the viewpoint of the UNE Center  
25 (“UNEC”), it is coordinating one test, but for two locations, one inside the central

1 office and one in the field. Thus, in actuality there is one test that takes 54 minutes  
2 (2X27).

3

4 On page 19, Mr. Riolo states that BellSouth “erroneously” used 61.8 minutes  
5 instead of 45 minutes for Complex Resale Support Group (“CRSG”) time. Mr.  
6 Riolo apparently disregarded the second page of the CRSG document upon which  
7 Mr. Riolo relies. This document clearly states that the 45 minutes “Assumes  
8 perfect flow”. Of course, “perfect flow” is rarely achieved. Thus, the additional  
9 16.8 minutes is appropriately considered for resolving order complications. Mr.  
10 Riolo also implies that BellSouth did not consider the fact that multiple loops may  
11 be ordered at the same time when calculating CRSG work times. (Page 25) This is  
12 not true. BellSouth’s cost study reflects a “First and Additional” rate structure,  
13 designed to recognize just such cost savings. Further, if one were to review the  
14 input file, it is clear the work times for the CRSG differ between First and  
15 Additional.

16

17 Also on page 19, Mr. Riolo claims that BellSouth has overstated the Local Carrier  
18 Service Center (“LCSC”) work time for service inquiry by 15 minutes. The  
19 document upon which Mr. Riolo relied is outdated and was not used by the cost  
20 organization in developing the time for LCSC functions. The 45 minute  
21 assumption was provided by the LCSC subject matter expert based on more current  
22 information.

23

24 On page 27, Mr. Riolo asserts that BellSouth has double counted travel time. If  
25 one were to review the explanation of the activities that comprise his 115.2

1 minutes, however, it is evident that these minutes relate to activities that take place  
2 only after the technician is at the work site. Because the technician is not magically  
3 transported to the work location, travel time must be included! Travel time is not  
4 reflected in the 115.2 minutes, notwithstanding, Mr. Riolo's claim to the contrary.  
5 The 20 minutes contained in the equation in the input file reflects the time required  
6 for the technician to receive and analyze the service request, not for travel. This  
7 information is also contained in the document that generated the chart Mr. Riolo  
8 presented as part of his testimony.

9

10 **Q. AT&T WITNESS JEFFERY KING CONTENDS THAT BELLSOUTH HAS**  
11 **“INTRODUCED UNNECESSARY WORKGROUPS.” (PAGE 12) ARE**  
12 **HIS ASSERTIONS JUSTIFIED?**

13

14 A. No. Mr. King's elimination of the LCSC and UNEC/Access Customer Advocate  
15 Center (“ACAC”) work centers is based upon an incorrect premise. His reasoning  
16 that “BellSouth's own retail operations do not incur” costs associated with these  
17 work centers misses the point. In the retail environment, BellSouth has a business  
18 office that corresponds to the LCSC and an ACAC for Access customers. The  
19 LCSC and the ACAC are integral centers involved in the provisioning of UNEs and  
20 UNE combinations and the cost of operating these centers must be reflected in  
21 developing forward-looking costs.

22

23 **Q. SPRINT WITNESS STEVEN MCMAHON CLAIMS THAT BELLSOUTH'S**  
24 **NONRECURRING COSTS FOR ENHANCED EXTENDED LINKS**  
25 **(“EELS”) EXCEEDS THE SUM OF THE INDIVIDUAL COMPONENTS.**

1       **(PAGE 30) PLEASE COMMENT.**

2

3 A. Mr. McMahon failed to realize that BellSouth's Voice Grade Local Loop for  
4 Combinations (Element P.17.10) is valid for all voice-grade loops; i.e., it reflects an  
5 average provisioning time for the various types of 2-wire and 4-wire loops. Thus, a  
6 comparison between an average rate for a combination and a single rate for a  
7 specific element is not a valid comparison. Furthermore, the notion that  
8 nonrecurring costs for EELs exceeds the sum of the individual components is not  
9 universally true, as reflected in my Rebuttal Exhibit DDC-8. For example, for a 4-  
10 wire Voice Grade Loop with DS1 IOF, the sum of the UNEs is \$710.23 and the  
11 cost of the combination is \$673.99. Similarly, for a DS3 Loop with DS3 IOF, the  
12 sum of the UNEs is \$1,515.97, and the nonrecurring cost of the combination is  
13 \$1,050.83.

14

15       **MODELS**

16       **Q. ON PAGE 14, AT&T/MCI WORLDCOM WITNESS JEFFREY KING**  
17       **COMMENTS ON BELL SOUTH'S MODELS. PLEASE RESPOND.**

18

19 A. Mr. King's broad statement that "Many computations were found to be in error",  
20 makes it difficult, if not impossible, to respond in any meaningful manner.  
21 However, BellSouth filed an updated cost study on August 16, 2000 that should  
22 remedy Mr. King's concerns, particularly the "incorrect cell references" and "hard  
23 coding" problems Mr. King identifies.

24       **Q. ON PAGES 45-46 OF THEIR TESTIMONY, MR. PITKIN AND MR.**  
25       **DONOVAN LIST THE "FLAWS" THEY FEEL NEED TO BE**

1       **CORRECTED IN BELLSOUTH'S BSTLM. PLEASE SUMMARIZE**  
2       **BELLSOUTH'S POSITION ON EACH OF THEIR PROPOSED**  
3       **MODIFICATIONS.**

4

5   A. Mr. Pitkin and Mr. Donovan raise twelve issues concerning the BSTLM. I will  
6   address the following issues:

7

- 8       1) Use of BellSouth's "Combo" scenario to reflect use of integrated digital loop  
9       carrier systems;
- 10      2) Use of the plant-specific factors recommended by Mr. Darnell;
- 11      3) Use of the expense development factors recommended by Mr. Darnell;
- 12      4) BellSouth's alleged attempts to double-count the effects of inflation;
- 13      5) BellSouth's installation and engineering factors versus the Commission's prior  
14      unit-cost determinations;
- 15      6) BellSouth's installation and engineering factors for DLC equipment;
- 16      7) BellSouth's use of multiple vendors for Digital Loop Carrier ("DLC")  
17      equipment;
- 18      8) BellSouth's method of allocating common equipment based on DS0 capacity;
- 19      9) BellSouth's land and building investment calculations.

20

21   BellSouth witness Walter Reid also will respond to Mr. Pitkin and Mr. Donovan's  
22   recommendations for expense adjustments (Issue 3). BellSouth witness Jim  
23   Stegeman will discuss how the BSTLM utilizes DS0s in sizing equipment and thus,  
24   why this Commission should reject AT&T/MCI WorldCom's proposal with respect  
25   to Issue 8. Mr. Stegeman will also respond to the following 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

- 1) Adjusting the loop length criteria to reflect the most efficient network design consistent with the Commission's decision in the USF proceeding;
- 2) Requiring BellSouth to evaluate and "correct" routing algorithms;
- 3) Requiring BellSouth to "correct" drop calculations.

Mr. Pitkin and Mr. Donovan also propose that this Commission adopt the depreciation and cost of capital input presented by AT&T/MCI WorldCom. These issues will be resolved as part of the Phase I decision in this docket.

**Q. ON PAGE 6 OF THEIR TESTIMONY, MR. PITKIN AND MR. DONOVAN STATE THAT THE BSTLM "ESTIMATE[S] THE FORWARD-LOOKING COSTS OF PROVIDING UNBUNDLED NETWORK ELEMENTS USING CURRENT TECHNOLOGY." IS THIS AN ACCURATE ASSESSMENT?**

A. Well, they got half of it right. The BSTLM does estimate forward-looking costs. However, it is not based upon the "current" technology BellSouth has deployed in its network today to the extent such "current" technology is not forward-looking. In fact, the model builds a network using the most efficient network design, which utilizes forward-looking technology to obtain that goal.

The forward-looking investments determined by the BSTLM are in turn used to determine the forward-looking maintenance costs associated with those investments. Thus, Ms. Murray's analogy on page 42 of the ALECs paying for building a "brand-new" car and absorbing the cost of maintaining an "older"



1 vehicle is incorrect. The BSTLM develops the cost of building and maintaining a  
2 forward-looking network.

3

4 **Q. ON PAGE 9 OF HIS TESTIMONY, MR. PITKIN MAINTAINS THAT**  
5 **EVEN AFTER THREE VERSIONS OF RSERVICE.SYS FILES FROM**  
6 **BELLSOUTH, HE HAS NOT BEEN ABLE TO REPLICATE**  
7 **BELLSOUTH'S FILING RESULTS USING THE BSTLM. PLEASE**  
8 **COMMENT.**

9

10 **A.** The BSTLM develops material investments based on the scenario selected and a set  
11 of characteristics identified on a Report Services (Rservice) screen in the Reports  
12 section of the model. The Rservice setup determines: 1) the components of the  
13 network included in the UNE ; 2) the services used as the universe for each UNE;  
14 3) the special characteristics/restrictions (e.g., only include locations served less  
15 than 18,000 feet from the wire center) that apply to each UNE; and 4) the central  
16 office adders that should be included with the UNE.

17

18 While Mr. Pitkin is correct that BellSouth originally filed an Rservice.sys file that  
19 contained errors, the file was correct for most of the UNEs. Therefore, the  
20 erroneous Rservice.sys file did not prevent Mr. Pitkin from replicating BellSouth's  
21 filing for most of the UNEs. Additionally, BellSouth's Rservice screens were set  
22 up for three different scenarios, each intended to be used to develop specific UNE  
23 costs. Mr. Pitkin has chosen to use only one scenario – the Combo scenario – for  
24 all UNEs. This, along with many of the other changes Mr. Pitkin attempted to  
25 incorporate into the BSTLM, has more to do with Mr. Pitkin's inability to match

1 BellSouth's results than did the incorrect Rservice.sys file. Furthermore, BellSouth  
2 has corrected the Rservice.sys file in its August 16<sup>th</sup> filed cost study.

3

4 **Q. YOU STATED THAT THE BSTLM DEVELOPS MATERIAL BASED ON**  
5 **THE SCENARIO SELECTED. WHILE BELLSOUTH USED THREE**  
6 **SCENARIOS, ON PAGE 13, MR. PITKIN CLAIMS THAT ONLY ONE**  
7 **SCENARIO IS NEEDED. (MS. MURRAY ALSO ADVANCES THIS**  
8 **CLAIM.) CAN YOU ELABORATE ON THE SCENARIOS BELLSOUTH**  
9 **USED IN ITS FILING OF THE BSTLM AND WHY EACH IS REQUIRED?**

10

11 A. BellSouth uses three scenarios to develop the costs of the various UNEs and the  
12 loop component of combinations in this filing. First, the BST2000 scenario is used  
13 to develop material investments for all of the non-copper only, non-UNE  
14 Combination UNEs. Second, the Copper Only scenario is used to develop those  
15 UNEs served only on unloaded copper feeder and distribution facilities. Third, a  
16 Combo scenario is used to develop material associated with the two loops used in  
17 UNE combinations (the 2-wire analog voice grade loop and the 2-wire ISDN loop).

18

19 The BST2000 scenario reflects the fact that all UNE loops (other than those  
20 combined with a port in the Combo scenario) served via a fiber feeder based digital  
21 loop carrier ("DLC") system must operate on a non-integrated basis since these  
22 unbundled loops are not terminated directly into the BellSouth switch. This is  
23 accomplished in the BSTLM by setting all of the switched services to "non-  
24 switched" so the model will build the network such that these loops terminate in a

25

1 central office terminal rather than terminating in a directly integrated DS1 into the  
2 switch.

3

4 The Copper Only scenario is necessary in order to develop costs for non-loaded  
5 copper facilities requested by the ALECs. Neither the BST2000 scenario nor the  
6 Combo scenario can be used for these loops since both of those scenarios limit  
7 loops served on copper to approximately 12,000 feet. However, ALECs want  
8 access to available copper loops at any distance and do not want to be limited to  
9 access to loops of specific length. Therefore, if either the BST2000 scenario or the  
10 Combo scenario is used to develop costs for any of the "copper only" loops, the  
11 costs developed by the BSTLM would be based only on those loops less than  
12 12,000 feet. Since BellSouth did not want to limit copper-only loops to 12,000 feet  
13 or less, the new "Copper Only" scenario was created with a crossover from copper  
14 to fiber set beyond the wire center boundaries resulting in all loops in this scenario  
15 served on copper feeder and distribution cable.

16

17 The Combo scenario, as noted above, is used only for the 2-wire analog voice  
18 grade and 2-wire ISDN loops used in combination with a port. Since combination  
19 loop/port offerings can be served via integrated DLC, this scenario sets all switched  
20 services back from the "non-switched" setting used in BST2000 to the "switched"  
21 setting. With this setting, all switched services are designed using integrated DLC.

22

23 **Q. ON PAGE 41 OF HER TESTIMONY, MS. MURRAY ASSERTS THAT**  
24 **THE "USE OF A SINGLE, CONSISTENT NETWORK DESIGN**

25

1     **PREVENTS THE INCUMBENTS FROM DOUBLE-RECOVERING’**  
2     **COSTS. IS SHE CORRECT?**

3

4     A. No. Ms. Murray’s proposition of using one network would, in fact, lead to an  
5     under-recovery of BellSouth’s costs because not all possible uses for a loop to a  
6     specific customer location are considered with a single scenario. For example,  
7     assume a customer is located 15,000 feet from the central office. If the Combo  
8     scenario was used exclusively, this customer would never be considered for an  
9     unbundled copper loop since in the Combo run all loops over 12,000 feet are  
10    served via DLC or fiber. Also, if this loop was used to provide a stand-alone loop  
11    that connects to an ALEC switch, the cost is understated. Before a voice grade  
12    circuit can go to an ALEC switch, this loop must be removed from the DLC digital  
13    DS1, converted to voice grade, and terminated on the main distribution frame  
14    (“MDF”). The costs for this conversion and the MDF termination are not included  
15    in the Combo run. Multiple scenarios are the only way to ensure that all costs of  
16    the various UNEs are identified.

