Andrew D. Shore Senior Regulatory Counsel

BellSouth Telecommunications, Inc. 150 South Monroe Street Room 400 Tallahassee, Florida 32301 (404) 335-0743

January 28, 2002

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

# Re: Docket No. 990649A-TP (UNE Docket)

Dear Mrs. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Motion for Leave to file Amended Cost Study and Testimony which we ask that you file in the captioned docket.

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

Sincerely,

Indrew D. Shore

Andrew D. Shore

cc: All Parties of Record Marshall M. Criser III R. Douglas Lackey Nancy B. White

> DOCUMENT NUMBER DATE 01058 JAN 28 B FPSC-COMMISSION CLERK

# CERTIFICATE OF SERVICE Docket No. 990649A-TP

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

Email and Federal Express this 28<sup>th</sup> day of January, 2002 to the following:

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(Indrew D. Shore (32) Andrew D. Shore (32)

(+) Signed Protective Agreement

## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation into pricing of unbundled) Docket No.: 990649A-TP network element ) ) Filed: January 28, 2002

# BELLSOUTH 'S MOTION FOR LEAVE TO FILE AMENDED COST STUDY AND TESTIMONY

BellSouth Telecommunication, Inc. ("BellSouth") hereby respectfully moves pursuant to Rule 28-106.204 of the Florida Administrative Code for leave to file its amended cost study and testimony and exhibits that it amended as a result of its amended cost study. In further support of this motion, BellSouth shows the Commission that:

1. By letter dated January 24, 2002, BellSouth advised the Commission and the parties that it was revising certain inputs into its cost study filed in this proceeding in order to correct errors discovered during the course of this case. The letter, which is attached hereto and incorporated herein by reference, explains the reasons for those changes.

2. BellSouth served the parties electronically with a file containing its revised inputs on January 24, 2002.

3. On January 25, 2002, AT&T and MCI served BellSouth with data requests seeking information regarding BellSouth's revised inputs. BellSouth served responses to those data requests on Monday, January 28, 2002, answering all of AT&T and MCI's questions.

4. AT&T and MCI have stated that they may request permission to present live rebuttal testimony at the hearing dealing specifically with the issues of BellSouth's revised inputs. BellSouth would not object to that request.

DOCUMENT NUMPER-DATE 01058 JAN 28 8 FPSC-CUM ASSIGN CLERIC 5. BellSouth's cost witness, Daonne Caldwell amended her testimony to make it consistent with BellSouth's revised inputs. Redlined copies of Ms. Caldwell's amended direct and surrebuttal testimony are attached. Exhibits DDC-1 and DDC-3 to Ms. Caldwell's testimony have also been amended to reflect the cost model run with the revised inputs.

6. BellSouth seeks permission to file its revised cost study and exhibits so that it may enter them into the record in this proceeding.

7. The revisions were made in order to correct errors discovered during the course of this case. Also, BellSouth answered immediately the ALECs' questions about its revised inputs and does not object to them presenting live rebuttal testimony on these issues.

8. Pursuant to Rule 28-106.204(3) of the Florida Administrative Code, BellSouth conferred with counsel for AT&T and MCI regarding this motion and they advised that their clients do not have a position with respect to this motion.

Respectfully submitted this 28th day of January, 2002.

BELLSOUTH TELECOMMUNICATIONS, INC.

NANCY B. WHITE c/o Nancy Sims 150 South Monroe Street, Suite 400 Tallahassee, FL 32301 (305) 347-5558

MAL,

ANDREW SHORE R. DOUGLAS LACKEY Suite 4300 675 W. Peachtree St., NE Atlanta, GA 30375 (404) 335-0743

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Andrew D. Shore Senior Regulatory Counsel

BellSouth Telecommunications, Inc. 150 South Monroe Street Room 400 Tallahassee, Florida 32301 (404) 335-0743

January 24, 2002

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

## Re: <u>Investigation into Pricing of Unbundled Network Elements</u> (BellSouth Track), Docket No. 990649A-TP

Dear Mrs. Bayó:

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The purpose of this letter is to inform the Commission and parties to this proceeding of changes BellSouth has made to certain inputs in its cost-study filed in this proceeding and to explain the reasons for the changes.

•

First, the engineering factors BellSouth used in its original cost study are the same factors used in BellSouth's internal cost estimating system, OSPCM. In gathering information for a Staff-requested late-filed deposition exhibit, BellSouth learned of a discrepancy in the way the OSPCM system applies the factors and the way the BSTLM© applies the factors. The engineering factors in the OSPCM are applied to Telco labor plus contractor costs. The BSTLM©, however, was programmed to apply the factors to Telco labor, contractor costs, and material cost. Thus, application of the factors from BellSouth's OSPCM resulted in an overstatement of the engineering costs for copper and fiber cable accounts. In order to address this problem, BellSouth has developed engineering factors based on relationships between engineering costs and total non-engineering investments for each plant account. A worksheet setting forth the development of these factors is attached.

Second, BellSouth has made two of the BSTLM© logic changes addressed by Mr. Pitkin in his rebuttal testimony and by Mr. Stegman in his surrebuttal testimony. Those two changes address the cell reference problem with the fiber cable, EF&I calculation and the cell reference problem with the structure sharing calculation. Mrs. Blanca S. Bayo January 24, 2002 Page 2

Third, BellSouth is correcting an error with respect to Feeder/Distribution Interface (FDI) placing hours. BellSouth uses contractors to place FDI's with placement costs based on the weight of the cabinets. Since the BSTLM input tables for FDI placement assume Telco placement, BellSouth had to convert contractor costs to Telco placement hours by dividing contractor costs by the Telco labor rate. BellSouth made an error in that calculation, resulting in a slight overstatement of FDI cost. BellSouth's revised inputs reflect the a correction of the referenced error.

Lastly, BellSouth changed inputs regarding its underground excavation costs and manhole costs. BSTLMC calculates all conduit duct costs. underground excavation costs and manhole costs as engineering, furnished and installed (EF&I) (rather than distinguishing between material and labor), because BellSouth's contracts with outside vendors provide for these items on a furnished and installed basis that includes the material and labor associated with installing the material. Since the BSTLM© applies loadings (e.g., sales tax, exempt material, supply expense) to material only, this would result in an understatement of these miscellaneous loading costs in the BSTLM©. BellSouth developed a 4C loading factor to account for these loadings and applied that factor to the BSTLM inputs in its cost study filing in this proceeding. BellSouth later learned that this loading was not applied to Type 1 and Type 2 manholes or to the underground excavation costs per foot. BellSouth is correcting this problem by applying the loading to all manhole sizes, to duct costs per foot. and to underground excavation costs per foot. BellSouth is also revising manhole costs as set forth in the surrebuttal testimony of BellSouth witness Daonne Caldwell.

BellSouth is in the process of re-running its cost models with the revised inputs discussed above and plans to file an amended cost study as well as an amended Exhibit DDC-3 to Ms. Caldwell's testimony. However, due to the processing times associated with running the cost models and the logistics of making electronic copies and transporting them to Tallahassee, BellSouth will be unable to file its amended cost study and exhibit, which is the cost output summary, until Monday, January 28, 2002. We did, however, want to get this information to the Commission and the parties even before those cost study runs can be completed. We are providing to all parties today via e-mail an executable file, FI\_Network\_Version\_Changes.exe, to replace a user's Invest Logic.xls file, as well as with three new .mdb data bases (1 for each BSTLM© scenario) with BellSouth's revised inputs so that parties can see these revisions and run them in the cost model if they wish. This file contains proprietary information and is being provided pursuant to a Notice of Intent being filed today as well as to the terms of the Protective Agreement.

Mrs. Blanca S. Bayo January 24, 2002 Page 3

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I would appreciate your marking a copy of this letter as "filed" and returning it to me. If you have any questions or need any further information, please do not hesitate to contact me.

Andrew D. Shore (FB) Andrew D. Shore Sincerely,

cc: All Parties of Record (via e-mail and overnight mail) Marshall M. Criser III R. Douglas Lackey Nancy B. White

1	BELLSOUTH TELECOMMUNICATIONS, INC.
2	DIRECT TESTIMONY OF D. DAONNE CALDWELL
3	<b>BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION</b>
4	DOCKET NO. 990649A-TP
5	(120-DAY ITEMS)
6	<b>NOVEMBER 8, 2001</b>
7	AMENDED JANUARY 28, 2002
8	
9	Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.
10	
11	A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,
12	N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth
13	Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of
14	responsibility relates to the development of economic costs.
15	
16	Q. ARE YOU THE SAME D. DAONNE CALDWELL THAT PREVIOUSLY
17	FILED TESTIMONY IN THIS DOCKET?
18	
19	A. Yes.
20	
21	Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
22	
23	A. In its May 25, 2001 Order No. PSC-01-1181-FOF-TP ("Order") in this docket, the
24	Florida Public Service Commission ("Commission") outlined a number of issues
25	that required responses by BellSouth within 120 days. The Order listed the