17

18    In each of the scenarios BellSouth built, the “total quantity of facilities” was  
19    considered; i.e., each scenario had the same overall line count. This methodology is  
20    appropriate since BellSouth cannot anticipate the ultimate use for any particular  
21    loop. A loop delivering voice grade service today potentially can be utilized to  
22    provide digital service tomorrow. Thus, Ms. Murray’s contention that BellSouth  
23    failed to consider “the total quantity of facilities and functions” is without merit.

24

25

1 **Q. MR. PITKIN CLAIMS ON PAGE 15 THAT COPPER-ONLY UNES**  
2 **SHOULD BE DEVELOPED FROM THE “COMBO” NETWORK**  
3 **SCENARIO. IS HE CORRECT?**

4

5 A. No, for two reasons. First, the combo scenario is based on loops being provided on  
6 fiber-based DLC systems directly integrated into the switch at the central office. As  
7 I’ve already discussed, this is not a realistic assumption for unbundled loops served  
8 on copper. Copper only unbundled loops do not terminate in BellSouth switches  
9 and, therefore, cannot be terminated at a DS1 level directly into the switch. In fact,  
10 copper-only loops cannot be served via DLC on fiber.

11

12 Second, the Combo scenario assumes all loops greater than 12,000 feet from the  
13 wire center are served on fiber-fed DLC systems. Therefore, the Combo scenario  
14 only develops costs for copper loops less than 12,000 feet. If one were to accept  
15 Mr. Pitkin’s argument, the average cost of all copper-only loops would be based  
16 only on those loops less than 12,000 in length. Since the ALECs request copper-  
17 only loops of all lengths, Mr. Pitkin’s approach is unreasonable.

18

19 **Q. ON PAGE 29 OF HER TESTIMONY, MS. MURRAY STATES THAT**  
20 **BELLSOUTH HAS NOT ASSUMED THE MOST EFFICIENT DLC**  
21 **TECHNOLOGY BY NOT ASSUMING THE USE OF IDLC. IS SHE**  
22 **CORRECT?**

23

24 A. No. BellSouth’s studies reflect Integrated Digital Loop carrier (“IDLC”), as Ms.  
25 Murray notes, in its “Combo” scenario since these loops are combined with a

1 switch port and can be terminated directly into BellSouth's switch. However,  
2 BellSouth cannot use IDLC and directly integrate stand-alone loops into  
3 BellSouth's switch at the DS0 level. Mr. Milner addresses this issue in greater  
4 detail. While an ALEC could buy a full DS1 from the DLC remote terminal into  
5 the central office, BellSouth has an offering for an unbundled DS1 loop that the  
6 ALEC can purchase. However, if the ALEC orders individual 2-Wire Voice Grade  
7 Unbundled Loops, then by definition those loops cannot terminate in BellSouth's  
8 switch. Therefore, they cannot ride integrated DLC.

9

10 **Q. ON PAGE 34 OF MR. DONOVAN'S AND MR. PITKIN'S TESTIMONY,**  
11 **THEY STATE THAT THEY HAVE CHOSEN THEIR SECOND DESIGN**  
12 **OPTION OF "USING EXTENDED RANGE LINE CARDS ABOVE 13,000**  
13 **FEET WITH A MAXIMUM LOOP LENGTH OF 16,800 FEET ON 26-**  
14 **GAUGE COPPER CABLE, WITH NO 24-GAUGE COPPER CABLE". IS**  
15 **THERE A FLAW IN THIS ANALYSIS?**

16

17 A. Yes. First, it ignores BellSouth's design principles, which are addressed by Mr.  
18 Milner. Second, through no fault of their own, Mr. Donovan and Mr. Pitkin  
19 analysis is flawed because in the original cost filing, BellSouth inadvertently set all  
20 extended range line card costs equal to the normal line card costs. This was an  
21 oversight on BellSouth's part that has been corrected in the August 16th filing.  
22 Based on the fact that Mr. Donovan and Mr. Pitkin did not adjust these card costs,  
23 as evidenced by Exhibit JCD/BFP-10, their comparative analysis of the two  
24 engineering approaches is invalid.

25

1 **Q. MR. PITKIN AND MR. DONOVAN ARGUE THAT CERTAIN “FIXED”**  
2 **INVESTMENTS; SUCH AS, DLC COMMON EQUIPMENT AND FIBER**  
3 **CABLE SHOULD NOT BE ALLOCATED TO THE SERVICES USING**  
4 **THOSE FACILITIES ON THE BASIS OF DS0 EQUIVALENTS.**  
5 **INSTEAD, THEY ARGUE THAT ALLOCATION SHOULD BE BASED ON**  
6 **PAIR EQUIVALENTS. (PAGES 35-39) DO YOU AGREE WITH THEIR**  
7 **APPROACH?**

8  
9 A. Absolutely not. First of all, I continue to believe the best approach of assigning  
10 investment of items, such as DLC common equipment and fiber facilities, is on the  
11 basis of DS0 equivalents. This methodology represents a reasonable approach and,  
12 in many cases, the equipment is actually sized based on DS0 equivalents. While  
13 one could debate the assignment of these costs, the fact is that the BSTLM uses  
14 DS0 equivalents not only to assign “fixed” investments among services, but it also  
15 uses DS0 equivalents to size the equipment. Therefore, as Mr. Pitkin and Mr.  
16 Donovan point out on page 39 of their testimony, they have indeed adjusted down  
17 the capacity requirements of the DLC optical equipment. To illustrate my point, a  
18 DS1 requires 24 DS0s or 2 pairs. Using 2 lines instead of 24 DS0s as input, the  
19 BSTLM would size the equipment to support only 2 DS0s, not the 24 DS0s that  
20 are really required. The bottom line is that this adjustment proposed by Mr. Pitkin  
21 and Mr. Donovan understates the equipment requirements generated by the  
22 BSTLM and therefore, understates the costs. For this reason alone, this  
23 Commission should disregard their results from the model.

24

25 **Q. IN DISCUSSING BELLSOUTH’S ISDN COSTS, MS. MURRAY**

1       **MAINTAINS THAT THE BELLSOUTH STUDY INAPPROPRIATELY**  
2       **ASSUMES THAT HIGHER BANDWIDTH OF DIGITAL LOOPS**  
3       **RESULTS IN HIGHER COSTS OF CENTRAL OFFICE AND REMOTE**  
4       **TERMINAL COSTS. IS SHE CORRECT?**

5

6    A. No. BellSouth's study correctly apportions a greater cost of DLC equipment to  
7       ISDN, which requires greater bandwidth requirements, than to POTS-type services.  
8       As Ms. Murray notes, "each of the incumbents" has done this. This is not a  
9       "BellSouth" methodology. Cost studies typically assign DLC common costs and  
10      fiber costs on the basis of DS0 equivalents. Sprint's methodology basically mirrors  
11      what BellSouth has done with respect to this issue.

12

13   **Q. ON PAGE 26 OF HER TESTIMONY, MS. MURRAY COMPARES**  
14   **BELLSOUTH'S RECURRING COST FOR A 2-WIRE ANALOG SERVICE**  
15   **LEVEL ("SL")1 LOOP TO THE COST OF AN UNBUNDLED COPPER**  
16   **LOOP. IS HER COMPARISON VALID?**

17

18   A. No. First, if such a cost comparison were to be made, it should be a comparison of  
19      an SL2 (designed loop) and the unbundled copper loops (short and long) both  
20      designed. By using an SL1 loop, Ms. Murray distorts the example. Second, Ms.  
21      Murray uses another *inappropriate comparison on page 39* where she states that  
22      "BST proposes a statewide average monthly recurring rate for ISDN-capable loops  
23      of \$29.80, about 67% more expensive than BST's proposed charge for analog  
24      loops." Her math is only correct if one compares an SL1 (non-designed loop) to  
25      the ISDN-capable loop, which is an invalid comparison.



1

2 **Q. BELLSOUTH'S COST STUDY INCLUDES SEPARATE COSTS FOR A**  
 3 **SHORT (<18KFT) UNBUNDLED COPPER LOOP ("UCL") AND FOR A**  
 4 **LONG (>18KFT) UNBUNDLED COPPER LOOP. FROM A COST**  
 5 **METHODOLOGY PERSPECTIVE, IS THIS RATE STRUCTURE**  
 6 **APPROPRIATE?**

7

8 A. Yes. As I have explained earlier in my testimony, a special run was made in the  
 9 BSTLM based on the assumption that all potential xDSL customer locations are  
 10 served via copper, the Copper Scenario. Two investment reports are then  
 11 generated from the BSTLM, one that reflects loops less than 18Kft (UCL-Short)  
 12 and one that reflects loops greater than 18kft in length (UCL-Long).

13

14 Everyone recognizes that loop length is a major cost driver. However, this is  
 15 especially true for loops that are 100% copper, where digital loop carrier costs and  
 16 fiber cable costs are not considered in the calculations. In fact, the cost of copper  
 17 loops increases practically linearly with length. This relationship can be seen from  
 18 the information presented below:

19

20	<b>Loop</b>	<b>Average Length</b>	<b>Cost</b>
21	2-wire UCL-Short	10,139 feet	\$18.06
22	2-wire UCL – Long	42,844 feet	\$53.24
23			
24	4-wire UCL – Short	8,380 feet	\$26.05
25	4-wire UCL – Long	40,140 feet	\$93.13

1

2 (The length data was obtained from BSTLM reports.)

3

4 Because there is a distinct difference between the long and the short versions of the  
5 UCL, costs should be developed that reflect this fact. Thus, this is not a “pricing  
6 scheme” as Ms. Murray alleges on page 24, but instead it is a definite reflection of  
7 the physical make-up of the loop. Therefore, this Commission should ignore Ms.  
8 Murray’s recommendation that it “reject BST’s proposed distinctions based on  
9 loop length.” (Murray testimony, Page 24)

10

11 **Q. MR. PITKIN AND MR. DONOVAN HAVE PROPOSED USING INPUTS**  
12 **FROM THE COMMISSION’S DECISION IN THE UNIVERSAL SERVICE**  
13 **FUND (“USF”) PROCEEDING. IS THIS ADVISABLE?**

14

15 A. No. While Mr. Pitkin’s and Mr. Donovan’s attempt to limit the number of areas of  
16 potential controversy by relying on previous Commission decisions is laudable, an  
17 important distinction between the current proceeding and the Universal Service  
18 Fund proceeding exists. Universal Service Funding is designed to set a subsidy  
19 level for all providers, while the UNE proceeding is designed to set permanent rates  
20 for BellSouth. In its discussion of the use of forward-looking economic costs with  
21 respect to USF, the FCC stated that, “long run, forward-looking economic cost  
22 best approximates the costs that would be incurred by an efficient carrier in the  
23 market.” (Paragraph 224, Report and Order Docket No. 96-45) With that  
24 objective in mind, this Commission issued its USF Order relying heavily on input  
25 from Sprint, considered by this Commission to be representative of an “efficient

1 provider.” On the other hand, the rates set here should be set at a level that  
2 compensates BellSouth (not Sprint) for the use of BellSouth’s (not Sprint’s)  
3 network.

4  
5 In fact, the FCC’s Third Report and Order alluded to this subtle, but important  
6 difference; the “benchmark of forward-looking cost and existing network design  
7 most closely represents the incremental costs incumbents actually expect to incur in  
8 making network elements available to new entrants.” (Paragraph 685, FCC Third  
9 Report and Order, emphasis added) The Eight Circuit Court’s recent ruling only  
10 underscores the need to use inputs that reflect the cost to BellSouth of the use of  
11 BellSouth’s network and not some hypothetical efficient provider.

12

13 **Q. ON PAGES 28-29 OF THEIR TESTIMONY, MR. PITKIN AND MR.**  
14 **DONOVAN PROPOSE THAT THE BSTLM BE MODIFIED TO CHOOSE**  
15 **THE LEAST COST VENDOR FOR DLC PLACEMENTS? PLEASE**  
16 **COMMENT.**

17

18 A. Programming the model to evaluate alternative vendors for each DLC site once the  
19 site was sized would be a nightmare. BellSouth’s solution simplified the execution  
20 of the program without significantly sacrificing the accuracy of the results. Using  
21 BellSouth’s methodology, if one were to examine the cost of each DLC site  
22 individually, some would potentially be high, but others would be lower than if one  
23 were to use the methodology proposed by Mr. Pitkin and Mr. Donovan. On the  
24 average, however, the costs would be reflective of the cost BellSouth is expected to  
25 incur on a going-forward basis.

1

2 **Q. SINCE BELLSOUTH DID NOT FULFILL THEIR REQUEST TO**  
3 **REPROGRAM THE BSTLM, MR. PITKIN AND MR. DONOVAN**  
4 **DECIDED TO USE ONLY ONE VENDOR. PLEASE COMMENT.**

5

6 A. Mr. Pitkin's and Mr. Donovan's single-vendor approach is unreasonable because  
7 BellSouth will be employing multiple vendors on a going-forward basis to deploy  
8 its network and to provision unbundled network elements. Multiple vendors  
9 generate competition and the beneficial discounts obtained because of that  
10 competition are reflected in the investments BellSouth presented in its cost study.  
11 Additionally, exclusive contracts may result in a price above the market-driven  
12 price in later years. Also, there is no guarantee the price for the life of the contract  
13 will always be the lowest available. At some point in time, switching to the low  
14 cost provider may be more costly due to equipment compatibility issues.

15

16 Another aspect of using more than one vendor is accessibility to the supplier. Use  
17 of multiple vendors ensures BellSouth will be able to obtain the necessary  
18 equipment in a timely manner. Single-sourced operations potentially suffer from  
19 lack of parts due to delays in equipment delivery. Anyone who construes a  
20 forward-looking "least cost" methodology to mandate choosing only one vendor or  
21 weighting more toward the "least-cost" vendor misinterprets this guideline. Only  
22 by having multiple vendors can equipment prices be driven to the levels BellSouth's  
23 cost studies reflect and only by considering the on-going distribution between  
24 vendors that BellSouth actually utilizes can costs reflect BellSouth's incurred costs  
25 and ensure adequate equipment supply.

1

2 **Q. AFTER THEY MADE ALL OF THEIR ADJUSTMENTS, MR. PITKIN**  
3 **AND MR. DONOVAN PRODUCED A COST OF \$7.42 FOR A 2-WIRE**  
4 **UNBUNDLED COPPER LOOP (SL1). PLEASE COMMENT.**

5

6 A. This result should definitely call into question the adjustments AT&T and MCI  
7 WorldCom are proposing. The last time this Commission established the rate of an  
8 unbundled 2-wire loop in Florida for BellSouth, the Commission used \$17.00.  
9 There is no reason that Messrs. Donovan and Pitkin offer for the cost of a 2-wire  
10 loop to decline so precipitously in such a short period of time. Obviously,  
11 something is very wrong with the revisions made to the model and inputs proposed  
12 by Mr. Pitkin and Mr. Donovan.

13

14 **Q. SPRINT WITNESS KENT DICKERSON DISCUSSES BELL SOUTH'S**  
15 **DEVELOPMENT OF COSTS FOR HIGH CAPACITY LOOPS. PLEASE**  
16 **RESPOND TO HIS CONCERNS.**

17

18 A. It appears that Mr. Dickerson does not have any problem with the manner in which  
19 BellSouth developed its material prices nor with the underlying study methodology.  
20 On page 17, however, he states "I have a concern with the weighting factors  
21 (Probability of Occurrence) used to determine the frequency of occurrence of each  
22 Synchronous Optical Network (SONET) Terminal type." I will address his  
23 concerns. On page 22, he displays a chart that compares BellSouth's inputs to  
24 Sprint's inputs for these items:

25

1		<b>BST Local</b>	<b>Sprint</b>
2		<b>Loop</b>	
3	<b>OC - 3</b>	75%	64.58%
4	<b>OC - 12</b>	20%	22.92%
5	<b>OC - 48</b>	5%	12.50%

6

7 Mr. Dickerson laments that “BellSouth has a much greater occurrence of Urban  
8 Wire Centers” and thus, should have at least comparable distributions to Sprint.

9 Mr. Dickerson fails to realize that BellSouth has two distinct offering, Local Loops  
10 and Local Channels. If one introduces both types of loops into Mr. Dickerson’s  
11 chart, it is apparent that the two companies are using basically the same inputs.

12

13		<b>BST Local</b>	<b>BST Local</b>	<b>BST</b>	<b>Sprint</b>
14		<b>Loop</b>	<b>Channel</b>	<b>Average</b>	
15	<b>OC - 3</b>	75%	55%	65.0%	64.58%
16	<b>OC - 12</b>	20%	25%	22.5%	22.92%
17	<b>OC - 48</b>	5%	20%	12.5%	12.50%

18

19 Of course while I have used a straight average rather than a weighted average, this  
20 straightforward analysis indicates that the disparity about which Mr. Dickerson is  
21 concerned should be no concern at all.

22

23 **Q. ON PAGE 19, MR. DICKERSON STATES THAT “NO EXPLANATION IS**  
24 **PROVIDED FOR THE EQUIPMENT UTILIZATION LEVELS” FOR**  
25 **HIGH CAPACITY LOOPS. PLEASE COMMENT ON THIS**

1       **STATEMENT.**

2

3   A. Utilization is developed and applied in the SONET model and does vary based on  
4       network functionality, transmission level, and study area. Utilization is multiplexed  
5       down to accommodate the required transmission level and the formulas are shown  
6       in the UTIL table in the SONET model. BellSouth obtained utilization data from  
7       the Loop Engineering Information System ("LEIS").

8

9   **Q. FCTA WITNESS WILLIAM BARTA SUGGESTS CERTAIN INPUT**  
10   **MODIFICATIONS TO THE BSTLM. PLEASE COMMENT.**

11

12   A. Mr. Barta recommends that BellSouth's cost study be "modified to include two  
13       additional parties sharing pole facilities." (Page 27) *If I understand this correctly,*  
14       Mr. Barta is proposing that BellSouth incur 1/3 of the pole costs. Even though the  
15       model now allows structure sharing percentages as an input, BellSouth's filed cost  
16       study still relies on a loading factor to determine pole investment associated with  
17       aerial cable. Any structure sharing is reflected in the plant specific factors in the  
18       form of rents received. However, based on a review of the number of poles  
19       BellSouth owns, the number of non-BellSouth poles to which BellSouth attaches,  
20       and rents, the percentage should be closer to 40%, not the 33% proposed by Mr.  
21       Barta.

22

23       On page 28, Mr. Barta implies BellSouth "deploy[ed] facilities to satisfy demand  
24       that is not expected to materialize." If this were true, the result would be low  
25       utilization rates, which is not the case with the BSTLM. Furthermore, as I

1 explained in my direct testimony, the BSTLM builds to existing customer locations,  
2 thus, the demand is already there! Therefore, Mr. Barta's concerns with respect to  
3 utilization are unfounded.

4

5 **FACTORS**

6 **Q. MR. DONOVAN AND MR. PITKIN CLAIM THAT BELLSOUTH'S COST**  
7 **CALCULATIONS IMPROPERLY DOUBLE COUNT THE EFFECTS OF**  
8 **INFLATION. ARE THEY CORRECT?**

9

10 A. No. On page 17 Mr. Donovan and Mr. Pitkin state, "The cost of capital employed  
11 by BellSouth, the Commission, and Mr. Hirshleifer are 'nominal' costs of capital.  
12 Nominal costs of capital compensate investors not only for the time value of money  
13 and business and financial risk, but also for the effects of inflation." They then  
14 claim that because of this BellSouth's proposed costs double-count inflation  
15 because a unit-cost inflation factor is also applied to the material investment  
16 generated by the BSTLM.

17

18 Mr. Donovan and Mr. Pitkin have ignored the fact that there are two distinct types  
19 of inflation that impact the cost BellSouth will incur; one to compensate investors  
20 for the use of their funds and the other to capture the increase/decrease in cost of  
21 the plant itself. The cost of capital, as they state, compensates investors for the use  
22 of their funds and of course, this must consider inflation effects. On the other hand,  
23 the loop material costs are the actual costs BellSouth incurs in running the business.  
24 To imply that the costs BellSouth faces in purchasing plant are immune to inflation  
25 is ridiculous. BellSouth must pay both for its facilities and to reimburse its



1 investors.

2

3 AT&T witness Mr. Hirshleifer's testimony addresses the appropriate cost of capital,  
4 period. Nowhere does he state that it is incorrect to apply inflation to the loop  
5 material costs. Furthermore, Mr. Hirshleifer cites work by Thomas Copeland in his  
6 testimony.

7

8 The following discussion from Mr. Copeland's economic text supports my position:

9

10 Source: "Financial Theory and Corporate Policy", 3<sup>rd</sup> edition by Thomas E.  
11 Copeland and J. Fred Weston, 1988 Addison-Wesley Publishing Company, page  
12 62-63:

13

14 The market data utilized in the estimated current capital costs will  
15 include a premium for anticipated inflation. But while the market  
16 remembers to include an adjustment for inflation in the discount  
17 factor, the cash flow estimates used by the firm in the capital  
18 budgeting analysis may fail to include an element to reflect future  
19 inflation. Given that the cost of capital (observed using market  
20 rates of return) already includes expected inflation, the decision  
21 maker can correct for inflation either (a) by adding an estimate of  
22 inflation to the cash flows in the numerator or (b) by expressing the  
23 numerator without including an adjustment for inflation and  
24 removing an inflationary factor from the market rate in the  
25 denominator... Sound analysis requires that the anticipated inflation

1 rate be taken into account in the cash flow estimates.

2

3 Thus when anticipated inflation is properly reflected in both the  
4 cash flow estimates in the numerator and the required rate of return  
5 from market data in the denominator, the resulting NPV calculation  
6 will be in both real and nominal terms. This was noted by Findlay  
7 and Frankle [1976] as follows: "Any properly measured, market-  
8 determined wealth concept is, simultaneously, *both nominal and*  
9 *real*. NPV, or any other wealth measure gives the amount for  
10 which one can 'cash out' now (nominal) and also the amount of  
11 today's goods that can be consumed at today's prices (real)" (p.84).

12 Thus if inflation is reflected in both the cash flow estimates and in  
13 the required rate of return, the resulting NPV estimate will be free  
14 of inflation bias.

15

16 Clearly, according to the economic theory relied upon by AT&T and MCI's own  
17 expert witness, accounting for inflation both in the cost of capital and in the cash  
18 flow analysis is the correct methodology. Thus, BellSouth's reflection of inflation  
19 both in the investment calculation and as a consideration in establishing the cost of  
20 capital is valid.

21

22 **Q. SPRINT WITNESS KENT DICKERSON ALSO ATTEMPTS TO**  
23 **DISCREDIT BELL SOUTH USE OF INFLATION FACTORS. DOES HE**  
24 **HAVE A VALID ARGUMENT?**

25

1 A. No. Let me note that Mr. Dickerson does not question the appropriateness of an  
2 inflation factor. Rather, he alleges that the methodology BellSouth uses to  
3 determine the inflation factors for use with material prices involves adding a loading  
4 factor to inflation and then subtracting productivity. Unfortunately, Mr. Dickerson  
5 has confused the process by which BellSouth projects plant specific expenses for  
6 future years with how the inflation adjustment factor that is used in conjunction  
7 with material prices is developed. In determining future plant specific expenses,  
8 BellSouth appropriately uses the following components to project a growth rate;  
9 load (percent change in average access lines in service), inflation related to labor,  
10 and productivity offset. This calculation appropriately recognizes the fact that  
11 expenses related to maintenance; i.e. plant specific expenses, are highly labor  
12 intensive.

13

14 The inflation factor is developed to recognize the increase/decrease in prices  
15 BellSouth pays for physical pieces of plant on average over a three-year period.  
16 Exhibit DDC-9 (from file InflanLv2.xls in the BellSouth cost study) illustrates that  
17 this calculation is nothing more than a straight average of the cumulative effect of  
18 inflation over the study period.

19

20 **Q. A NUMBER OF PARTIES RAISE CONCERNS WITH BELLSOUTH'S**  
21 **RELIANCE ON IN-PLANT FACTORS TO DETERMINE ENGINEERING**  
22 **AND INSTALLATION COSTS. PLEASE RESPOND.**

23

24

25

1 A. BellSouth utilizes in-plant loading factors to add engineering and installation labor  
2 and miscellaneous equipment to the material price and/or vendor installed price.  
3 That is, the in-plant loading converts the material price to an installed investment.

4  
5 On pages 23-26 of their testimony, Mr. Donovan and Mr. Pitkin allege BellSouth's  
6 outside plant in-plant factors overstate the costs of larger sized cables. While the  
7 relationship of the combined costs of installation labor, exempt material, sales tax  
8 and engineering to total material costs may not be perfectly linear, the use of in-  
9 plant factors produces representative cost results when viewed on a total cable  
10 placement basis. While the use of in-plant factors may potentially overstate, to  
11 some degree, the costs for large size cables, Mr. Donovan and Mr. Pitkin  
12 conveniently disregard the fact that if one believes that in-plants overstate the cost  
13 of large sized cables, then the corollary is also true; i.e., that the in-plants  
14 potentially understate, to some degree, the costs for small size cables.

15  
16 Rebuttal Exhibit DDC-10 depicts: 1) the cable route feet placed by cable size  
17 produced by the BSTLM and 2) the actual cable route feet placed by cable size  
18 during 1998 as derived from the Vintage Retirement Unit Cost ("VRUC") extract.  
19 For copper cable placement, the following points are relevant:

20  
21 1) The 1998 VRUC data, upon which BellSouth's in-plants are based, reflects  
22 somewhat of a bell-shaped curve with most copper placement related to 25 pair  
23 (12%), 50 pair (26%), 100 pair (21%), 200 pair (14%), and 300 pair (7%). Only  
24 20% of BellSouth's 1998 placements relate to cable sizes of 400 pair and larger.  
25 The in-plant factors are theoretically based on the composite total installed and

1 material costs for the universe of cables placed in 1998.

2

3 2) The network placed by the BSTLM assumes a greater incidence of small cable  
4 placement; i.e., 25 pair (42%), 50 pair (14%), 100 pair (9%), 200 pair (12%), 300  
5 pair (5%) with about 18% of the placements related to cable sizes of 400 pair and  
6 larger.

7

8 Thus, if the theory advanced by Mr. Donovan and Mr. Pitkin were true, BellSouth  
9 has understated the cost of its copper loop network since the BSTLM has projected  
10 a greater percent of small cable placements than what was used to develop the  
11 factors.

12

13 Referencing page 25 of their testimony, the statement that "the true cost of placing  
14 a 400-pair cable is not significantly higher than the cost of placing a 25-pair cable"  
15 may be, as literally written, technically true. (Emphasis added.) However, the  
16 implication that the total cost of placing a 400-pair cable into service (including  
17 engineering, exempt material, and especially, splicing costs), is not significantly  
18 higher than the cost of putting a 25-pair cable into service is very misleading.