1		following as 120-day items: (1) Hybrid Copper/Fiber xDSL-capable loop, (2)
2		xDSL nonrecurring costs that exclude the Design Layout Record ("DLR"), test
3		point, and order coordination, (3) network security and inventory issues, (4)
4		network interface device ("NID") costs, (5) explicit modeling of loops, and (6)
5		inflation. On September 24, 2001, BellSouth filed cost studies in this docket to
6		address these "120-day" issues. On October 2, 2001, however, the Commission
7		reversed its ruling on inflation in Order No. PSC-01-2051-FOF-TP; therefore,
8		revised cost studies were filed on October 8 <sup>th</sup> to include the impact of inflation.
9		Further, on October 23, 2001, the Commission identified a number of issues
10		precipitating from BellSouth's filing, with the objective of resolving them during
11		this phase of the docket. My testimony responds to those issues associated with
12		cost development. In doing so, I will present and support the revised cost studies
13		filed on October 8, 2001 and subsequently revised on January 28, 2002.
14		
15		Issue 1(a): Are the loop cost studies submitted in BellSouth's 120-day filing
16		compliant with Order No. PSC-01-1181-FOF-TP?
17		
18	Q.	PLEASE EXPLAIN WHY THE LOOP COST STUDIES BELLSOUTH
19		FILED ON OCTOBER 8, 2001, AND SUBSEQUENTLY REVISED ON
20		JANUARY 28, 2002, 2001COMPLY WITH ORDER NO. PSC-01-1181-FOF-
21		ТР.
22		
23	A.	The Commission outlined a number of modifications that impact both the
24		recurring and nonrecurring cost results for loops. Some of these adjustments are
25		relatively easy to implement, while others required BellSouth to not only expend

1	substantial resources, but also	to alter the manner	in which costs were developed.
2	The simpler Commission-orde	red modifications	reflected in BellSouth's October
3	8 <sup>th</sup> and January 28, 2002 cost	studies include:	
4			
5	Cost of Capital – The Commis	sion set the forwar	d-looking cost of capital for
6	BellSouth at 10.24% (60/40 eq	uity/debt ratio, del	t = 7.3%, equity = 12.2%).
7			
8	Depreciation - The Commissio	on adjusted the eco	nomic lives for metallic cable
9	accounts and digital switching	equipment. The C	Commission accepted BellSouth's
10	salvage values. The chart belo	w compares BellS	outh's initially proposed
11	economic lives and the ones or	dered by the Com	mission. The Commission-
12	ordered lives are reflected in th	e studies filed on (	October 8, 2001 and January 28,
13	<u>2002</u> .		
14			
15			
16		BellSouth	Commission –Ordered
17	Digital Switching	10	13
18	Aerial Metallic Cable	15	18
19	Underground Metallic Cable	14	23
20	Buried Metallic Cable	15	18
21	Submarine Metallic Cable	15	18
22			
23	BellSouth asked for reconsider	ation on two other	depreciation modifications
24	originally reflected in the Com	mission-ordered ra	tes; i.e., modifications to analog
25	switching equipment and to sul	bmarine fiber cable	e. In its October 2, 2001 ruling

1	(Order PSC-01-2051-FOF-TP), the Commission agreed that the analog switching
2	equipment economic life should be retained as BellSouth's input. In that ruling,
3	however, the Commission rejected the other request and stated that the Order did
4	alter the submarine fiber cable life and that it should be set at 20 years. The cost
5	study filed on October 8, 2001 reflects the analog switching equipment life of 1.6
6	years and the submarine fiber cable life of 20 years.
7	
8	Taxes - The Commission ordered Florida-specific tax rates as follows: a combined
9	state and federal income tax rate of 38.57% and an ad valorem tax rate of .9515%.
10	Also, the "gross receipts tax" factor was set at .15%. The cost study reflects these
11	modifications.
12	
13	Each of the Commission-ordered adjustments discussed above impact the
14	development of the shared and common cost factors. Thus, BellSouth
15	appropriately reflected these modifications in the Shared and Common
16	Application, which develops the shared and common cost factors.
17	Additionally, the deaveraging of loops was based upon the methodology adopted
18	by the Commission and the details provided in Appendix B of the Order, which
19	listed the wire centers by zone.
20	
21	Q. YOU MENTIONED THAT THERE WERE ADDITIONAL COMMISSION-
22	ORDERED MODIFICATIONS THAT WERE MORE DIFFICULT TO
23	MAKE. WHAT WERE THOSE MODIFICATIONS?
24	
25	A. The first modification that was more difficult to incorporate into the studies was the

1 nonrecurring work time estimates. The Order detailed the extensive examination

2 of three representative UNEs; the ADSL loop, CCS7 Signaling and Interoffice

3 Transport - DS0. Based on the Commission's analysis of these three UNEs,

4 adjustments to the work time estimates were recommended and outlined as listed

5 below (Order, page 364):

6

7		
8	Category	Approved Adjustments for BellSouth's
9		Installation and Disconnect Work Groups
10		and Work Times
11	CRSG Incremental Time	Eliminate work times
40		
12	CRSG	Reduce work times by 55%
13		
14	LCSC	Reduce work times by 75%
15	SAC	Reduce work times by 50%
16		
17	AFIG	Reduce work times by 50%
18	CPG	Reduce work times by 50%
19	UNEC Provisioning Variables	Eliminate work times
20		
21	UNEC	Reduce work times by 45%
22	WMC	Reduce work times by 65%
22		
20	CO I&M	Reduce work time by 20%
24		
25	SSI&M	Reduce work times by 35%

1 2 3	Category	Approved Adjustments for BellSouth's Installation and Disconnect Work Groups
4	Travel	and work Times No Adjustment
5 6	All other work groups	Reduce work times by 45%

These are the modifications BellSouth used to develop the nonrecurring costs
contained in the October 8<sup>th</sup>-cost studies. In order to implement these reductions,
BellSouth went into each input file and recalculated the originally proposed time
estimates. In fact, in order to allow review of BellSouth's calculations, the input
files show the Commission's modifications in red. The Commission also ordered
a 50/50 sharing of the cost of access to sub-loop elements, which is also reflected
in both BellSouth's input files and cost results.

14

15 The other Commission-ordered modification that was difficult to implement was

16 one specifically listed as a "120-day" item – the explicit modeling of "all cable and

17 associated supporting structure engineering and installation placements." (Order,

18 Page 242) BellSouth has provided, as ordered by the Commission, a "bottoms-up"

19 study of outside plant cable and structures using the BellSouth

Telecommunications Loop Model ("BSTLM<sup>©</sup>"). Whenever possible, either actual
data or subject matter experts' estimates have been used in the BSTLM. Execution
of the "bottoms-up" directive required activities such as: code modifications to the

23

<sup>24 • 1999</sup> INDETEC International and BellSouth Corporation All Rights Reserved (BSTLM)

1 BSTLM, which BellSouth witness Mr. Stegeman addresses, review of outside 2 contractor contracts, weighting of contractor prices by relative use, development of structure sharing percentages, estimation of BellSouth placing and splicing hours, 3 4 and determination of probabilities by terrain and density. 5 6 Q. ARE THERE OTHER MODIFICATIONS THAT HAVE BEEN MADE TO 7 8 THE NONRECURRING COSTS IN ADDITION TO THOSE CONTAINED 9 **IN THE ORDER?** 10 11 A. Yes. As noted in the cost study there were further changes to nonrecurring cost 12 development that need to be considered. These modifications reduce the 13 provisioning time and thus, should reduce the nonrecurring cost. These additional 14 input changes are detailed on pages 25-30 of the cost study. For example, the 15 amount of time a loop is not found in LFACS was lowered from 58% to 20% and 16 Work Management Center ("WMC") time was set at 2 minutes (down from 15). 17 18 Q. PLEASE PROVIDE AN OVERVIEW OF THE INPUTS USED IN 19 **BELLSOUTH'S "BOTTOMS-UP" COST DEVELOPMENT.** 20 21 A. BellSouth's "bottoms-up" inputs were obtained from two basic sources. First 22 Outside Plant Contractor costs for each district in Florida were reviewed. These 23 contracts provided the individual work item price, e.g. the price to place a pole, to 24 bore a driveway, or to bury a cable. BellSouth then used the amount of usage that 25 occurred during 2000 to develop an average contractor cost for each type of activity.

1 Attachment 3 in Appendix B of the cost study details the calculations performed to 2 develop the contractor cost input associated with pole placement, conduit, manhole, 3 and their placements, buried cable placement, etc. 4 5 The second input source was the Outside Plant Construction Management 6 ("OSPCM") system. The OSPCM is the same system used by BellSouth's Network 7 organization to estimate job costs. Attachment 4 in Appendix B of the cost study 8 provides the source code data and assumptions taken from the OSPCM system for 9 the development of splicing and placing time inputs. 10 11 Q. CAN YOU PROVIDE A DESCRIPTION OF THE SOURCES AND 12 ASSUMPTIONS USED IN THE DETERMINATION OF EACH 13 CATEGORY OF INPUT IN THE "BOTTOMS-UP" ANALYSIS? 14 15 A. Yes. The following discussion will describe how each category of input, as they 16 correspond to the BSTLM input tables, was derived. Attachment 1 in Appendix B 17 of the cost study displays the resulting input. 18 19 Aerial Structure Contract Labor 20 Contract labor costs for placing poles were obtained from actual outside contractor 21 contracts in each district in Florida. Each district contractor's price was weighted 22 by the amount of usage in the district in 2000 to arrive at a weighted average price 23 for an average size pole placement in the state. Contract labor associated with 24 placement of anchors was also obtained from the outside contractor contracts in 25 each district in Florida. Guys are placed by BellSouth personnel, and the time

- t required to install a guy was obtained from the OSPCM system.
- 2

## 3 <u>Aerial Structure (Material)</u>

Pole material prices were also obtained from actual outside contractor contracts in each district in Florida. Each district contractor's price was weighted by the amount of usage in the district in 2000 to determine a weighted average material price for an average size pole in the state. The material costs of anchors and guys are exempt material and are captured in the exempt material loading for poles.