19

20 Also on page 25, Mr. Donovan and Mr. Pitkin advocate the use of Standard Time  
21 Increments in lieu of in-plant factors for developing installation costs. While  
22 Standard Time Increments are available, such an approach should only be used in  
23 an environment where detailed engineering information is available for the specific  
24 network segment being installed. The BSTLM does not contain all of the necessary  
25 engineering criteria; and if Standard Time Increments were employed, numerous

1 assumptions would have to be made based on typical situations or probable  
2 occurrences. The cost results would be subject to some of the same frailties that  
3 Mr. Donovan and Mr. Pitkin criticize in the use of BellSouth's in-plant process.  
4 Once again, BellSouth's in-plant factors produce representative cost results when  
5 viewed from a total cable placement basis, and whatever distortions may be present  
6 from a "size of cable placed" perspective are minimal.

7

8 **Q. SPRINT WITNESS KENT DICKERSON ALSO DISCUSSES**  
9 **BELLSOUTH'S USE OF IN-PLANT FACTORS ON PAGES 7-14 OF HIS**  
10 **TESTIMONY. PLEASE RESPOND TO HIS COMMENTS.**

11

12 A. Mr. Dickerson asserts that the application of BellSouth's outside plant in-plant  
13 factors overstates the "per pair" costs of wire centers in higher density areas and  
14 understates the "per pair" cost of wire centers in rural areas. Mr. Dickerson also  
15 implies that BellSouth makes no distinction between the type of facility being  
16 studied; and therefore, engineering and installation costs are loaded equally fiber  
17 and copper. He also implies that BellSouth's use of in-plants causes projected  
18 installation costs to vary linearly with the number of pairs placed.

19

20 Mr. Dickerson is wrong. First, BellSouth developed unique in-plant factors for  
21 each type of cable (aerial copper, aerial fiber, underground copper, underground  
22 fiber, buried copper, buried fiber, etc.) based on costs incurred during 1998 in  
23 placing hundreds of thousands of cable sheath feet. Since BellSouth developed  
24 unique in-plants for each type of cable, it is obvious that BellSouth does not load  
25 engineering and installation costs equally to all loops ignoring the type of cable,

1 fiber or copper, as alleged by Mr. Dickerson.

2

3 Second, as mentioned previously, BellSouth in-plant factors are designed to  
4 convert a material cost into a fully installed, ready-for-service cost; and therefore,  
5 they do not vary linearly with the number of pairs placed as alleged by Mr.  
6 Dickerson. It is true, however, that BellSouth's installed, ready-for-service costs  
7 vary linearly with the material costs of the specific cable type. Whatever distortions  
8 that may be present from a "wire center density" or "size of cable placed"  
9 perspective are minimal in BellSouth's cost study.

10

11 Mr. Dickerson compares potential cost differences based at the extremes of "cable  
12 sizes." The reality is that actual cable placements, generated by the BSTLM,  
13 basically follows somewhat of a bell shaped curve with the great preponderance  
14 (over 75%) of cable placement affecting only 25 pair, 50 pair, 100 pair, and 200  
15 pair cable placements. (Refer to Rebuttal Exhibit DDC-10.) BellSouth almost  
16 never places the extreme cable sizes Mr. Dickerson uses as examples in his  
17 testimony, which calls into serious question the usefulness of his analysis.

18

19 **Q. MR. DONOVAN AND MR. PITKIN STATE THAT BELLSOUTH'S**  
20 **ENGINEERING AND INSTALLATION COSTS ARE OVERSTATED FOR**  
21 **DIGITAL LOOP CARRIER SYSTEMS. (PAGES 27-28) ARE THEIR**  
22 **CONCERNS JUSTIFIED?**

23

24 A. No. BellSouth's hardwire and plug-in factors were developed using hardwire and  
25 plug-in costs actually experienced during 1998 in placing 257C (DLC) equipment

1 into service. It does not reflect some theoretical approach to installing a DLC  
2 system with "cook-book" like engineering, placement, splicing, and testing  
3 components, but rather it reflects the real world experience of actually placing  
4 hundreds of these systems into service. The Donovan/Pitkin plug-in and hardware  
5 factors simply bear no resemblance to the real world costs associated with the  
6 complete job of placing digital subscriber line carrier into service. While we both  
7 agree on the relative portion of total costs related to engineering functions (about  
8 3½ % of total costs), Mr. Donovan and Mr. Pitkin approximate installation costs at  
9 about 6 % of total installed costs while BellSouth attributes more than twice that  
10 amount to installation activities. Additionally, Mr. Donovan and Mr. Pitkin appear  
11 to completely ignore such small, but necessary, in-service costs as sales taxes, right  
12 of way costs, license/permit fees, etc. The fact of the matter is that the  
13 Donovan/Pitkin derived hardware and plug-in factors simply do not represent the  
14 real costs associated with the complete job of placing digital subscriber line carrier  
15 into service.

16

17 **Q. MR. DONOVAN AND MR. PITKIN ALSO QUESTION THE VALIDITY**  
18 **OF USING LOADING FACTORS TO REFLECT THE LAND AND**  
19 **BUILDING COSTS ASSOCIATED WITH CENTRAL OFFICE**  
20 **EQUIPMENT. (PAGES 43-44) PLEASE REPLY TO THEIR COMMENTS.**

21

22 A. Mr. Donovan and Mr. Pitkin allege that the use of central office-related land and  
23 building investment loadings overstate the land and building investment associated  
24 with plug-in cards. While two plug-in cards of the same size should require  
25 relatively the same amount of central office-related land and building space, there is



1 no feasible way to measure the exact size of every conceivable type of plug-in card  
2 and other central office-related equipment.

3

4 While the use of BellSouth's land and building loading factors potentially overstate  
5 the costs for "high cost/small size" central office equipment, they also potentially  
6 understate the costs for "low cost/large size" central office equipment (a point  
7 ignored by Mr. Donovan and Mr. Pitkin). For the preponderance of central office-  
8 related items, the simple relationship of central office-related land & building  
9 investment to central office-related equipment investment appears to be a  
10 reasonable allocation method for recovering the costs of central office-related land  
11 and building investment. This methodology produces representative cost results  
12 when viewed from a total-central office equipment perspective.

13

14 **Q. ARE THERE OTHER LOADINGS THAT BELLSOUTH USED WHICH**  
15 **HAVE BEEN CRITICIZED?**

16

17 A. Yes. On pages 14-16 of his testimony, Mr. Dickerson implies that BellSouth's pole  
18 and conduit loading factors are based on a fixed installed cost loading per  
19 equivalent pair. He then goes into an exhaustive list of factors that influence the  
20 cost of pole and conduit placement and concludes this section of his testimony by  
21 stating that pole and conduit costs are not and cannot be uniform per pair.

22

23 BellSouth developed its pole and conduit loading factors based on a relationship of  
24 pole investment to aerial cable investment and conduit investment to underground  
25 cable investment, respectively. Obviously, BellSouth's pole and conduit loadings

1 are not based on a fixed installed cost loading per pair. While BellSouth's pole and  
2 conduit loading process does not individually capture each of the items contained in  
3 Mr. Dickerson's exhaustive list of cost drivers, BellSouth's loadings produce  
4 representative cost results when viewed from a total pole and conduit placement  
5 basis. Such loadings obviously do not translate to a uniform per pair amount. The  
6 relationship of pole investment to aerial cable investment and conduit investment to  
7 underground cable investment provides the best practical approach to developing  
8 representative pole and conduit costs.

9

10 **Q. AT&T/MCI WORLDCOM WITNESS MR. DARNELL IMPLIES THAT**  
11 **BELLSOUTH'S EXPENSE AND COMMON COSTS ARE EXCESSIVE.**  
12 **(PAGE 2). IS HIS ASSESSMENT CORRECT?**

13

14 A. No. BellSouth witness Walter Reid addresses Mr. Darnell's comments on  
15 BellSouth's shared and common cost calculations. However, I would like to  
16 respond to several concerns he raises concerning other expense items. First, let me  
17 mention that the 32.75% expense result BellSouth obtained in its calculation of the  
18 cost of a 2-wire loop is not out-of-line, as implied by Mr. Darnell. In its USF  
19 Order, for example, expense constitutes approximately 38% of the cost. In fact,  
20 the HAI model previously endorsed by AT&T produces results with over 30% of  
21 the cost related to expense. In fact, BellSouth's analysis of cost results based on  
22 the HAI model AT&T filed in Tennessee for an unbundled loop reflect that  
23 approximately 44% of the costs are expense related.

24

25 **Q. ON PAGE 10 OF HIS TESTIMONY, MR. DARNELL ALLEGES THAT**

1 **BELLSOUTH IS FILING PLANT SPECIFIC EXPENSES THAT ARE**  
 2 **HIGHER THAN THOSE FILED WITH THE FCC IN 1997 AND 1998.**  
 3 **PLEASE COMMENT.**

4

5 A. First, the plant specific expense factors BellSouth filed with the FCC in 1997 and  
 6 1998 were based on a 1995 base year and a 1997-1999 study period. The factors  
 7 used in the current filing reflect a 1998 base year, projected to a 2000-2002 study  
 8 period. Comparing data of different vintages is illogical.

9

10 Second, Mr. Darnell fails to acknowledge that the factors reflect a relationship  
 11 between two items; expenses and investments. To base his argument on a  
 12 perceived and unsupported decline in expense without addressing the trends in  
 13 investment is inappropriate. Further, as evidenced by the chart presented below,  
 14 only 6 out of the 11 categories of plant referenced by Mr. Darnell are experiencing  
 15 an increase and the majority of those are insignificant.

16

17

18

19

20

21

22

23

24

25

<u>Field Code</u>	<u>Current</u>	<u>1997/1998</u>	<u>Difference</u>
377C	0.0221	0.0400	-0.0179
257C	0.0161	0.0169	-0.0008
357C	0.0133	0.0169	-0.0036
1C	0.0204	0.0179	0.0025
22C	0.0446	0.0558	-0.0112
822C	0.0103	0.0029	0.0074
5C	0.0202	0.0196	0.0006

1	85C	0.0036	0.0032	0.0004
2	45C	0.0462	0.0346	0.0116
3	845C	0.0057	0.0039	0.0018
4	4C	0.0026	0.0033	-0.0007

5

6 Thus, Mr. Darnell's concerns are unfounded and unsupported by any evidence in  
7 his testimony.

8

9 **Q. ON PAGES 8-9, MR. DARNELL ALLEGES BELLSOUTH IS OVER-**  
10 **RECOVERING FOR LAND, BUILDING, AND POWER BECAUSE THE**  
11 **IMPACT OF COLLOCATION WAS NOT CONSIDERED. IS HE**  
12 **CORRECT?**

13

14 A. No. BellSouth does not agree with Mr. Darnell's proposal that BellSouth offset  
15 Land, Building, and Power expense accounts with collocation revenue. While he  
16 contends that the situation is analogous to offsetting pole expenses with pole rent  
17 revenue, the situations are somewhat dissimilar. In the pole expense/rent revenue  
18 example, BellSouth is offsetting a narrowly defined expense category with an  
19 equivalently defined, directly related revenue. Pole attachment rentals are paid to  
20 compensate the receiving party for its cost of providing poles for attachments; there  
21 is a direct, definable relationship between pole maintenance expenses and pole  
22 attachment rent revenue. On the other hand, in the case of collocation revenue,  
23 while it is true that a portion of such revenue compensates BellSouth for power  
24 consumption and building floor space, there are other items of cost recovery related  
25 to collocation revenue. Additionally, a one-for-one direct relationship of

1 collocation revenue with a single expense category does not exist.

2

3 Portions of Land, Building, and Power expense are recovered in the revenue that  
4 BellSouth receives for numerous services/products/elements; however, it would  
5 make little sense to pursue some complicated cost recovery allocation process in  
6 order to account for this fact. Even if, hypothetically, BellSouth was able to  
7 allocate a portion of collocation revenue to each of the involved expense  
8 categories, the level of collocation revenue would be insignificant in terms of  
9 offsetting such expenses. Mr. Darnell's offsetting collocation revenue proposal is  
10 both impractical and irrelevant to the costs of providing UNEs.

11

12 **Q. MR. DARNELL ALSO ALLEGES BELLSOUTH MAY BE OVER**  
13 **RECOVERING COSTS DUE TO ITS CORPORATE COMMUNICATIONS**  
14 **NETWORK. (PAGES 9-10) PLEASE REPLY TO HIS ARGUMENT.**

15

16 A. Mr. Darnell alleges that BellSouth has opportunities for "over recovery" of costs if  
17 adjustments are not made to the "Corporate Communications account" for revenue  
18 contributions from competitive services related to Operator and Signaling services.

19

20 I believe that Mr. Darnell is confused as to the nature of assets and expenses  
21 contained in Account 2123.2000 Company Communications Equipment and  
22 Account 6123.2000 Company Communications Equipment Expenses, respectively.

23 A significant portion of the costs related to these two accounts is allocated to  
24 shared and common costs.

25

1 Account 2123.2000 includes the original costs of stand-alone company  
2 communications equipment costing more than \$2000 and the cost of private branch  
3 exchange and key system intra-systems, including the associated communications  
4 equipment, installed for official company use. Account 2123.2000 is basically  
5 composed of terminal equipment and associated wiring. Account 6123.2000  
6 includes expenses related to equipment classified to Account 2123.2000. The costs  
7 of individual items of stand alone company communications equipment costing  
8 \$2000 or less are included in this account, along with the costs of inside wiring and  
9 labor charges related to such equipment.

10

11 None of the costs of transport related to Operator or Signaling services are  
12 contained in these two accounts; and furthermore, neither account has a direct  
13 relationship to the costs or revenues associated with the provisioning of Operator  
14 or Signaling services. Thus, Mr. Darnell's concerns are without merit.

15

16 **DEAVERAGING**

17 **Q. PLEASE SUMMARIZE THE GENERAL CONSENSUS WITH RESPECT**  
18 **TO WHICH ELEMENTS NEED TO BE DEAVERAGED.**

19

20 A. Sprint appears to be the only party actively advocating that anything beyond local  
21 loops and local channels and combinations, which have local loops and local  
22 channels as components, be deaveraged. Of course, the original stipulation  
23 mandated that sufficient evidence be provided such that the Commission could  
24 review and analyze the results and ultimately decide which elements should be  
25 deaveraged based on geographic cost differentials. BellSouth has done so and has

1 submitted costs at the wire center level for usage, ports, features, and all types of  
2 loops. Additionally, deaveraged costs have been presented for combinations that  
3 involve a local loop.

4

5 Lack of support from any other party for Sprint's proposal should speak volumes.  
6 Sprint has limited its interpretation of how deaveraging should be implemented such  
7 that they have lost focus on the total picture. Yes, switching costs differ by wire  
8 center, but does it make sense to segment these costs when one considers how calls  
9 transverse the network? Since central offices do not work independently, it is  
10 irrational to attempt to isolate central office costs at the wire center level, as Sprint  
11 proposes. Sprint's narrowing of the analysis to a simple question of whether or not  
12 cost differences are present skews the intent of the deaveraging process.

13

14 **Q. SPRINT WITNESSES, MR. COX, MR. DICKERSON, AND MR. SICHTER,**  
15 **PRESENT ARGUMENTS THAT SWITCHING AND INTEROFFICE**  
16 **TRANSPORT SHOULD BE DEAVERAGED. PLEASE COMMENT.**

17

18 A. While both switching and interoffice transport may display cost differences at the  
19 wire center level, wire center level costs are not the only factors that need to be  
20 considered with respect to geographic deaveraging. The same argument that I  
21 discussed with respect to switching holds for interoffice transport; i.e., you must  
22 consider the network as a whole and look logically at the ramifications of  
23 deaveraging. For example, for interoffice transport, one end of the circuit (A) may  
24 be in an urban area and the other end (B) in a rural area. Then question becomes,  
25 which end of the circuit should be considered the cost driver, A or B? Both A and

1 B terminations must be considered since the traffic load riding the circuit is  
2 determined by both ends, not just one.

3

4 Another issue, totally ignored in Sprint's testimony, is the question of deaveraging  
5 combinations when components that comprise the combination fall into different  
6 zones. For example consider a loop/port combination. If this Commission rules  
7 that the loop cost should drive the combination to its zone, then potentially two  
8 ports (if ports are deaveraged) that reside in the same switch, one unbundled and  
9 one in combination, would be rated differently. This pricing schedule makes no  
10 sense.

11

12 This argument extends to EELs. The problems I discussed with loop/port  
13 combinations would also exist here; a dedicated interoffice DS1 could have one rate  
14 when sold alone and another when sold in combination. Again, this makes no  
15 sense.

16

17 Another factor ignored by Sprint is one of implementation; rating, administration,  
18 and billing of UNEs that potentially could change based on how they are used; i.e.,  
19 whether they are sold as stand-alone UNEs or in combination! This nightmare  
20 expands if one considers that BellSouth offers 19 unbundled loops, 7 unbundled  
21 ports, and 9 IOF UNEs. This does not even consider the potential permutations of  
22 these elements to create combinations. Now multiply each of these by over 200  
23 wire centers!

24

25 With respect to deaveraging, I'm advocating that the Commission consider more



1 than the mere cost results. Logic needs to be applied. BellSouth maintains, and  
2 most parties agree, that the loop is the major cost driver and only the loop should  
3 be deaveraged. Rates for other UNEs should remain at the statewide level.

4

5 NTW/INC

6 **Q. PLEASE DESCRIBE WHAT BELLSOUTH INCLUDED IN THE COST**  
7 **DEVELOPMENT OF UNBUNDLED NETWORK TERMINATING WIRE**  
8 **(“UNTW”) AND UNBUNDLED INTRA-BUILDING CABLE (“UINC”).**

9

10 A. The recurring cost of UNTW reflects two types of expenses that BellSouth has  
11 expressed on a recurring basis; network terminating wire (“NTW”) maintenance  
12 expense and expense related to subscriber line testing. The nonrecurring costs  
13 reflect labor costs and the actual access terminal costs. The access terminal is  
14 typically located next to a garden terminal or in a wiring closet terminal, whose cost  
15 does not exceed \$2,000 and thus is classified as an expense item.

16

17 UINC recurring costs reflect the NTW components as well as the costs associated  
18 with the intra-building cable (52C), building terminal (12C), and distribution  
19 terminal (52C) are included. The capital investments were developed from an  
20 extract from the BSTLM. The nonrecurring costs reflect the labor associated with  
21 provisioning UINC. Note that the point at which the ALEC gains access to  
22 BellSouth’s intra-building cable is not included in this calculation. Rather it is  
23 included in elements A.2.19 and A.2.20.

24

25 **Q. ON PAGE 7 OF HER TESTIMONY, AT&T/MCI WORLDCOM WITNESS**

1       **BRENDA KAHN COMPARES BELLSOUTH'S UNBUNDLED INTRA-**  
2       **BUILDING CABLE ("UINC") COSTS TO THE RECURRING COST OF A**  
3       **2-WIRE LOOP. IS SUCH A COMPARISON VALID?**

4

5    A. No. Ms. Kahn's comparison is invalid for a number of reasons. First, she is  
6       comparing apples-to-oranges. If one desired to make a comparison, the valid  
7       comparison would be INC costs versus 2-wire loop costs for those loops that have  
8       intra-building cable. Second, the \$3.90 BellSouth calculated is for a specific  
9       unbundled element, which makes a comparison to other elements inappropriate. If  
10      an ALEC orders UINC, the cost should not be spread over all loops, but should  
11      stand on its own.

12

13   **Q. ON PAGE 14, MS. KAHN STATES THAT "BELLSOUTH INCLUDES**  
14       **TWO TERMINALS IN THE BUILDING EQUIPMENT ROOM." IS SHE**  
15       **CORRECT?**

16

17    A. No. BellSouth does not include two terminals in the building equipment room  
18       element (A.2.20). The input sheet to file FLUSL.xls reflects material costs that  
19       include one 25-pair connecting block, bridging clips, backboard, and wire guides.  
20       However, if Ms. Kahn is implying that BellSouth also includes the cost of a  
21       terminal in the recurring cost associated with INC, then she is correct. This is  
22       BellSouth's terminal and the one in the building equipment room is the ALEC's  
23       point of access, two separate items that are required thus, two costs. BellSouth  
24       witness Mr. Milner explains why this arrangement ensures the integrity of  
25       BellSouth's network and allows for a single point of contact for ALECs.

1

2 **Q. MS. KAHN IMPLIES BELLSOUTH RELIES ON AN “EMBEDDED COST**  
3 **ANALYSES” WHEN DEVELOPING INPUTS SUCH AS DEPRECIATION**  
4 **AND COST OF CAPITAL. (PAGE 19-20) IS SHE CORRECT?**

5

6 A. No. Ms. Kahn offers no support for her statement, which is an obvious attempt to  
7 raise concern where none is warranted. Depreciation rates and cost of capital  
8 inputs have been debated in Phase I of this docket. BellSouth will abide by the  
9 Commission’s ruling, thus, Ms. Kahn’s point is moot. If she desired to review  
10 BellSouth’s proposed inputs, the BellSouth Cost Calculator incorporates these  
11 values and are easily accessible.

12

13 **Q. WHY IS SUBSCRIBER LINE TESTING VALID FOR INC AND NTW?**

14

15 A. Subscriber line testing is a generic cost applied to all loop and sub-loop elements.  
16 This cost reflects the activities required to determine the condition of plant on a  
17 routine basis, prior to assignment of facilities, during trouble reports, or corrective  
18 action. Since BellSouth still owns the network terminating wire, this function is  
19 still needed. The method BellSouth utilizes to determine this expense is to divide  
20 the annual expense by the average number of access lines and then to divide by 12  
21 to reflect a recurring cost. Since the expense is spread over all loops, all loops,  
22 including sub-loops, should bear the cost. Also, BellSouth has excluded these  
23 expenses from the calculation of the plant specific factor in order to directly  
24 assigned them on a per loop basis.

25

1 **Q. COALITION WITNESS MARK STACY CONTENDS THAT**  
2 **BELLSOUTH'S COST STRUCTURE FOR INC ACCESS IS IN**  
3 **VIOLATION OF THE FCC'S ADVANCED SERVICES ORDER. (PAGES**  
4 **20-23) IS THIS TRUE?**

5

6 A. No. The Advanced Services Order was designed to address fixed costs that could  
7 potentially benefit multiple carriers, including ALECs and the incumbent. Access  
8 terminals for INC are dedicated to a particular ALEC. Thus, multiple ALECs  
9 cannot utilize (benefit from) the placement of that terminal. BellSouth's structure  
10 reflects a feasible means of reflecting anticipated demand in a multi-unit location.

11

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

13

14 A. Yes.

15

16

17

18

19

20

21

22

23

24

25

1 MR. ROSS: Thank you, Mr. Chairman.

2 BY MR. ROSS:

3 Q Ms. Caldwell, do you have a summary of your  
4 testimony?

5 A Yes, I do.

6 Q Can you please give it at this time?

7 A Yes. Good morning.

8 CHAIRMAN DEASON: Just one second. Did we  
9 insert the testimony into the record? If we did not, just  
10 to clarify, the testimony, without objection, will be  
11 inserted into the record.

12 MR. ROSS: Thank you, Mr. Chairman.

13 REPORTER'S NOTE: (For convenience of the record, Ms.  
14 Caldwell's prefiled direct and rebuttal testimony was  
15 inserted at Page.)

16 A All right. Good morning, the purpose of my  
17 testimony is to support the BellSouth cost studies that  
18 provide costs for numerous unbundled network elements or  
19 UNEs. This Commission has previously approved permanent  
20 rates for UNEs in arbitration.

21 However, the Commission's task in this  
22 proceeding is to revisit those rates to establish  
23 permanent rates for the new UNEs required by the FCC's 319  
24 UNE remand order, including combinations, and to adopt  
25 deaveraged UNE rates where appropriate.

1           First, let me discuss some general underlying  
2 principles and assumptions in the BellSouth cost studies.  
3 BellSouth's studies were developed to comply with the  
4 FCC's Telric methodology as it existed prior to the Eighth  
5 Circuit's July 18th, 2000, ruling.

6           Although the immediate impact of the Eighth  
7 Circuit's decision is not known at this time, BellSouth's  
8 cost studies are forward-looking and based on an efficient  
9 network. The Telric economic cost filed by BellSouth  
10 include direct cost of provisioning each UNE as well as a  
11 reasonable allocation of shared in common cost.

12           In order to conduct these cost studies,  
13 BellSouth relied upon various cost models, some of them  
14 familiar to this Commission, and some of them new. One of  
15 the new models is the BellSouth loop model or the BSTLM.  
16 This model develops material price of UNE loops based on  
17 the geo-coded location of BellSouth's existing customers  
18 and BellSouth's forward-looking engineering guidelines.

19           Previously, BellSouth had used a  
20 statistically-valid sample to identify the investments  
21 associated with unbundled loops. However, one of the  
22 objectives of this hearing is to establish deaveraged  
23 rates. Since the loop sample was only valid at the state  
24 level, BellSouth had defined a new approach to costing UNE  
25 loops. BellSouth, in association with Indetec

1 International, CostQuest Associates, and Stockwatch Maps,  
2 developed the BSTLM. Mr. Jim Stegeman will discuss the  
3 model in detail.

4 Additionally, BellSouth introduced a new  
5 switching and common transport model, the simplified  
6 switching tool we refer to as SST. This model  
7 developments investments for ports, features, local and  
8 tandem switching and common transport.

9 However, BellSouth continues to use Telcordia's  
10 switching cost information system model office referred to  
11 as the SCISMO to reduce the basic investments with  
12 switching. The SCISMO outputs are fed into the new SST.

13  
14 As for the other models BellSouth utilizes, the  
15 capital cost calculator to develop the annual cost  
16 factors, the shared and common model to develop the  
17 allocation of shared and common cost, several price  
18 calculators, which convert material prices for individual  
19 piece parts of a system; for example, an OC3 system, into  
20 a complete working system; various Excel spreadsheets, and  
21 these are used predominantly for the nonrecurring cost,  
22 and the BellSouth cost calculator, formally referred to as  
23 the Telric calculator. It has been enhanced with more  
24 user-friendly modifications to convert material prices to  
25 monthly cost and work times with labor rates to

1 nonrecurring provisioning costs

2

3 One area about which the intervening --

4 CHAIRMAN DEASON: Ms. Caldwell, just slow down

5 just a tad, okay?

6 A Oh, I'm sorry. One area about which the

7 intervening party seemed confused is the distinction drawn

8 in BellSouth's cost studies between recurring and

9 nonrecurring costs. The recurring costs identified in the

10 study are generally the costs associated with making an

11 investment in a network and then using that investment.

12 The costs are composed of the capital, the

13 depreciation, the cost of money and the income tax and in

14 the ongoing expenses, such as maintenance and taxes, for

15 using that investment.

16 By contrast, the nonrecurring costs, as

17 identified in the studies, are the costs associated with

18 provisioning a UNE at the request of an ALEC. For

19 example, putting a pair to work or putting a loop to work

20 for that ALEC.

21 These provisioning costs are over and above any

22 cost associated with making the initial investment. For

23 example, the cost of placing a cable in the ground is part

24 of the initial cable investment. It's capitalized in

25 BellSouth's accounts, and it's depreciated over the life



1 of the investment.