9

#### 10 Buried Excavation Contract Labor

11 While the BSTLM input tables were modified to allow contractors' buried

12 excavation prices to vary dependent on the terrain type, agreements between

13 BellSouth and its outside contractors do not differentiate prices by terrain type.

14 Therefore, all excavation cost values are the same, regardless of terrain type.

15 Excavation costs were determined in the same manner as the aerial structure

16 contract labor costs. Contract labor costs for buried excavation activities were

17 obtained from actual outside contractor contracts in each district in Florida. Each

18 district contractor's price was weighted by the amount of usage in the district in

19 2000 to arrive at a weighted average price per foot for buried excavation in the

- 20 state.
- 21

#### 22 <u>Underground Excavation Contract Labor</u>

While the BSTLM input tables were modified to allow contractors' underground
excavation prices to vary dependent on the terrain type, the agreements between
BellSouth and its outside contractors do not differentiate prices by terrain type.

1	Therefore, all underground excavation cost input is the same regardless of terrain
2	type. Underground excavation costs were determined in the same manner as the
3	buried excavation contract labor costs. Contract labor costs for underground
4	excavation activities were obtained from actual outside contractor contracts in each
5	district in Florida. Each district contractor's price was weighted by the amount of
6	usage in the district in 2000 to calculate a weighted average price per foot for
7	underground excavation in the state.
8	Structure Sharing
9	BellSouth only expects to share in the cost of buried structure approximately 6% of
10	the time in Florida. When sharing occurs, BellSouth has assumed that BellSouth
11	and two other parties will share in the cost of buried placement. Therefore, buried
12	sharing is calculated as follows:
13	
14	94% X 100% = 94%
15	6% X 33.33% = 2%
16	Total 96%
17	The 96% reflects the amount of buried structure cost assigned to BellSouth.
18	
19	For aerial plant sharing, BellSouth owns approximately 40% of the poles in its
20	territory in Florida. Therefore, BellSouth has used 40% as the amount of pole
21	costs assigned in its cost studies.
22	
23	For underground sharing, BellSouth rarely, if ever, shares conduit placement costs
24	with another party. BellSouth does lease a small amount of its conduit space to
25	others and has included that amount in the underground sharing percentage as

1	follows:		
2			
3		Duct feet in Florida	192,128,640
4		Leased to others	129,754
5		Assigned to BellSouth	99.93%

6

#### 7 Facility Sharing (between feeder and distribution)

8 The BSTLM provides the ability for sharing of structure between feeder and 9 distribution cables when both are located along the same path; however, this type 10 of sharing of structure rarely occurs according to Network subject matter experts. 11 This lack of sharing between feeder and distribution occurs for many reasons 12 including the fact that placement of feeder and distribution cables do not always 13 coincide in timing, often access to distribution cables is needed more frequently 14 than manhole spacing for feeder cable would allow, etc. Based on the fact that 15 experts predict very little sharing of structure between distribution and feeder, 16 BellSouth has assumed that when both are found on the same path that sharing of 17 structures occurs 25% of the time in a forward-looking environment. While 18 BellSouth believes the actual sharing will be less, the 25% reflects the expected 19 upper limit.

20

#### 21 Media Sharing

In BellSouth's previous filing, the Media Sharing table was populated with input values that resulted in a 50%/50% sharing of structure between copper and fiber when both copper and fiber cables were placed on, or in, the same structure. These values were not used in previous filings since all structure costs resulted from

-11-

1	either in-plant factors or pole/conduit factors in the BellSouth Cost Calculator
2	rather than from the BSTLM, itself. However, since the BSTLM is calculating
3	structure costs in this filing, the BSTLM approach was changed to improve the
4	logic previously provided through this table. Now, instead of using the Media
5	Sharing table, the logic of the updated BSTLM apportions, on both distribution
6	and feeder routes that have both copper and fiber cables, the costs of structure
7	(poles, trenching, etc.) between the media based on the number of DS0 equivalents
8	on each cable. This is consistent with how DLC common equipment, fiber, and
9	the structure for fiber are apportioned in the model. Additionally, in its Order in
10	this docket, the Commission found with respect to the use of DS0 equivalents: "Of
11	the two factors, competitive impact or causal linkage, we believe that where
12	possible, cost causal connections should get the nod when designing cost models.
13	Thus, based on the evidence, we find that the BSTLM method of allocating shared
14	investments based on DS0 equivalents is reasonable." (Order, Page 134)

15

#### 16 Feeder Distribution Interface (FDI) Placing Hours

17 The BSTLM is designed to assume that FDIs are placed by telephone company 18 personnel (i.e., placement hours X labor rate), however, FDIs are typically placed 19 by outside contractors in BellSouth. This inconsistency in the BSTLM approach 20 and BellSouth input was not discovered in time to correct the model. Therefore, 21 BellSouth has taken contractor costs and converted them to hours by dividing the 22 contractor costs by the BellSouth installation labor rate. Further, the outside plant 23 contracts have a fixed placement cost for FDIs weighing between 101 and 800 24 pounds, another cost for 801 to 1700 pounds, and a third price for 1701 to 4000 25 pounds. These contractor costs for various weights have been used for each

- 2 format of the BSTLM input table.
- 3

# 4 <u>Aerial Structure Placing Hours (Telco)</u>

- 5 Since outside contractors place poles for BellSouth, this table is only used for the
- 6 time to place a guy, which is handled by BellSouth personnel.

# 7 DTBT Splicing and Placing Hours

- 8 Times for closure and setup, cross connects and splicing were obtained from the
- 9 OSPCM system used by BellSouth to estimate job costs for internal purposes.
- 10 While the material prices for terminals of sizes 100 pairs or less are exempt
- 11 material, the labor to install these terminals is not. Therefore, the times are
- 12 populated for all sizes of terminals.
- 13

### 14 Media Splicing and Placing Hours

- 15 Times for placing and splicing aerial, buried and underground copper and fiber
- 16 cables were obtained from the OSPCM system used by BellSouth to estimate job
- 17 costs for internal purposes. Since outside contractors place buried cable, buried
- 18 placing costs are zero in this table.
- 19

### 20 FDI Splicing

- Times for FDI splicing were obtained from the OSPCM system used by BellSouth
  to estimate job costs for internal purposes.
- 23

## 24 <u>Percent Activities</u>

25 Similar to other proxy-type cost models, the BSTLM requires knowledge of not

1	only the cost of various activities associated with placing the structure for cable,
2	but also the likelihood that each of those activities will occur in various density
3	zones and various terrain types. Actual data regarding these probabilities by
4	density and terrain type does not exist. However, BellSouth's subject matter
5	experts previously reviewed the default percentages used in the BenchMark Cost
6	Proxy Model ("BCPM") and found them to be a reasonable reflection of BellSouth
7	experience in various terrain and density combinations. Additionally the
8	Commission approved the use of these "percent activities" in the Universal Service
9	Fund ("USF") Docket No. 980696-TP. BellSouth used those same percentages in
10	this filing. Modifications were required, however, since the BCPM included nine
11	density zones and separated feeder from distribution. The BSTLM, on the other
12	hand, includes a breakdown into three density groups (which are groupings of the
13	density zones) - urban, suburban and rural - and combines feeder and distribution
14	into one table. Thus, BellSouth combined the feeder percent activities previously
15	approved by the Commission such that areas with fewer than 200 lines per square
16	mile are classified as rural, areas with between 201 and 5000 lines per square mile
17	are treated as suburban, and areas with more than 5000 lines per square mile are
18	considered urban.

19

## 20 Other Material Loadings

21 While BellSouth has used the capabilities of the BSTLM to develop a "bottoms-

22 up" approach to determining installation and engineering costs, there remain

23 certain items of investment that are calculated via factors. Those items include

- 24 sales tax, exempt material, supply expense, and other items such as indirect labor
- 25 costs, right of way and tree trimming associated with initial cable placements, and

interest during construction. These items are included in this filing in the Material
 Loading table. Attachments 5 and 5A in Appendix B to the cost study provide a
 description and explain the development of these factors.