2           And that's what I include in my recurring  
3 monthly cost. However, the cost of connecting a jumper in  
4 the cross box to put a single pair to work at the request  
5 of a customer is not part of that initial cable  
6 investment. Rather, this cost is expensed, and is  
7 included in the nonrecurring cost. BellSouth is not  
8 seeking to double recover these costs, as some parties  
9 claim.

10           Another issue that has been raised by several  
11 parties in this proceeding concerning -- is BellSouth's  
12 use of in-plant factors. These in-plant factors convert  
13 the material price to an installed investment by adding  
14 such things as your engineering, your installation,  
15 miscellaneous equipment, and any vendor-installed cost  
16 that you would have incurred associated with that.

17           Although some parties criticize that the use of  
18 the in-plant factors potentially overstayed, to some  
19 degree the cost for a larger-sized cable, when you review  
20 the in-plant as a total cost, the representative cost for  
21 the entire placement of the cable across all the cables  
22 you would be placing, that's not true.

23           The in-plant factor does give a representative  
24 cost for the total cable placement that you have in your  
25 study. And this is particularly true in the BellSouth

1 loop studies that we have today in Florida.

2           If you look at the loop model, you will find out  
3 that BellSouth assumes that 56% of the cable -- that the  
4 cable feet, sheath feet, placed in Florida will be 25 or  
5 50-pair cable. And only 18% of the placing assumed will  
6 be 400-pair or larger. So, therefore, we're using the  
7 in-plants against the smaller cable sizes so the disparity  
8 will not be as indicated by the intervenors.

9           The alternative to the use of the BellSouth's  
10 in-plant factors advocated for certain parties is no  
11 solution. This is because the data is not readily  
12 available and the assumptions that would have to be made  
13 to implement such a solution are subject to the same  
14 frailties by which the parties complain in using the  
15 in-plant factors. In conclusion, BellSouth's cost studies  
16 are reasonable and should be adopted by this Commission.

17           Thank you. That concludes my summary.

18           MR. ROSS: Mr. Chairman, the witness is  
19 available for cross examination.

20           CHAIRMAN DEASON: Let me ask this question. Do  
21 the parties have a preconceived idea as to the order in  
22 which they wish to conduct cross examination or are we  
23 just going to go left to right.

24           MR. MELSON: I think, it probably varies from  
25 witness to witness, at least a subset of us have a

1 preconceived order.

2 CHAIRMAN DEASON: Okay. Who wants to go first?

3 MR. LAMOUREAUX: I think that's me.

4 CHAIRMAN DEASON: All right, Mr. Lamoureux.

5 Please proceed.

6 CROSS EXAMINATION

7 BY MR. LAMOUREAUX:

8 Q Good afternoon, Ms. Caldwell. I'm going to  
9 dispense with most of my questions dealing with the cost  
10 standards and that sort of stuff, but I do have two  
11 questions.

12 Would you agree with me that regardless of  
13 whether we're talking about pre-Eighth Circuit standards  
14 or post-Eighth Circuit standards, cost study to develop  
15 UNE rates should be a forward-looking cost study.

16 A Yes, I do.

17 Q And by forward-looking, is it correct that you  
18 mean assumptions that are achievable and would be  
19 available today?

20 A Yes, I would agree with that, achievable.

21 Q Let's turn to the subject of deaveraging. Can  
22 we agree that this is one FCC rule that actually is still  
23 valid and it's not something that the Eighth Circuit has  
24 vacated?

25 A Yes.

1 Q Okay. And under the FCC's rules on deaveraging,  
2 would you agree that deaveraged UNE rates must reflect  
3 geographic cost differences?

4 A Yes, that's part of the rule.

5 Q Is there anything other than geographic cost  
6 differences that the deaveraging methodology must reflect  
7 under the FCC's rules.

8 A It's been a while since I looked at that rule.  
9 The only thing I know is that it does discuss, in terms of  
10 looking at the cost differences based on geographical  
11 areas, the three zones we discussed earlier.

12 Q I'm going to go ahead and hand you a copy of the  
13 rule, if I may. And in particular what we're talking  
14 about is Rule 51.507F; is that correct?

15 A Correct.

16 Q And that rule specifically talks about  
17 establishing deaveraged UNE rates to reflect geographic  
18 cost differences, correct?

19 A Yes.

20 Q Is there any other criterion set forth in the  
21 FCC rules as the basis for deaveraging UNE rates, other  
22 than geographic cost differences?

23 A Not that I'm aware of.

24 Q Now, the first step in BellSouth's deaveraging  
25 methodology is the creation of three zones based on

1 BellSouth's rate groups in Florida; is that right?

2 A Yes, that's how they determine the zones, yes.

3 Q Okay. And the rate groups we're talking about,  
4 those are the rate groups that are set forth in  
5 BellSouth's general subscriber tariff in Florida, correct?

6 A That's correct.

7 Q Okay. The rate groups that BellSouth has in  
8 Florida, those were not established specifically based on  
9 costs in the rate groups themselves, were they?

10 A I do not know how they were established.

11 Q Do you know how the rate groups were  
12 established?

13 A No, I do not.

14 Q Okay, but you don't know specifically that the  
15 rate groups were established based on the geographic costs  
16 in the rate groups; is that correct?

17 A I do not know how they were established.

18 Q Let me just walk you through the steps of how  
19 the zones -- how the wire centers get put into the zones,  
20 okay?

21 A Mm-hmm.

22 Q Once the three zones are created, the next step  
23 is to group all of the wire centers in Florida to one of  
24 the three zones; is that right?

25 A Yes.

1 Q Okay. And a wire center is placed in one of the  
2 three zones, based on the rate group that that wire center  
3 happens to fall into, correct?

4 A That's correct.

5 Q And, you know, let me come -- let me see if I  
6 can draw this out. I'm just going to talk really loud.  
7 Oh, maybe it's on.

8 A rate group encompasses a geographic area,  
9 correct.

10 A Yes.

11 Q So, if we've got a rate group, and let's say  
12 it's the North Dade rate group in Florida for BellSouth,  
13 okay? Within a rate group, there are exchanges; is that  
14 right?

15 A Correct.

16 Q So, let's say there are a certain number of  
17 exchanges in that rate group. And wire centers,  
18 generally, fall within an exchange as well, correct?

19 A Correct.

20 Q So, within each of the exchange in this rate  
21 group, you can have a number of wire centers, right?

22 A Yes.

23 Q Okay. And let's say, this is rate group 12,  
24 which I think is the North Dade rate group in Florida,  
25 okay? Rate group 12 is mapped to zone 1 for purposes of

1 creating deaveraged loop rates in the BellSouth  
2 deaveraging methodology, right?

3 A It's been a while since I actually looked at the  
4 rate groups, because all I deal with is putting the cost  
5 of the wire centers into each one of the zones. So,  
6 subject to check, I would say that's where it is.

7 Q Okay. Assume with me that rate group 12 goes to  
8 zone 1, okay? What happens is all of the wire centers  
9 that are in rate group 12 are then put into zone 1, right?

10 A Yes.

11 Q Similarly, let's take, for example, that rate  
12 groups 10 through 12 are all mapped to zone 1, okay? What  
13 that's going to mean is every rate group that is a rate  
14 group 10 through 12, all the wire centers in each of those  
15 rate groups get put into zone 1, correct?

16 A Correct.

17 Q And the same thing would happen for zone 2 and  
18 zone 3; all the rate groups that get mapped to zone 2, all  
19 the wire centers that are in those rate groups go into  
20 zone 3, all the rate groups that are mapped to zone 3, all  
21 the wire centers in those rate groups get mapped into zone  
22 3?

23 A Yes.

24 Q Is that right?

25 A Yes.

1 Q And the way that deaveraged UNEs are created is  
2 once all the wire centers are put into, let's say, zone 1,  
3 okay, you simply, average up the cost of each wire center  
4 in zone 1, and that's your average cost -- and you've  
5 weighed it by line, that's the average cost for zone 1; is  
6 that correct?

7 A Yes, weighted on lines, correct.

8 Q So, would you agree with me that once you've  
9 mapped all the rate groups to the three zones, that  
10 automatically, tells you which zone a particular wire  
11 center goes into by virtue of the rate group that that  
12 wire center falls in?

13 A Yes, we established those zones in the rate  
14 group, correct.

15 Q So, in fact, using this methodology, the  
16 composition of the three zones is not based on the cost of  
17 the wire centers at all, correct?

18 A From a mathematical standpoint, it's not based  
19 on the individual cost that's in my model. But there were  
20 decisions made, I believe, Mr. Varner explains in his  
21 testimony, that talks about the reasons for getting -- for  
22 the rate groups associated with zone 1.

23 Q But I could tell you which wire centers are in  
24 zone 1 without ever knowing the cost of any of the wire  
25 centers, couldn't I?



1 A Based on the UNE, that is correct.

2 Q Because the wire centers are put into the zone  
3 based on which rate group they fall in, correct?

4 A Yes.

5 Q So, I don't even need to know what the cost does  
6 of the wire center to be able to tell you what zone it  
7 goes into, correct?

8 A From a mathematical calculation, correct.

9 Q Now, you testified in an Alabama proceeding  
10 sponsoring this deaveraging methodology; is that correct?

11 A Yes.

12 Q And the Alabama Commission rejected BellSouth's  
13 proposed methodology. Are you aware of that?

14 A No, I haven't seen the order.

15 MR. LAMOUREAUX: I'd like to have this exhibit  
16 marked as Exhibit 97. This is the order of the Alabama  
17 Commission dated April 28th, 2000, in Alabama docket --  
18 oh, 25980.

19 CHAIRMAN DEASON: Let me ask a question at this  
20 point. Are you identifying this as an exhibit to move it  
21 into the record for it to establish some type of fact or a  
22 finding or is this just something that you wish for the  
23 Commission to take judicial notice of?

24 MR. LAMOUREAUX: Procedurally, it doesn't matter  
25 to me which way we do it.

1 MS. KEATING: We'll be glad to add it to the  
2 official recognition list.

3 CHAIRMAN DEASON: We will just add this. We  
4 will not identify it as a separate exhibit. It will just  
5 be added to Staff's list of official recognition.

6 BY MR. LAMOUREAUX:

7 Q Ms. Caldwell, if it helps, the discussion in  
8 this is around page 11 of the order, but my initial  
9 question is this is the proceeding in which you testified  
10 sponsoring the BellSouth rate group deaveraging  
11 methodology in Alabama; is that right.

12 A Yes, I testified in this proceeding.

13 Q And there was a competing methodology, which was  
14 to deaverage loop rates based on costs of the wire center  
15 and establishing certain break points of the costs of  
16 those wire centers, generally.

17 A Generally.

18 Q And if you look on page 11 of this order, would  
19 you agree with me that the Commission adopted the wire  
20 center cost approach rather than the BellSouth rate  
21 approach of deaveraging?

22 A Under the discussion, it says that the staff  
23 recommended the utilization of the wire center  
24 methodology.

25 Q Okay. Would you look at page 13 towards the

1 bottom. Would you agree with me that the Commission  
2 adopted the recommendations of the Staff in their  
3 entirety?

4 A Yes. The order does state that -- it starts  
5 with "We have considered all the recommendations of staff.  
6 And it is our conclusion that each of these  
7 recommendations shall be adopted in their entirety."

8 Q Are you aware of any other Commission in the  
9 BellSouth territory which has had hearings on BellSouth's  
10 proposed rate group methodology, other than the Alabama  
11 proceeding and the proceeding today?

12 A I don't remember any hearings.

13 Q Change subjects and move on to in-plant factors.  
14 Now, BellSouth uses loading factors to develop installed  
15 investment; is that correct?

16 A We use an in-plant factor applied to the  
17 material price.

18 Q Okay. And can you describe, just briefly, how  
19 that works, how that factor gets you to the installed  
20 investment from the material cost?

21 A Yes. What we do is if you take a piece of  
22 equipment, say, for instance, you're going to install a  
23 cable, aerial cable, as an example. What we do is we  
24 develop the material price, because we know the price from  
25 our vendors as to how much that particular piece of cable

1 is going to -- that we would have to pay, including all of  
2 our discounts from a material price standpoint.

3 We then, develop something called our in-plant  
4 factor, which simply means take that material price and  
5 convert it to an in-plant or an installed investment. It  
6 adds engineering, installation, miscellaneous pieces of  
7 equipment. And one of the important things it adds is  
8 something called exempt material, which is if you're  
9 talking about cable, that's your small terminals less than  
10 100 size, 100 pairs working on that terminal. Those type  
11 things are included.

12 That factor is based upon our most recent  
13 activity in your state. So, the data I believe that we  
14 had was in 1998 when we had a complete year. We have  
15 looked at that data and we developed a relationship  
16 between a dollar of material that we would charge for  
17 aerial cable compared to what it actually turns out when  
18 it's an investment.

19 In other words, if I pay \$1.00 for aerial cable  
20 material price, when it gets closed into the books where  
21 all the engineering and all the capitalized labor is  
22 charged to it, what does that dollar become? And let's,  
23 just for example, say it became \$4.00. So, it's to  
24 calculate those additional costs necessary to put that  
25 piece of equipment to work.

1 Q So, essentially, the factors are multipliers on  
2 the material investment amount that gets you to the  
3 installed amount for that material; is, generally, that  
4 correct?

5 A Yes, to account for these things I mentioned.

6 Q All right. So, for example, if a 2,400-pair  
7 cable is 20 times more expensive to buy than a 25-pair  
8 cable, the 2,400-pair cable is going to end up with 20  
9 times more installed investment than the smaller cable,  
10 even though it might not cost 20 times more to install  
11 that bigger cable than the smaller cable; is that correct?

12 A Yes, you would have some distortions. I would  
13 not say that it's exactly a 20% difference, because you  
14 have to look at the material prices. But as, I think, I  
15 said in my summary, we do not place in our loop model --  
16 I'm not sure we replace any 2,400, but I do have a chart  
17 in my testimony that says this, most of the cables we are  
18 placing are very small, 50 and 25-pair cables.

19 Q Would you agree with me that these larger size  
20 type cables tend to be more predominant in urban areas?

21 A Yes, you would have your larger-sized cable in  
22 urban areas, correct.

23 Q So, wouldn't it be correct, then, that by using  
24 a factor approach as a multiplier on material investment,  
25 costs are going to be more disproportionately higher in

1 the zone 1 urban areas, which tend to have the more  
2 expensive cables?

3 A I don't agree with that, based on what I know  
4 about the loop model and what it actually places. We are  
5 placing predominantly distribution cable. And you're not  
6 going to be placing a lot of those larger-sized cables  
7 that's used for feeder. So I don't see the distortion and  
8 deaveraging to that extent.

9 Q Would you agree with me that there is going to  
10 be some amount of distortion in the urban areas which tend  
11 to have the more expensive cables?

12 A Yes, I think, I admitted there was some  
13 distortion. I just don't think it's that great.

14 Q So, it's just a question of the degree to which  
15 that distortion takes place?

16 A That's correct.

17 COMMISSIONER JABER: Ms. Caldwell, may I  
18 follow-up on that while we're on that topic. Is the  
19 opposite true with respect to rural areas where certain  
20 products may not be available and therefore, costs could  
21 be greater in rural areas and, therefore, the price of the  
22 elements might be higher in rural areas. Would you agree  
23 that?

24 THE WITNESS: No, I think it's actually the  
25 reverse. See, what's happened is if you go with the

1 argument that you're placing the larger-sized cable in  
2 urban and you're, basically, applying the factor and it  
3 calculates more cost, so actually you're showing a higher  
4 price in your urban area and a lower price in your rural  
5 area. It does the exact opposite, because of the way it's  
6 supplied.

7 COMMISSIONER JABER: All right.

8 BY MR. LAMOUREUX:

9 Q Would you agree that there are similar  
10 distortionary effects with respect to advanced services  
11 versus voice-grade services, that because advanced  
12 services tend to have more expensive equipment, even  
13 though it may not be linearly more expensive to install,  
14 there may be more loadings applied to those advanced  
15 services by virtue of the multiplier on the material  
16 amount that goes into those advanced service facilities?

17 A Could you give me an example of one of your  
18 advanced services you're talking about?

19 Q Like a -- really all I'm talking about is DS1  
20 versus less than DS1 facilities, that because DS1 may have  
21 more electronics or more expensive equipment on those  
22 facilities, it's going to get hit with more loadings. And  
23 so it may be proportionately higher in terms of its own  
24 investment.

25 A I'm not sure I necessarily agree with that,

1 because of you've moved from just looking at a copper  
2 cable environment to now mixing electronics into your  
3 study. And the way we study the electronics is we do not  
4 assign them on a per-pair basis. So, I do not see that  
5 big of a difference there.

6 Q All right. Let's take a different example. How  
7 about in terms of, like, a plug-in card, to the extent  
8 that an ISDN card is more expensive than a POTS, P-O-T-S,  
9 plug-in card. The ISDN card is going to get hit with more  
10 loadings, because there are multipliers on the material  
11 investment, even though it really may not be that much  
12 more expensive to install the ISDN card to the POTS card.

13 A If you look at the individual cards, you would  
14 see some differences on the card.

15 Q So, again, there'd be some distortionary effects  
16 putting more installation on the more expensive  
17 facilities, and there'd be a question of degree, how much  
18 more they are getting in terms of installation?

19 A Again, I would agree there is some distortion.  
20 I think that you have to look at -- if you look at our  
21 studies, is what we have done reasonable? And I feel that  
22 what we have done is reasonable. We've used in-plants  
23 before, before this Commission. In fact, in the 1996  
24 arbitrations, we actually used the same in-plant approach.  
25 So, it's not something new, but when you look at all the



1 guineas that we have laid out from the switch through the  
2 loop, I do not feel that you would have that big of a  
3 distortion.

4 Q Well, let's talk about that for a second. You  
5 testified in this Commission's USF proceeding as the  
6 inputs witness for your sponsorship of the BCPM model,  
7 correct?

8 A Yes, I did.

9 Q And, in fact, didn't the Commission, on several  
10 occasions in its USF order, specifically, reject the use  
11 of linear loading factors, instead noting its preference  
12 for using installed material costs?

13 A I know in one case they discussed something to  
14 do with some of the inflation factors. I don't remember  
15 the linear loading factors. But the way the BCPM, which  
16 is the model we sponsored, was built. It was built with  
17 the -- each individual item to be populated. And that was  
18 a function of that model. And we were providing that  
19 model and supporting that model. So, I supplied the  
20 individual items in that agreement.

21 Q Let me hand you a copy of the Commission's USF  
22 order. And again, I think, this is already on the  
23 official recognition list. So, I'm not going to hand out  
24 copies as an exhibit, but...

25 In particular, what I've handed you is page 157

1 of that order, and I've highlighted a paragraph there. If  
2 you would take a minute to read that, I'd appreciate it.

3 A Okay.

4 Q Would you agree with me looking at that passage  
5 on page 157 in the USF order that the Commission,  
6 specifically, noted its criticism of the use of linear  
7 loading factors and its preference, instead, for using an  
8 installed material costs?

9 A Yes, it did, but the reference it gives, it  
10 talks about a 12-pair or 4,200-pair cable. And the BCPM,  
11 when it builds the network, builds the network a little  
12 differently than the BSTLM. So, from that standpoint, you  
13 could see more of a distortion in that particular model.

14 Q But generally, the concept is correct that the  
15 Commission criticized the use of linear loading factors as  
16 opposed to installed material costs. And again, what  
17 you're talking about is a question of the degree of the  
18 distortion of BCPM versus BSTLM.

19 A They criticized it as it applied to the USF  
20 hearing, which was based on the BCPM.

21 Q And, I guess, as I understood what you were  
22 saying is your understanding is that their criticism was  
23 based on fact that BCPM distorted or had greater  
24 distortionary effects than what you believe is present in  
25 the loop model in this proceeding; is that right?

1           A     Reword that again, I'm sorry.

2           Q     Sure. We've agreed that, generally, there's  
3 criticism in there of linear loading factors. And I seem  
4 to understand that you were trying draw a distinction  
5 between the BCPM and the BSTLM in terms of the loading  
6 factor. And I was just trying to get at what you were  
7 saying.

8                     And is it correct to understand that what you  
9 were saying is you believe the distortionary factors in  
10 BCPM are greater than what they are in BSTLM? And that is  
11 why the Commission said that in its order.

12          A     No, not exactly. That's why the Commission said  
13 that. All I can say is when I read this statement, when  
14 it talks about the linear loadings, and it gives an  
15 example of the 12-pair versus the 4,200-pair cable, then I  
16 know for a fact that the BCPM does look at the 12-pair  
17 cable and the 4,200-pair cable. So, from that knowledge,  
18 I'm assuming it's talking in terms of the BCPM. Beyond  
19 that, I don't mean to draw any general, you know,  
20 understanding of this other than that relationship.

21          Q     Well, in fact, isn't it correct that in the USF  
22 order the Commission rejected all of BellSouth's loading  
23 factors for material input to get to installation;  
24 instead, adopted installed material costs for all the  
25 inputs?

1           A     I can't answer that in all, but in general, the  
2 Commission in the USF hearing adopted, specifically, most  
3 of Sprint's materials, declaiming it was an efficient  
4 network. And again, that's a different hearing, it's a  
5 different environment. You're looking at the USF -- the  
6 requirement for the USF is that you look at the most  
7 efficient provider, regardless of who the incumbent LEC  
8 is. So, from that standpoint the Commission chose to use  
9 Sprint's numbers.

10          Q     Okay. Let's talk about that for a second.

11          A     Okay.

12          Q     Now, BellSouth called the cost studies in this  
13 proceeding and continues to contend that the cost studies  
14 in this proceeding comply with the efficient network  
15 standard; isn't that correct?

16          A     Yes.

17          Q     Well, if that's correct, then there should be no  
18 problem with adopting inputs that reflect an efficient  
19 network in the model that BellSouth has in its proceeding,  
20 should there?

21          A     No, I don't agree with that. The efficient  
22 network standard, still, if you read the FCC order, you're  
23 still allowed to recover your costs, the ILECs cost; that  
24 is, the incumbent LEC. So, just because Sprint has some  
25 input numbers that are different from BellSouth's, in

1 BellSouth's territory, you need to consider the cost  
2 BellSouth will incur in providing that network going  
3 forward.

4 Q The inputs that Sprint sponsored in that  
5 proceeding, those are actual Sprint-specific numbers for  
6 Sprint in Florida, correct?

7 A I don't remember all the details about them.  
8 All I know is that Sprint presented those numbers.

9 Q Well, you agree with me earlier in the  
10 questioning that forward-looking means achievable and  
11 something that could be attained, correct?

12 A Yes.

13 Q Well, obviously, if Sprint is able to achieve  
14 certain material costs, wouldn't that indicate to you that  
15 those are attainable material costs?

16 A A lot of that depends upon the territory that  
17 you're working in, the contracts you have with your  
18 suppliers, the contracts that you have with your labor  
19 forces.

20 Q Certainly, wouldn't you agree with me in the USF  
21 order, it was the rationale of the Commission that those  
22 would be achievable attainable material costs for any  
23 telecommunications provider in Florida?

24 A I can't say that. I can only say that they  
25 based it upon the most efficient provider in the state of

1 Florida.

2 Q Wasn't the intent of the USF order to come up  
3 with a cost model to determine costs that would be  
4 achievable by any efficient telecommunications provider in  
5 Florida?

6 A Just thinking about the word achievable; yes, I  
7 guess, so.

8 Q Now, it's not your testimony that the cost of  
9 cable, on a per-foot basis, would somehow be different if  
10 that was an input to USF model or if it was an input to a  
11 UNE model, is it?

12 A Not the material price, no, of the per-foot  
13 price.

14 Q Is it your testimony that the installed cost per  
15 foot of cable would somehow be different, if that was an  
16 input in a USF model and a UNE model?

17 A No, as long as you're dealing with the incumbent  
18 LEC. And what I mean by that is, is BellSouth's input for  
19 USF and BellSouth's input for UNEs, they would be the  
20 same.

21 Q Now, can we agree that the only rule that was  
22 vacated from the FCC's Telric pricing rule was the rule of  
23 having an efficient hypothetical network provider?

24 A Yes.

25 Q And there is still a rule, 51.505 D-1 that

1 prohibits the development of UNE costs from including the  
2 cost that BellSouth incurred in the past and that are  
3 recorded on its books, isn't there?

4 A Do you have a --

5 Q I think, you still have my copy of the FCC regs.  
6 If you'd take a look at 51.505 D1.

7 A Yes.

8 Q That is in the section on costs that are  
9 prohibited in a forward-looking UNE cost study, correct?

10 A Correct.

11 Q Would you agree with me that 51.505 D1 still  
12 prohibits the development of UNE costs from including the  
13 costs that BellSouth incurred from the past and that are  
14 recorded on its books?

15 A Yes.

16 Q You mentioned this earlier, but in the USF  
17 order, the Commission also specifically rejected  
18 BellSouth's use of inflation factors as applied to its  
19 material investments; is that correct?

20 A Yes, I believe, they ruled they didn't feel they  
21 were necessary.

22 Q The inputs that BellSouth submitted in the USF  
23 proceeding, those were BellSouth Florida-specific inputs,  
24 correct?

25 A Correct.

1 Q Let's move on to another subject. I want to  
2 talk about IDLC, integrated digital loop carrier, for a  
3 moment. Would you agree with me that IDLC technology is  
4 available today?

5 A Yes.

6 Q And, in fact, BellSouth deploys IDLC in its  
7 network today; does it not?

8 A Yes.

9 Q Particularly, in its network in Florida?

10 A Yes.

11 Q Now, there are generally two, for lack of a  
12 better word, flavors of IDLC, what's called TRO08 and  
13 GR303; would you agree with me on that?

14 A Yes.

15 Q And is GR303 currently an available technology?

16 A Yes.

17 Q Does BellSouth deploy GR303 in its network today  
18 in Florida?

19 A Very little of it, but yes.

20 Q But it does deploy some?

21 A Yes.

22 Q And, generally, GR303 is the newest  
23 forward-looking technology that's available out there for  
24 integrated digital loop carrier, correct?

25 A For integrated, correct.



1 Q And would you agree with me that GR303 has cost  
2 advantages over TRO08 IDLC by virtue of the ability of  
3 GR303 to combine capacity? I shouldn't have asked the  
4 last part.

5 Would you agree with me that GR303 has some cost  
6 advantages over TR008?

7 A There are advantages when you are looking at a  
8 switched offering.

9 Q And what sort of cost advantages does that  
10 technology provide?

11 A When you actually have a physical loop that's on  
12 an integrated digital loop carrier that goes to your  
13 switch, then you're dealing with a switched offering, and  
14 you have -- it's called a concentration ratio that means  
15 you can put more circuits on each individual facility that  
16 you're dealing with.

17 Q So, it's the ability to increase the amount of  
18 circuits that you can put on those facilities and get some  
19 economies of scale cost advantages through that.

20 A Right, mainly looking at the feeder from the  
21 remote location back to the C.O., correct.

22 Q And would you agree that even though BellSouth  
23 may not deploy a lot of GR303 in its network today, the  
24 deployment of TRO08 in the network is anticipated to slow  
25 and eventually stop to the point where only GR303 is being

1 deployed?