4

## 5 Pole, Guy and Anchor, and Manhole Spacing

6 Pole spacing was determined by examining 12/31/00 ARMIS Report 43-08 for 7 Florida to determine the number of poles in the state relative to the sheath distance 8 of aerial cable in the state. Worksheets displaying the development of the pole 9 spacing input are shown in Attachment 1 of Appendix B to the cost study. The 10 number of poles owned by BellSouth in Florida were adjusted by the percentage of 11 poles owned by BellSouth to arrive at the total number of poles to which BellSouth 12 cable is attached in Florida. Then, this adjusted number of poles was divided into 13 the aerial sheath feet in Florida. The result was 112 feet of aerial sheath per pole. 14 BellSouth rounded this up to an even 120 feet. This result is extremely 15 conservative given the fact that this methodology assumes only one existing 16 BellSouth sheath on each pole line route, when in reality there are often two or 17 more sheaths on a given pole line. If one were to assume 1.5 sheaths, on average, 18 per pole line, the spacing interval would drop to approximately 75 feet. 19 20 Anchor and guy spacing is estimated to be every 500 feet (roughly every 4 poles) 21 and manhole spacing is assumed to be every 625 feet based on subject matter 22 expert estimates. 23

# 24 <u>Underground Conduit and Manhole Contractor Costs</u>

25 Conduit duct costs and manhole costs, like the underground excavation contract

-15-

1	labor costs, were also obtained from actual outside contractor contracts in each
2	district in Florida. Each district contractor's price was weighted by the amount of
З	usage in the district in 2000 to determine a weighted average price for furnishing
4	and installing conduit and manholes in the state. As specified in the contracts,
5	contractors charge to place manholes on a per cubic foot basis. Therefore, the
6	BSTLM inputs for manhole costs were based upon the total cubic feet of the
7	different sizes.
8	
9	Engineering
10	The BSTLM's internal logic in the previous filing (August 2000) calculated
11	engineering as a loading on material. For the 120-day filing, the BSTLM logic
12	has been modified to now calculate engineering costs by applying factors to the
13	total of non-engineering investments (i.e., as a loading on material, installation
14	labor, sales tax, and other loadings.) The engineering factors used and included in
15	the January 28, 2002 filing are account-specific and were developed from the
16	same data source previously used to derive in-plant factors, the 1998 State and
17	Local Sales Taxes, Resource Tracking Analysis and Planning ("RTAP") System,
18	and Special Report/File 542 - 1998 Investments. The basic factor calculation is
19	(TELCO Engineering + Vendor Engineering)/(TELCO Labor + Vendor Labor +
20	Exempt Material + Non-exempt Material + Other)
21	Engineering
22	Engineering costs were obtained from the OSPCM system. While previous filings
23	treated engineering as a linear factor of non-exempt material, the engineering input
24	from OSPCM is applied as a factor of total non engineering investments (i.e., as a
25	loading on non-exempt material, exempt-material, labor, contractor costs, sales tax,

1		and other loadings). The BSTLM logic in the provious filing calculated			
2		engineering as a loading on material. For this filing, the BSTLM logic has been			
3		modified to now calculate engineering in the same manner as the OSPCM by			
4		applying the factor to the total of non-engineering investments.			
5					
6		Outside Contractor Use (Engineering Rules)			
7		This input table was not used in the previous filing by BellSouth since all			
8		contractor and BellSouth labor was calculated via in-plant factors in the Cost			
9		Calculator. This table directs the BSTLM to use either contractor installation or			
10		BellSouth personnel installation ("Y" indicates contractor while "N" indicates			
11		BellSouth personnel). Since poles are placed by contractors and guys are placed			
12		by BellSouth personnel, the table was modified to include a third option for Poles			
13		("B" indicates that both contractor and BellSouth installation is required).			
14		Additionally, even though not used, this table was populated in the previous filing			
15		and two entries required correction. The indicators for DTBT and FDI were			
16		changed from "Y" to "N" to reflect the fact that BellSouth personnel placed FDIs			
17		(see discussion of FDI placing hours above) and terminals.			
18					
19	Q.	HOW DO THE RECURRING COSTS OBTAINED FROM USE OF THE			
20		"BOTTOMS-UP" APPROACH COMPARE TO COSTS USING IN-PLANT			
21		FACTORS?			
22					
23	Α.	Some of the element costs have increased, while others have decreased, even			
24		though all costs are based on the same "bottoms-up" input values and BSTLM			
25		algorithms. For example, the Service Level 1 ("SL1"), SL2, ISDN, and 4 wire			

-17-

1	DS1 loops have increased in every zone as compared with the current		
2	Commission-ordered rates. On the other hand, 2 wire and 4 wire UCL-Long loops		
3	have decreased in every zone. Additionally, for a given element, one deaveraged		
4	zone cost may have increased while another zone cost has decreased. For		
5	example, the 2 wire UCL-Short loop's zone 1 cost increased while zones 2 and 3		
6	decreased. Exhibit DDC-1_120 compares BellSouth's "bottoms-up" cost study to		
7	the revised Commission-ordered rates contained in Appendix A of Order PSC-01-		
8	2051-FOF-TP. (The Commission-ordered rates are those that reflect the impact of		
9	inflation.) As one can see from reviewing this exhibit, the differences do not seem		
10	to follow any pattern.		
11			
12	Issue 1(b): Should BellSouth's loop rates or rate structure previously approved		
13	in Order No. PSC-01-1181-FOF-TP be modified? If so, to what		
14	extent, if any, should the rates or rate structure be modified?		
15			
16	Q. FROM A COST PERSPECTIVE, WHAT IS YOUR OPINION ON THIS		
17	ISSUE?		
18			
1 <del>9</del>	A. First, the Commission must also consider Order PSC-01-2051-FOF-TP, which re-		
20	instated the impact of inflation. Once the decisions contained in that ruling are		
21	considered, there is no reason to modify the loop rates or the rate structure. From		
22	the discussion I have presented on the input development, one can see that the		
23	"bottoms-up" approach taken by BellSouth is a much more complex study of loop		
24	costs than the previously filed study based upon the use of in-plant factors and		
25	structure loading factors. BellSouth continues to believe, however, that the use of		

-18-

1	in-plant factors and structure loading factors produces reasonable, accurate results		
2	and that the ordered rates should remain as is. Cost studies produce estimates of		
3	cost, not absolute results. While the "bottoms-up" approach produces very specific		
4	results, these results are a combination of a much larger number of influencing		
5	variables and inputs than was present under the factor approach. Under the		
6	"bottoms-up" method, depending upon the customer location, the type and size of		
7	facilities, and number of services, the costs can vary substantially, as Exhibit		
8	DDC-1_120 illustrates. In contrast, in-plant and loading factors reflect		
9	experienced cost relationships between material prices and labor/engineering costs.		
10			
11	Furthermore, the "bottoms-up" approach introduces an extensive set of new inputs		
12	that can be questioned, criticized and manipulated by intervening parties. While		
13	BellSouth is not afraid of this scrutiny, it does not believe that the end-result of		
14	such an effort will produce either a better quality result or a more "TELRIC-		
15	compliant" result.		
16			
17	Issue 2(a): Are the ADUF and ODUF cost studies submitted in BellSouth's		
18	120-day filing compliance filing appropriate?		
19	Q. WHY DID BELLSOUTH FILE ADUF AND ODUF COSTS IN THIS PHASE		
20	OF THE DOCKET?		
21			
22	A. Even though the Commission's Order did not specifically include these elements		
23	in the 120-day requirement, substantial changes to the study inputs necessitated		
24	that BellSouth advise the Commission. The costs for the DUF elements BellSouth		
25	filed on October 8, 2001 reflect the applicable Commission-ordered modifications		

1 I discussed previously. As I explain below, BellSouth is revising the DUF element 2 costs further and is filing a revised cost study simultaneously with this testimony 3 (Cost Study - Revision 2). 4 5 Q. PLEASE BRIEFLY EXPLAIN WHAT THE ADUF AND ODUF 6 ELEMENTS ARE AND HOW THE COSTS WERE DEVELOPED. 7 8 A. In fact, there are three different daily usage offerings; Access Daily Usage Files 9 ("ADUF"), Optional Daily Usage Files ("ODUF"), and Enhanced Optional Daily 10 Usage Files ("EODUF"). Each of the offerings provides electronic billing data to 11 the ALECs: 12 13 ADUF - information of end user's daily originating and terminating access carrier 14 messages. BellSouth extracts and distributes call detail on these access messages. 15 16 ODUF – call detail information for billable messages transported through 17 BellSouth's network and processed in BellSouth's CRIS (Customer Records 18 Information System) billing system. BellSouth extracts and distributes call detail 19 on messages such as, Measured Local, IntraLATA Toll, and operator-handled calls 20 if the ALEC purchases Operator Services from BellSouth. This element is 21 applicable to both UNEs and resale. 22 23 EODUF – usage data for local calls that originate from resold, flat-rated business 24 and residential lines. BellSouth extracts and distributes call detail on these 25 messages.

2	BellSouth has developed unique programs at the ALEC's request in order to
3	extract the billing data they requested, in a format such that they can bill their end-
4	users. The costs associated with this on-going process and the computer resources
5	required to implement and support the programs are reflected in BellSouth's cost
6	study. These costs are incremental to BellSouth's normal billing process.
7	

# 8 Q. WHY WERE THESE COST STUDIES FOR THE DAILY USAGE FILE 9 ("DUF") ELEMENTS REVISED?

10

1

11 A. When BellSouth developed the cost study inputs in the original filing (August 12 2000), the actual number of records was low and rather stagnant. The projected 13 demand reflected this trend. Since the time the original cost study was filed in this 14 docket, however, BellSouth experienced a dramatic increase in the number of 15 message records. The increase in the number of resale to UNE-P (combination) 16 conversions may have caused this upswing. Since the cost results for the DUF 17 elements are demand-dependent, BellSouth included the DUF elements as part of 18 the 120-day items. In fact, in gathering cost input for the most recently initiated 19 generic cost docket in BellSouth's region (Georgia Docket No. 14361-U), projected demand for ADUF and ODUF has increased over what was filed on 20 October 8<sup>th</sup> in Florida. (The EODUF demand has decreased, increasing the costs 21 22 slightly.) Exhibit DDC-1\_120 displays the results of updating this demand. As I 23 mentioned previously, concurrent with the filing of this testimony, BellSouth is 24 filing its revised cost study to incorporate this change in demand to the DUF 25 elements. Only the DUF results changed from the study filed on October 8, 2001.