2 A It will slow. The stopping is probably  
3 somewhere around 10 plus years, but yes.

4 Q But there is some point at which it will stop  
5 and only GR303 will be deployed?

6 A I believe, I have seen that answered, yes.

7 Q Even though GR303 is currently available as  
8 forward-looking available technology, in its cost model  
9 there are certain scenario runs of the model where  
10 BellSouth does not assume 100% use of GR303, correct?

11 A Yes. Predominantly, we assume in very small  
12 areas we have a low amount of demand, I believe, it's 150  
13 lines or less we will place TROO8, because it's just a  
14 smaller, cheaper piece of equipment is mainly why. It's  
15 more cost-effective to do it that way. But in dealing  
16 with the switch services in the run, we call it our Combo  
17 run in the model, where we actually have our switch  
18 services connected into the switch, then we do use the  
19 integrated GR303 100% in that scenario.

20 Q There are three scenarios that can be run in the  
21 BellSouth model, right?

22 A Yes.

23 Q Let me see if I can get them right. There's the  
24 BST 2000, Combos, and all-copper; is that right?

25 A Correct.

1 Q And what you've just said is that in the Combos  
2 one, 100% GR303 IDLC is assumed, right?

3 A Yes, because you're dealing with switched  
4 services, correct.

5 Q In the other two scenarios, not only do they not  
6 assume 100% GR303, they don't even assume 100% IDLC,  
7 correct.

8 A Yes, it's not 100%, because you are not taking  
9 the facility to the BellSouth switch. You are stopping it  
10 at the main distribution frame.

11 Q That's an assumption that BellSouth has put in  
12 its cost studies, though, isn't it?

13 A Yes, that's how we will do it.

14 Q Okay. Isn't it possible to hand off a facility  
15 to a CLEC on IDLC technology? If a CLEC wanted to buy a  
16 loop from BellSouth, isn't it still possible to hand off  
17 loops to CLECs using IDLC technology?

18 A Based on the network today, there are work  
19 arounds that we can perform where we can actually take the  
20 loop into the switch and bring it out, but that's not  
21 cost-effective.

22 If I'm building down a Telric study, building  
23 loops that I'm going to provide to the CLECs that I'm  
24 going to provide at a -- what we refer to as a 2-wire  
25 voice-grade loop, then I'm going to stop that loop at the

1 main distribution frame. I'm not going to take it into my  
2 switch and use my switch capacity.

3 Q Now, when you say it's cost-effective, have you  
4 rerun the model using only the 100% IDLC assumption to see  
5 if that minimizes cost?

6 A No, because that's not the only thing you need  
7 to do. You need to then look at all the work arounds and  
8 costs associated with going in and out of the switch.

9 Q Well, let me ask you that. Have you rerun the  
10 model using 100% IDLC technology assumptions adding  
11 whatever costs might be necessary to be able to hand off  
12 loops using the IDLC to see if that minimizes the cost as  
13 opposed to running the other two scenarios?

14 A I have not looked at the new model. I have, in  
15 years past, looked at it.

16 Q So, you don't know whether or not really it is a  
17 cost minimization assumption that sometimes you're not  
18 going to be on IDLC.

19 A You need to repeat that. I lost it.

20 Q You don't know in the BellSouth cost model  
21 whether it really is a cost of minimization assumption  
22 that sometimes you won't be able to use IDLC.

23 A For the new model, I cannot answer that, but I  
24 think that's one thing we still need to remember. When I  
25 am providing, in my cost model, a 2-wire voice-grade loop,

1 I'm taking it to the main distribution frame so it can be  
2 handed off to the ALEC.

3           And if I'm going to build a future network,  
4 that's how I'm going to do it. I would never start  
5 designing my network. So, I'm always going to take them  
6 into the switch and have to work around that switch to  
7 bring them out. So, that is an underlying assumption in  
8 my model on how you're going to deliver that particular  
9 facility. Now, when I do a Combo that does go to the  
10 switch, I do recognize the integrated DLC, which is the  
11 most cost-effective way to provide the switch facility.

12           Q     Now, when you talk about a work around, that  
13 work around is only necessary if somehow you want to  
14 physically lift a loop off the main distribution frame in  
15 order to be able to send it over to the CLECs or ALECs'  
16 collocation space; is that right?

17                     There are ways that you can set up electronic  
18 cross connects to be able to hand off on a DS1 basis from  
19 an IDLC situation to an ALEC, aren't there?

20           A     You can actually bring the digital loop pairs in  
21 to a digital cross-connect system and then groom out the  
22 facility to give to the CLEC. But again, that's not  
23 cost-effective. You're going to have to -- digital  
24 cross-connect system is not cheap. So, you'll have to  
25 install those in your office to actually perform that

1 function.

2 Q When you say it's not cost-effective, isn't it  
3 fair to say you don't really know whether it's  
4 cost-effective, because you haven't run the model with an  
5 all-IDLC assumption and put in whatever costs you think  
6 are appropriate for those cross connects to see whether it  
7 really is cost-effective or not?

8 A I haven't made the run on the BSTLM, but I have  
9 made those runs in the past when I worked on those  
10 facilities. So, I mean, I know a DACS is an expensive  
11 piece of equipment.

12 Q Let's talk about network terminating wire and  
13 intrabuilding network cable network terminating wire. Now  
14 that I've said the words I'm just going to use NTW and  
15 INC, okay?

16 For NTW, BellSouth has developed a single  
17 recurring cost element and a single nonrecurring cost  
18 element; is that right?

19 A That's right. If you don't mind, let me look at  
20 my summary, because these elements, sometimes I get NTW  
21 and INC confused.

22 Q And I know these are rates rather than costs,  
23 but looking at Mr. Varner's exhibit with his rates, the  
24 NTW rate element is A.15.

25 A .1, correct.

1 Q Actually, it's A.15, right?

2 A I do not have Mr. Varner's summary. I have one  
3 level back, but that's okay. There's only one element  
4 under NTW.

5 Q I see what you're saying. It's A.15.1.

6 A Right.

7 Q Okay. Now, for a network terminating wire, NTW,  
8 there is a single recurring cost and a single nonrecurring  
9 cost; is that right?

10 A Correct.

11 Q And for the recurring, we're talking 46 cents;  
12 and the nonrecurring one-time fee, we're talking about  
13 \$65.

14 A Correct.

15 Q Now, generally, network terminating wire, one  
16 situation where you'd buy network terminating wire is when  
17 you want to gain access to a garden type apartment, you --  
18 if you interconnect at those garden terminals that you see  
19 outside, the network terminating wire is what runs from  
20 those garden terminals to each of the tenants in the  
21 garden -- in the apartment complex; is that right?

22 A That's correct.

23 Q Okay. So, for each NTW pair for each tenant in  
24 that garden apartment complex, an ALEC pays 45 cents for  
25 recurring -- or 46 cents for recurring and \$65 for the

1 nonrecurring; is that right?

2 A On the individuals that they subscribe to, yes.

3 Q So, if AT&T wanted to gain access to a tenant in  
4 an apartment complex, to gain access to that -- to buy the  
5 network terminating wire to that tenant's apartment, we'd  
6 pay the 45 cents every month or 46 cents every month and  
7 the \$65 in the one-time nonrecurring cost.

8 A Yes.

9 Q Okay. For the \$65, that \$65 includes in it the  
10 cost of the access terminal that BellSouth is going to  
11 require ALECs to hook up to, to gain access into the  
12 garden apartment, right?

13 A Yes. It's, like, 100-pair terminal spread over  
14 the users of that terminal.

15 Q And I'll talk more with Mr. Milner about this,  
16 but just generally to set the stage, what we're talking  
17 about is if, in a garden complex, you've got three  
18 apartments, typically, there's one of those little green  
19 boxes somewhere out on the lawn. And the network  
20 terminating wire is the wire that goes from that little  
21 green box to each of the apartments, right?

22 A Yes.

23 Q Okay.

24 A Takes a minute.

25 Q It would have been hard to ask the rest of my



1 questions.

2           And what BellSouth is going to require is that  
3 to gain access this network terminating wire at this  
4 little green box, BellSouth will then construct another  
5 box, prewire those two boxes, and then the ALEC connects  
6 up to that intermediary box, for lack of a better word.

7           A     Yes, that's how a cost study is done.

8           Q     And when I say access terminal, what I'm talking  
9 about is that intermediary box, right?

10          A     Correct.

11          Q     Okay. And so, the nonrecurring cost, the \$65,  
12 includes in it on a per-line basis, the cost for BellSouth  
13 to deploy that intermediary access terminal; is that  
14 right?

15          A     Yes, it's based upon the average number of  
16 customers expected.

17          Q     Now, for INC, typically, what we're talking  
18 about in the INC situation is the cable that you need to  
19 get from the equipment closet in the basement of a  
20 building up to an individual tenant on a floor in a  
21 high-rise building, right?

22          A     Yes.

23          Q     So, if you've got a high-rise on multiple  
24 floors, typically, there's an equipment closet down in the  
25 basement of that building that has sort of the equivalent

1 of that little green box, but for a high-rise building,  
2 instead of for a garden apartment complex, generally; is  
3 that about right?

4 A Yeah, generally, yeah.

5 Q Okay. And what network terminating wire, in  
6 addition to being the wire in the garden complex, it's  
7 also the horizontal cable on each floor of a high-rise  
8 building and intrabuilding network cable is the whole  
9 amount of that cable from the basement all the way to an  
10 individual tenant.

11 A Yes, it's the whole amount, correct.

12 Q The way that BellSouth is going to require ALECs  
13 to access in this high-rise situation to the INC is again,  
14 there will be an access terminal installed, but this time  
15 BellSouth is not going to install that access terminal.  
16 It will require the ALEC to install it, correct?

17 A I have an access panel installed within my own  
18 terminal, exactly how -- Mr. Milner is going to have to  
19 explain how that access is done. All I can tell you is  
20 what's in my cost study, but I do not have a separate  
21 building terminal in my cost study for INC.

22 Q Okay. When you say there's an access terminal  
23 in your study, what you're talking about is the one that  
24 BellSouth owns today that is in that equipment closet of  
25 the building.

1 A Yes.

2 Q There is nothing in your cost study that also  
3 includes one of these intermediary terminals that the ALEC  
4 hooks up to in order to gain access to the BellSouth  
5 terminal; is that right?

6 A From having a little bit of difficulty here is  
7 that I do have an access panel, a 25-pair panel, it's just  
8 not defined exactly as the access terminal in the NTW.

9 Q Well, if you'd look at the elements that go with  
10 INC --

11 A Yeah.

12 Q -- there's a recurring rate, and a nonrecurring  
13 rate, but then there are also two additional nonrecurring  
14 rates for INC, correct?

15 A Yes. That's the 25-pair panel set-up I'm  
16 talking about.

17 Q Okay. So, in addition to the element A.2.14,  
18 which is the INC itself, there are two other elements,  
19 A.2.19 and 20, reflecting charges to set up and install  
20 and pay for that intermediary terminal that the CLEC will  
21 hook up to, correct?

22 A Correct, the 25-pair panel.

23 Q Okay. And all I want to get at is by paying the  
24 \$3.87 recurring and the \$113 nonrecurring, for the INC  
25 situation, the ALEC doesn't get included in that in any

1 way the access terminal, the intermediary access terminal.

2 A I think what I'm having a problem is, is I don't  
3 understand your intermediary access terminal. I have the  
4 cost to set up a 25-pair panel included in there. If  
5 there is another terminal that is to be built I do not  
6 have that in the study.

7 Q When you say the 25-pair panel, are you talking  
8 about what's listed in A.2.20?

9 A Yes.

10 Q And here's what I want to get at. The  
11 nonrecurring charge for INC itself, the \$113, when I pay  
12 the \$3.87 and the \$113, I still haven't paid for that  
13 intermediary access terminal. I've still got to pay  
14 another \$443 in order to get that access terminal to be  
15 able to access BellSouth's terminal.

16 A I really cannot remember exactly what's in the  
17 113. It's been a while since I looked at it. I just  
18 can't remember.

19 Q Would you agree with me on this, that in order  
20 to gain access to the INC and the equipment closet of the  
21 base of that building, an ALEC's going to have to pay all  
22 three of the nonrecurring charges, the \$113, the \$333, and  
23 the \$109?

24 A Yes.

25 CHAIRMAN DEASON: Mr. Lamoureux, how much more

1 do you have?

2 MR. LAMOUREAUX: I'm moving faster than I  
3 thought, but I probably still have 20 minutes.

4 CHAIRMAN DEASON: We're going to go ahead and  
5 recess for lunch. We'll reconvene at 2:00.

6 (Transcript continues in sequence in Volume 9.)

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 STATE OF FLORIDA

2 : CERTIFICATE OF REPORTER

3 COUNTY OF LEON )

4

5 I, KORETTA E. STANFORD, RPR, Official Commission  
6 Reporter, do hereby certify that the Hearing in Docket  
7 No. 990649-TP was heard by the Florida Public Service  
8 Commission at the time and place herein stated.

7

8 It is further certified that I stenographically  
9 reported the said proceedings; that the same has been  
10 transcribed under my direct supervision; and that this  
11 transcript, consisting of 163 pages, Volume 8 constitutes  
12 a true transcription of my notes of said proceedings and  
13 the insertion of the prescribed prefiled testimony of the  
14 witness(s) ..

11

12 I FURTHER CERTIFY that I am not a relative, employee,  
13 attorney or counsel of any of the parties, nor am I a  
14 relative or employee of any of the parties' attorneys or  
15 counsel connected with the action, nor am I financially  
16 interested in the action.

14

DATED this 21st DAY OF SEPTEMBER, 2000.

15

*Koretta E. Stanford*

16

KORETTA E. STANFORD, RPR  
FPSC Official Commissioner Reporter  
(850) 413-6734

17

18

19

20

21

22

23

24

25