-21-

1	The DUF elements were not impacted by any of the revisions made with the				
2	January 28, 2002 filing.				
З					
4	Issue 2(b): Should BellSouth's ADUF and ODUF rates or rate structure				
5	previously approved in Order No. PSC-01-1181-FOF-TP be				
6	modified? If so, to what extent, if any, should the rates or rate				
7	structure be modified?				
8					
9	Q. WHAT IS YOUR OPINION ON THIS ISSUE?				
10					
11	A. The Commission should consider the updated information on DUF costs filed here.				
12	BellSouth, in good faith, has advised this Commission of a supportable change to a				
13	cost study input. Since the change results in a reduction of ADUF and ODUF				
14	rates, the intervening parties would not be adversely affected by a decision to				
15	consider the revised cost study. Let me clarify one point, the issue here is whether				
16	or not the rates should be revised. It is NOT a question of whether or not DUF				
17	rates are appropriate. This issue has already been litigated in the first phase of this				
18	proceeding and the Commission established rates in both Order No. PSC-01-1181-				
19	FOF-TP and in Order No. PSC-01-2051-FOF-TP, which considered inflation.				
20					
21	Issue 3(a): Are the UCL-ND loop cost studies submitted in BellSouth's 120-day				
22	filing compliant with Order No. PSC-01-1181-FOF-TP?				
23					
24	Q. WHY DID BELLSOUTH FILE A COST STUDY FOR UCL-ND IN THIS				
25	PHASE OF THIS DOCKET?				

2	Α.	One of the "120-day" requirements identified by this Commission was to
3		determine xDSL nonrecurring costs that exclude the Design Layout Record
4		("DLR"), test point, and order coordination. The Unbundled Copper Loop - Non-
5		Designed ("UCL-ND") fulfills that obligation. In addition, this all copper loop
6		offering satisfies the Commission's requirement that BellSouth provision SL1
7		loops and guarantee not to roll them onto another facility or convert them to
8		another technology. The UCL-ND gives the ALECs what they need to provide
9		xDSL service, but does not unduly restrict BellSouth in providing voice grade
10		service over the most efficient technology.
11		
12	Q.	HOW DOES THE UNBUNDLED COPPER LOOP - NON-DESIGNED
13		DIFFER FROM THE UNBUNDLED COPPER LOOPS PREVIOUSLY
14		FILED BY BELLSOUTH IN THIS DOCKET?
15		
16	A.	As the name implies, these loops do not go through the design process BellSouth
17		utilizes to provision UCL-Short and UCL-Long loops. Thus, they are not
18		provisioned with a test point and a DLR will not be provided. Additionally, the
19		UCL-ND loop will not have a specific length limitation. Since its resistance is
20		restricted to 1300 ohms, however, the UCL-ND loop generally will be 18,000 feet
21		or less. However, in some cases, the length may be longer based on gauge.
22		
23		Even though the DLR is not provided with the UCL-ND loop, ALECs may request
24		an Engineering Information document from BellSouth (element A.1.8). This
25		document provides loop make-up information, similar to a DLR. The October 8 <sup>th</sup>

1

1	cost study al	cost study also includes the cost development for this optional element The cost				
2	of Element A	of Element A.1.8 was not impacted by the January 28, 2002 revision.				
З						
4	Q. HOW DOE	. HOW DOES THE RECURRING COST OF UCL-ND LOOPS COMPARE				
5	TO OTHER	TO OTHER TYPES OF LOOPS?				
6						
7	A. The table be	. The table below compares the statewide average recurring cost of an SL1, SL2,				
8	ADSL, HDS	ADSL, HDSL, UCL-Short and UCL-Long to the UCL-ND loop based on the				
9	"bottoms-up	"bottoms-up" approach.				
10						
11	A.1.1	2-Wire Analog Voice Grade Loop - Service Level 1	\$19.52			
12	A.1.2	2-Wire Analog Voice Grade Loop - Service Level 2	<b>\$2</b> 1,72			
13	A.6.1	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop	\$15.66			
14	A.7.1	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop	\$13.60			
15	A.13.1	2-Wire Copper Loop - short	\$15.66			
16	A.13.7	2-Wire Copper Loop – long	\$32.19			
17	A.13.12	2-Wire Copper Loop – ND	\$15.21			
18						
19	Note that the	Note that the UCL-ND loop is less than both an UCL-Short loop and an SL1 loop,				
20	and significat	ntly less than the UCL-Long loop. This is consistent wi	th the fact that			
21	test points ha	test points have been removed and that the UCL-ND has no length restriction, but				
22	is generally lo	is generally less than 18,000 feet because of the 1300-ohm resistance limit. In				
23	running the C	running the Copper-Only scenario in the BSTLM, the loop limit was set at 24,000				
24	feet in order	feet in order to capture those loops that potentially would still meet the 1300-ohm				
25	restriction, bu	restriction, but exceed the 18,000 feet limit. In fact, the average loop length for the				

1 UCL-ND generated by the BSTLM is 13,258 feet.

#### 2 Q. HOW DOES THE NONRECURRING COST OF UCL-ND LOOPS

- 3 COMPARE TO OTHER TYPES OF LOOPS?
- 4

A. The nonrecurring cost of an UCL-ND is less than the nonrecurring costs associated
with designed loops. Additionally, it is less than the SL1 because it is an allcopper loop and thus, a plug-in does not have to be provisioned in the digital loop
carrier system.

9

# 10 Q. ARE THERE OTHER ADJUSTMENTS TO THE COST STUDY THAT 11 ARE REQUIRED DUE TO THE UCL-ND OFFERING?

12

13 A. Yes. As I mentioned previously, this type of loop is non-designed. Thus, no test 14 point is provisioned. ALECs, however, may desire a joint acceptance test to 15 benchmark the transmission quality of the loop and to ensure compatibility with 16 the xDSL service they wish to provide. These testing parameters include, but are 17 not limited to, testing for non-loading, balance of pair, and continuity from the 18 main distribution frame ("MDF") to the network interface device ("NID"). 19 BellSouth filed Testing Beyond Voice (A.19 elements) previously in this docket. 20 These costs, however, only considered testing a designed loop that had been 21 conditioned. The adjusted loop testing elements also consider testing parameters 22 for non-designed loops (SL1 or UCL-ND). Exhibit DDC-1\_120 illustrates the 23 difference in the A.19 costs between the current Commission ordered rates and the 24 latest cost study. 25
1		
2		Issue 3(b): What modifications, if any, are appropriate and what should the
3		rates be?
4		
5	Q.	SHOULD THIS COMMISSION USE THE COSTS FILED HERE TO SET
6		RATES FOR UCL-ND ELEMENTS?
7		
8	A.	No. As discussed in response to Issue 1(b), BellSouth does not believe that the
9		"bottoms-up" approach develops a more representative result than the use of
10		factors. Let me note that BellSouth has also filed the UCL-ND elements in Docket
11		No. 960786-TP (271 docket) based on the use of in-plants and loading factors.
12		Those cost studies reflect the Commission-ordered adjustments except for the re-
13		instatement of inflation. BellSouth requests that the Commission establish rates
14		for the UCL-ND related elements in Docket No. 960786-TP once inflation is
15		considered.
16		
17		Issue 4(a): What revisions, if any, should be made to NIDs in both the BSTLM
18		and the stand-alone NID cost study?
19		Issue 4(b): To what extent, if any, should the rates or rate structure be modified?
20		
21	Q.	ARE REVISIONS REQUIRED TO THE CALCULATION OF BOTH
22		TYPES OF NID COSTS?
23		
24	Α.	No. Adjustments are not required to both the NID cost considered in the BSTLM
25		and to the stand-alone NID costs. The stand-alone NID costs, however, do require

-26-

1 revision. Let me explain.

At pages 192-93 of Order No. PSC-01-1181-FOF-TP, the Commission noted an
inconsistency in the treatment of exempt/miscellaneous material for the standalone NID and the exempt/miscellaneous material associated with the NID when it
is provisioned with the loop (via the BSTLM).

6

Typically, the NID is provisioned with the loop at the time the residence or
business is constructed and the drop wire is placed and treated as capitalized
investment. For most cable placements in BellSouth's studies, exempt material is
recovered through an In-Plant factor; however, a different approach is taken for the
NID and drop. BellSouth, in the BSTLM, directly identifies items normally
captured in an In-Plant factor (labor, exempt materials, sales tax, etc.) for the
capitalized drop and NID.

14

15 Thus, because the NID investment generated by the BSTLM already considers 16 exempt material, taxes, labor, etc., the BellSouth Cost Calculator does not need to 17 apply the In-Plant factors to drop and NID investments. BellSouth reflected this by 18 assigning special "sub-FRCs" to the drop and NID. These special sub-FRC codes 19 are 22C-01 or 45C-01. The "01" sub-FRCs instruct the BellSouth Cost Calculator 20 not to apply In-Plant factors to those items of plant. Therefore, BellSouth's NID 21 costs associated with unbundled loops are correct and no "double-counting" of In-22 Plant costs associated with the NID or drop occurs.

23

24 On the other hand, Stand-Alone NID/NID Access is a separate UNE offering

designed for situations where the existing NID is not suitable for ALEC connection

1	and where BellSouth terminates its loop directly to the inside wire, or at the
2	ALEC's request. BellSouth charges a nonrecurring fee for the installation of,
3	material for, and cross connect (if appropriate) to the stand-alone NID. The stand-
4	alone NID material (housing, interface, and protectors) is exactly the same as the
5	NID placed with the loop. As found by the Commission in its Order, BellSouth
6	did not apply exempt materials in the stand-alone NID study. In fact, BellSouth
7	should indeed have included exempt material in its stand-alone NID costs.
8	BellSouth has included this adjustment in this filing. Further, these are the
9	appropriate costs to be used to establish rates for Stand-Alone NID/NID Access
10	elements.
11	
12	Issue5 (a): What is a "hybrid copper/fiber xDSL-capable loop" offering and
13	is it technically feasible for BellSouth to provide it?
14	
15	(b) Is BellSouth's cost study contained in the 120-day compliance
16	filing for the "hybrid copper/fiber xDSL-capable loop" offering
17	appropriate?
18	
19	(c) What should the rate structure and rates be?
20	
21	Q. THE COMMISSION'S ORDER STATED "WE BELIEVE BELLSOUTH IS
22	OBLIGATED, IF TECHNICALLY FEASIBLE, TO PROVIDE HYBRID
23	COPPER/FIBER xDSL-CAPABLE LOOPS TO DATA ALECS." WHAT
24	COST SUPPORT HAS BELLSOUTH FILED IN SUPPORT OF THE
25	HYBRID COPPER/FIBER LOOP?

2	A. BellSouth filed the recurring and nonrecurring costs associated with providing data
3	ALECs the ability to utilize a loop served by fiber-fed digital loop carrier ("DLC")
4	systems (i.e., loops comprised of fiber feeder and copper distribution) to offer
5	digital subscriber line ("DSL") services to their end-users, without unbundling
6	packet switching. The distribution portion of the loop is comprised of a dedicated
7	2-wire physical transmission facility which is connected to a dedicated 16-port
8	Digital Subscriber Line Access Multiplexer ("DSLAM"). From the DSLAM, a
9	dedicated DS1 is required through the DLC remote terminal ("RT") to the central
10	office terminal ("COT") to the ALEC's collocated space in the central office.
11	Exhibit DDC-2_120 depicts the components of the Hybrid Copper/Fiber loop.
12	BellSouth witness Mr. Jerry Kephart addresses the feasibility issue and discusses
13	why this configuration fulfills the Commission's directive. I address how the costs
14	were developed.
15	
16	The BSTLM developed the investments associated with the DS1 component of the

17 Hybrid Copper/Fiber Loop. Let me note that this sub-loop feeder DS1 is not the 18 same as the unbundled sub-loop feeder - 4-wire DS1 (element A.9.2) also filed in 19 this docket. The sub-loop feeder DS1 (A.9.2) includes the feeder portion of all 20 DS1 loops. These include DS1 loops served by both copper feeder and those 21 served by fiber feeder facilities to a remote DLC terminal. The Hybrid 22 Copper/Fiber DS1 (element A.20.1), on the other hand, only considers locations 23 served via a remote DLC terminal served by fiber. Thus, all of the locations used 24 in the calculation of the sub-loop feeder - 4-wire DS1 are not included in the cost 25 calculation of the Hybrid Copper/Fiber DS1. The material prices for the 16-port

1

- 1 DSLAM were obtained from vendor contracts.
- The nonrecurring costs reflect the work activities required to connect and turn-up
  the DS1 and the 2-wire transmission facility onto the DSLAM. In order to make
  this a functional loop and to reflect the manner in which the loop will be
  provisioned, the individual network components must be summed into (1) System,
  (2) DS1, and (3) Activation elements.

### 8 Q. PLEASE DESCRIBE WHICH COMPONENTS ARE CONSIDERED IN 9 THE SYSTEM, DS1, AND ACTIVATION COSTS.

- 10
- A. The System element represents the cost of the DSLAM (element A.20.3) with an
  administrative DS1 (A.20.1), which is used for BellSouth's management of the
  DSLAM. This administrative DS1 does not terminate at the ALEC's collocation
  space. Instead, it terminates into a DSL hub bay in order to allow BellSouth to
  control the provisioning, maintenance, and repair of the xDSL Hybrid
  Copper/Fiber loop. The cost of the administrative DS1 does not differ from the
  DS1 that terminates into the ALEC's collocation space.
- 18

19 The DS1 element accounts for the cost of the fiber DS1 that essentially connects 20 the DSLAM at the RT to the ALEC's collocated space in the central office. The 21 recurring cost is equal to the Hybrid Copper/Fiber DS1 (element A.20.1). The 22 nonrecurring cost is the sum of the DS1 establishment element (A.20.2) and the 23 nonrecurring cost associated with the Sub-loop Feeder per 4-wire DS1 element 24 (A.9.2). Let me note that the nonrecurring cost for A.9.2 was not restudied since 25 the Commission has set a rate for this element. Rather, the rate (\$133.77) was

1	hard-coded into the Final Cost Summary.
2	The Activation nonrecurring cost is the sum of the channel activation cost (element
3	A.20.4) and the nonrecurring cost associated with the 2-wire distribution sub-loop
4	(element A.2.2). As with element A.9.2, the nonrecurring cost for A.2.2 was not
5	restudied since the Commission has set a rate for this element. Rather, the rate
6	(\$60.19) was hard coded into the Final Cost Summary.
7	
8	Issue 6: In BellSouth's 120-day filing, has BellSouth accounted for the impact
9	of inflation consistent with Order No. PSC-01-2051-FOF-TP?
10	
11	Q. WHAT IS YOUR RESPONSE TO THIS ISSUE?
12	
13	A. BellSouth's cost studies are in compliance with the Commission's directive on
14	inflation. Order No. PSC-01-2051-FOF-TP states: "we hereby reconsider our
15	decision to reject BellSouth's proposed inflation factor, because it was based upon
16	a misinterpretation and misrepresentation of the facts presented." (Page 5) Thus,
17	the Commission found that the application of inflation factors to both the
18	investment and to labor rates is appropriate. The cost study filed on October 8,
19	2001 reflects the impact of inflation based on factors originally filed in this docket.
20	BellSouth made no adjustment to the inflation application in the January 28, 2002
21	<u>filing.</u>
22	
23	Issue 7: Apart from issues 1-6, is BellSouth's 120-day filing consistent with
24	the orders in this docket?
25	

.

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2	
3	A. The cost studies filed by BellSouth incorporate all of the adjustments ordered by
4	this Commission. I have described the modifications as part of this testimony.
5	Further, the cost study contains a detailed discussion of the adjustments made by
6	BellSouth in order to comply with the Commission's directive.
7	
8	Q. DOES THIS CONCLUDE YOUR TESTIMONY?
9	
10	A. Yes.
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#### 1 Q. WHAT IS YOUR RESPONSE TO THIS ISSUE?

-32-

1	BELLSOUTH TELECOMMUNICATIONS, INC.
2	SURREBUTTAL TESTIMONY OF D. DAONNE CALDWELL
3	<b>BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION</b>
4	DOCKET NO. 990649A-TP
5	(120-DAY ITEMS)
6	<b>DECEMBER 26, 2001</b>
7	AMENDED JANUARY 28, 2002
8	
9	Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.
10	
11	A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,
12	N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth
13	Telecommunications, Inc. ("BellSouth"). My area of responsibility relates to the
14	development of economic costs.
15	
16	Q. ARE YOU THE SAME D. DAONNE CALDWELL THAT PREVIOUSLY
17	FILED TESTIMONY IN THIS DOCKET?
18	
19	A. Yes.
20	
21	Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
22	
23	A. The purpose of my testimony is to respond to cost development issues raised in the
24	testimony filed by intervening parties. Specifically, I respond to allegations made
25	by AT&T/MCI WorldCom witnesses Greg Darnell, John Donovan, and Brian

1	Pitkin and Florida Digital Network ("FDN") witness Michael Gallagher.
2	MULTIPLE SCENARIOS
3	Q. MR. DARNELL CLAIMS THAT THE FLORIDA PUBLIC SERVICE
4	COMMISSION ("COMMISSION") FOUND THAT "BELLSOUTH'S
5	METHOD OF DEVELOPING UNE LOOP RATES WAS NOT
6	ACCEPTABLE." (PAGE 2, LINES 20-21) DO YOU AGREE?
7	
8	A. Absolutely not. First, the argument presented by Mr. Darnell concerns multiple
9	scenario use by the BellSouth Telecommunications Loop Model <sup>©</sup> ("BSTLM").
10	This issue was not identified by the Commission as a "120-day" issue and thus, is
11	not properly before the Commission. Mr. Darnell is attempting to argue a topic
12	that has been reviewed, resolved, reconsidered, and rejected by the Commission.
13	Second, Mr. Darnell has selectively extracted a single statement contained in the
14	discussion of this issue from the order and has ignored the Commission's
15	conclusion. In fact, the Commission stated: "Accordingly, at this time we find that
16	the record supports that the BST2000 is an appropriate basis for determining the
17	costs of stand-alone UNE loop offerings, while the Combo run is appropriate only
18	for certain integrated loop/port combinations." (Page 155, Order No. PSC-01-
19	1181-FOF-TP) Further, WorldCom argued the same points contained in Mr.
20	Darnell's testimony in its request for reconsideration on this issue. After review of
21	the reconsideration arguments, the Commission ruled:
22	
23	the Movants' Motion for Reconsideration on this point is denied. The Movants
24	

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1 have not identified a mistake of fact or law in our decision. Disagreement with 2 our interpretation of the law does not equate to [a] mistake in our decision. (Page 3 19, Order No. PSC-01-2051-FOF-TP) 4 5 Lastly, every Commission in BellSouth's region that has considered the argument 6 raised again (and inappropriately) by Mr. Darnell has, like this Commission, 7 rejected the argument and ruled that it is appropriate to use multiple scenarios in 8 the BSTLM to calculate rates for different UNEs. Mr. Darnell offers nothing in his 9 testimony that should cause the Commission to overturn its previous ruling. 10 11 DAILY USAGE FILES ("DUFs") 12 Q. MR. DARNELL ASSERTS: "DUF CHARGES ARE THE SAME COSTS 13 THAT BELLSOUTH USED IN ITS DEVELOPMENT OF THE COMMON 14 COST FACTOR." (PAGE 11, LINES 17-18) IS HE CORRECT? 15 16 A. No. Mr. Darnell is wrong. As the input sheets to the DUF studies filed as part of 17 BellSouth's cost study show, the costs reflect the computer resources, 18 programming effort and support labor directly attributable to the processing and 19 delivery of the ALECs' daily usage files ("DUFs"). These costs are incremental to 20 costs associated with normal call measurement detail. BellSouth developed unique 21 programs at the ALECs' request in order to extract the billing data they requested, 22 in a format they can use to bill their end-users. The costs associated with this on-23 going process and the computer resources required to implement and support the 24 programs are appropriately reflected in BellSouth's cost study. Also, the cost of 25 recording is not included in the DUF studies. There is a separate element for

recording (element M.2.1) that is only charged to facility-based providers who
purchase operator services from BellSouth. Second, the DUF products were
developed to extract data in a format unique to the ALEC. For example, Enhanced
Optional Daily Usage File ("EODUF") is designed to capture the call details from
what would have "normally" been a flat-rated customer. It is evident that these
ALEC-caused costs are in addition to BellSouth's normal billing process and
therefore are appropriately charged to the ALEC.

8

9 Even though Mr. Darnell provides no support for his argument, he may have based 10 his "double recovery" claim on the fact that the same expense accounts (6124, 11 6623, and 6724) appear in both the DUF studies and in the shared and common 12 cost factors. However, BellSouth identified and removed costs that are directly assigned in the cost studies from the development of the shared and common 13 14 factors. In fact, file EXPPRJ00.XLS, contained in the cost study, outlines the 15 adjustments BellSouth made to remove the directly identified costs. Thus, 16 BellSouth's "currently approved common cost factor does not include certain 17 forward-looking common costs," as Mr. Darnell contends. (Darnell Testimony, 18 Page 11, Lines 21-22)

19

Finally, Mr. Darnell's recommendation that "[I]f the amount of the cost directly
assigned to DUF charges is so insignificant that it does not effect the common cost
percentage when this cost is removed from the percentage, the Commission should
reject DUF charges" is both a self-serving pronouncement and a faulty conclusion.
(Darnell Testimony, Page 12, Lines 17-20) ALECs directly cause these costs to be
incurred and BellSouth does not benefit from the production of daily usage files.

Thus, BellSouth may appropriately recover these costs. Mr. Darnell's accusation
 of BellSouth engaging in "costing mischief" is wholly unfounded.

3

#### 4 HYBRID COPPER/FIBER LOOP

# 5 Q. MR. DARNELL AND MR. GALLAGHER COMMENT ON THE HYBRID 6 COPPER/FIBER LOOP FILED BY BELLSOUTH. PLEASE RESPOND TO 7 THEIR CRITICISMS.

8

9 A. My response will center on the way in which the costs were developed. BellSouth
10 witness Jerry Kephart will comment on the product design and network
11 requirements of this offering and Tommy Williams will discuss BellSouth's
12 unbundling requirements as and expand on how it relates to Line Sharing and Line
13 Splitting.

14

15 Mr. Darnell claims that the nonrecurring charge for channel activation (A.20.4) 16 should be set to zero since "the nonrecurring charges for element A.2.2 subloop 17 already recover those costs." (Darnell Testimony, Page 17, Lines 22-23) Mr. 18 Darnell's contention that these costs have already been recovered is wrong. The 19 input file for the A.20.4 element clearly identifies a work group and associated 20 work activity not contained in the input file of the sub-loop element A.2.2. The 21 Data Support Group (wage scale 32) was not a component of the A.2.2 cost 22 development. Clearly since the Hybrid Copper/Fiber Loop is designed to handle 23 data transmissions, while the distribution sub-loop is primarily designed to carry 24 only voice traffic, it is not surprising that additional work activity by the Data 25 Support Group is required. Mr. Darnell makes the same incorrect allegation

concerning the nonrecurring costs associated with the Hybrid Copper/Fiber DS1,
 i.e., that an incremental cost does not exist. Again, Mr. Darnell is wrong. The
 same Data Support Group activity is required on the DS1 as on the distribution
 portion of the Hybrid Copper/Fiber Loop.

5

6 Both Mr. Darnell and Mr. Gallagher question the difference in recurring costs 7 between the Hybrid Copper/Fiber DS1 and the sub-loop feeder DS1. Their 8 concern is unfounded. As I explained in my direct testimony: "this sub-loop 9 feeder DS1 is not the same as the unbundled sub-loop feeder – 4-wire DS1 10 (element A.9.2) also filed in this docket. The sub-loop feeder DS1 (A.9.2) includes 11 the feeder portion of all DS1 loops. These include DS1 loops served by both 12 copper feeder and those served by fiber feeder facilities to a remote DLC terminal. 13 The Hybrid Copper/Fiber DS1 (element A.20.1), on the other hand, only considers 14 locations served via a remote DLC terminal served by fiber. Thus, all of the 15 locations used in the calculation of the sub-loop feeder DS1 (A.9.2) are not 16 included in the cost calculation of the Hybrid Copper/Fiber DS1." Therefore, Mr. 17 Gallagher's conclusion that this difference is due to BellSouth's "fail[ure] to utilize 18 a single unified design in the determination of its unbundled DS1 subloop rates" is 19 incorrect. (Gallagher Testimony, Page 26, Lines 22-23) Even if BellSouth had 20 used only one scenario in running the BSTLM, there would still have been a 21 difference between the two DS1 elements because they are defined differently. 22 The sub-loop DS1 (A.9.2) considers both copper and fiber facilities, while the 23 hybrid DS1 (A.20.1) is purely fiber and is longer in length since, in the BSTLM, 24 DS1s are provisioned on fiber-fed digital loop carrier systems ("DLCs") only if the 25 DS1 loop length is greater than 12,000 feet. In fact, the average length of the DS1

1	sub-loop (A.9.2) is 10,407 feet while the average length of the hybrid DS1 (A.20.1)
2	is 21,029 feet.

Mr. Darnell's contention on page 18 of his testimony that the inclusion of a portion
of the remote terminal costs violates TELRIC principles because the remote
terminal is "scorched" is incorrect. In a long-run study, such as a TELRIC study,
all costs are considered variable, i.e., that they will exhaust. Since the deployment
of the Hybrid Copper/Fiber loop utilizes components of the remote terminal, they
are appropriately considered in the cost development.

10

11	Finally, without any evidence, Mr. Darnell alleges that; "the material prices (i.e.
12	DSLAM, Hub Bay and DS1 Card) and installation times (i.e. service inquiry) that
13	BellSouth has used for the development of proposed DSLAM recurring and non-
14	recurring rates do not reflect those of a forward looking, least cost
15	telecommunications service provider." (Darnell Testimony, Page 18, Lines 21-25)
16	Since Mr. Darnell did not provide an example of what he believes are "forward
17	looking, least cost" rates I cannot specifically address his concerns. Thus, I can
18	only state that the cost study accurately reflects the product description provided by
19	the product team and the equipment and labor resources identified by subject
20	matter experts in BellSouth's Network department.
21	

In preparing the cost study that was filed on November 8, 2001, the Final Cost

23 Summary failed to reflect the total System, DS1, and Activation costs associated

- 24 with the Hybrid Copper/Fiber Loop; i.e., the individual components were not
- summed. Exhibit DDC-3\_120 Day, filed on a separate CD, explains how to

manually correct the rate list file, contains a corrected rate list file, and includes the
 revised Final Cost Summary. A paper copy of the revised Final Cost Summary is
 also attached to my testimony.

4

#### 5 <u>"BOTTOMS-UP INPUTS"</u>

#### 6 LOADING FACTORS

## 7 Q. MR. PITKIN CONTENDS THAT BELLSOUTH'S MATERIAL LOADING 8 FACTORS ARE OVERSTATED. (PAGES 8-12) IS HE CORRECT?

9

10 A. No. First, he alleges that because these ratios are developed based on historical 11 data that makes their application embedded. That is not true. The Miscellaneous 12 Material loading factor develops a relationship between exempt material and non-13 exempt material. Thus, when these factors are applied to forward-looking material 14 prices the result is forward-looking. Mr. Pitkin also criticizes BellSouth for using 15 only one-year's worth of data. This criticism is also unfounded. By using the 16 latest data available at the time of the study's filing, the resulting factors are the 17 best indication of future trends.

18

Both Mr. Donovan and Mr. Pitkin advocate the inclusion of exempt material cost
in the labor rates. In addition, Mr. Donovan throws out an unsupported cap on his
proposed Exempt Material load on labor rates of 20%. Besides being arbitrary,
Mr. Donovan's method is inappropriate. Exempt material varies by field reporting
code; the amount of exempt material associated with aerial placements is not the
same as buried or underground placements. Furthermore, the amount of exempt
material associated with cable provisioning varies vastly between copper and fiber

1	placement	s. On the other hand, labor rates do not vary. A splicer is paid the same
2	per hour v	whether he is splicing aerial, buried, or underground cable. Mr.
З	Donovan'	s method distorts these facts. Thus, BellSouth's use of the ratio of
4	exempt to	non-exempt material produces representative results.
5		
6	Q. MR. PIT	KIN ASSERTS THAT "BECAUSE THE BSTLM EXPLICITLY
7	MODELS	S THE COSTS OF NIDS AND DROPS, THE EXEMPT MATERIAL
8	LOADIN	G FACTOR SHOULD EXCLUDE THESE ITEMS." (PAGE 10,
9	LINES 12	-13) IS THIS TRUE?
10		
11	A. No. Mr. F	itkin pulls a quote from my reply affidavit filed in connection with
12	BellSouth	s current application with the FCC to provide in-region long distance
13	service. T	he affidavit, however, fully explains why he is wrong. As I stated:
14		
15	The lal associa	or-related costs of placing service drop wires and the ted NIDs are assigned to Asset Category Code ("ACC") 248
16	(Aerial Metall	cable – Metallic Drop) and ACC 548 (Buried Cable –
17	wires a	nd associated NID units are classified to exempt material.
18	month	y allocations process to the various ACCs (including ACC
19	248 an each A	ACC 548) based on the direct labor dollars associated with CC. In the development of in-plant factors for ACC 022
20	(Aerial BellSo	Cable – Metallic) and ACC 045 (Buried Cable – Metallic), uth does not include any of the assignments to ACC 248 or
21	ACC 5	48. Therefore, the costs of placing service drops and NIDs
22	CC Do	cket 01-277, ¶ 37, emphasis added)
23		
24	Again, Bel	South excluded ACCs 248 or 548, the asset accounts containing
25	NID/drop of	costs, in the development of the material loading factors. Thus, Mr.

1			Pitkin's claim is without merit.
2			
3	(	2.	MR. DONOVAN STATES THAT "EXEMPT MATERIAL IS ALREADY
4			INCLUDED IN THE FULLY LOADED LABOR RATE PROPOSED BY
5			BELLSOUTH." (PAGE 53, LINES 6-7) PLEASE COMMENT.
6			
7	A	<b>\</b> .	Mr. Donovan is wrong. The following extract from the original cost study
8			narrative (Section 5) filed in this docket details the categories of costs included in
9			the labor rates:
10			
11	1.		DIRECT SALARIES AND WAGES Direct Labor - Productive (RESOURCE TYPE CODE (RTC) 111, 121)
12			Represents the wage and salary costs associated with work reporting employees for
13		includes the costs of salaries paid to management employees when perform productive work. Classified and unclassified productive hours are used as	
14		1	basis for Direct Labor Costs.
15	2.		Direct Labor - Premium (RTC 122)
16			worked beyond the normally scheduled work period.
17	3.	]	Direct Labor - Other Employee (RTC 199, 19B, 19C, 193)
18		(	Covers the costs associated with the periodic incentive compensation payments
19		performance, the annual bonus paid to non-management employees, all costs associated with commissions paid to employees, cash awards paid for any approved program, etc.	
20			
21	4.	1	Direct Labor - Annual Paid Absence (RTC 132, 19E)
22		]	Identifies the cost of payments to be made over the year to occupational work reporting employees for accrued costs of holidays, vacations, and excused days.
23	5.	1	Direct Administration (RTC 111, 121, 122, 199, 19B, 19C, 19E, 193, 132)
24 25		] [ [	Identifies the costs of salaries paid during the month to the first level of supervision responsible for supervising occupational work reporting employees, and salaries and wages paid to employees and immediate supervisors who perform

1		basic office services for occupational work reporting employees. Also included are the wages paid to occupational work reporting employees loaned to perform
2		supervisory or clerical functions.
3	6.	Other Tools - Salaries (RTC CQR) Identifies the salary portion of the distributed costs associated with tools.
4	_	
5	7.	<u>Motor Vehicles - Salaries (RTC CQM)</u> Identifies the salary portion of the plant motor vehicle expenses distributed to
6		construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicles.
7	-	
-	<u>OT</u>	HER DIRECT
8	1.	Direct Labor - Other Costs (Various RTCs)
9		Identifies the costs incurred for office, traveling and other costs of employees whose wage and salary costs are direct labor.
10	2.	Other Tools - Benefits (RTC CQS)
11		Identifies the distributed benefits costs associated with tools.
12	3.	Other Tools - Rents (RTC COK)
13		identifies the distributed rent costs associated with tools.
14	4.	Other Tools - Other (RTC COL)
15		identifies the distributed other expense costs associated with tools.
	5.	Motor Vehicles - Benefits (RTC CQN)
16		Identifies the benefits portion of the plant motor vehicle expenses distributed to construction removal or plant specific operations expense accounts based on the
17		classified productive hours of the labor groups using the motor vehicles.
18	6.	Motor Vehicle - Rents (RTC COP)
19		Identifies the rents portion of the plant motor vehicle expenses distributed to construction, removal or plant specific operation expense accounts based on the
20		classified productive hours of the labor groups using the motor vehicles.
21	7.	Motor Vehicle - Other (RTC CQQ)
22		Identifies the other costs portion of the plant motor vehicle expenses distributed to construction, removal or plant specific operations expense accounts based on the
23		classified productive hours of the labor groups using the motor vehicles.
24	8.	Benefits (RTC KB1)
25		pension accruals; company matching portion of savings plan; dental, medical, and

1	group insurance plan reimbursements; and company portion of social security and unemployment payroll taxes.
2	
3	As can be ascertained from reviewing this list, exempt material is not included.
4	On page 54, Mr. Donovan also claims "direct supervision and other indirect
5	expenses are already components of BellSouth's fully loaded labor rate." While it
6	is true that direct supervision is included in the labor rates, it is not included in the
7	Other – Indirect factor created for this filing. As explained in Appendix B,
8	Attachment 5 of the cost study filed on November 8, 2001, the salaries, benefits,
9	and other indirect costs are for "supervision and support above the first level of
10	work reporting plant labor employees." (Emphasis added) These costs are not
11	direct supervision costs, as Mr. Donovan claims.
12	
13	Q. IN DISCUSSING THE INTEREST DURING CONSTRUCTION
14	COMPONENT OF THE OTHER FACTOR, MR. DONOVAN STATES
15	<b>"BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS</b>
15 16	"BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?
15 16 17	"BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?
15 16 17 18	<ul> <li>"BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications</li> </ul>
15 16 17 18 19	<ul> <li>*BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications Commission ("FCC") Part 32 Rules and Regulations that discusses such costs as</li> </ul>
15 16 17 18 19 20	<ul> <li>*BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications Commission ("FCC") Part 32 Rules and Regulations that discusses such costs as described below:</li> </ul>
15 16 17 18 19 20 21	<ul> <li>*BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications Commission ("FCC") Part 32 Rules and Regulations that discusses such costs as described below:</li> </ul>
15 16 17 18 19 20 21 22	<ul> <li>*BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications Commission ("FCC") Part 32 Rules and Regulations that discusses such costs as described below:</li> <li>FCC Part 32 Rules 32.2000 (c)</li> </ul>
15 16 17 18 19 20 21 22 23	<ul> <li>"BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications Commission ("FCC") Part 32 Rules and Regulations that discusses such costs as described below:</li> <li>FCC Part 32 Rules 32.2000 (c) <ol> <li>Telecommunications plant represents an economic resource which will be used to provide future services, the cost of which</li> </ol> </li> </ul>
15 16 17 18 19 20 21 22 23 24	<ul> <li>"BELLSOUTH INPUTS HAVE MISAPPLIED SUCH A CHARGE IN THIS CASE." (PAGE 55, LINES 2-3) IS HIS CLAIM CORRECT?</li> <li>A. No. BellSouth adheres to the rules outlined by the Federal Communications Commission ("FCC") Part 32 Rules and Regulations that discusses such costs as described below:</li> <li>FCC Part 32 Rules 32.2000 (c)</li> <li>(1) Telecommunications plant represents an economic resource which will be used to provide future services, the cost of which will be allocated in a rational and systematic manner to the future periods in which it provides benefits. In accounting for</li> </ul>

1	telecommunications plant accounts, where applicable, all direct and indirect costs.
2	(2) Direct and indirect costs shall include, but not be limited to:
3	(r) Allowance for funds used during construction
4	("AFUDC") provides for the cost of financing the construction of
5	telecommunications plant. AFUDC shall be charged to Account 2003, Telecommunications Plant Under Construction, and credited
6	to Account 7340. The rate for calculating AFUDC shall be determined as follows: If financing plans associate a specific new
7	borrowing with an asset, the rate on that borrowing may be used for the asset: if no specific new borrowing is associated with an
8	asset or if the average accumulated expenditures for the asset
9	the capitalization rate to be applied to such excess shall be a
10	weighted average of the rates applicable to other borrowing of the enterprise. The amount of interest cost capitalized in an
11	accounting period shall not exceed the total amount of interest cost incurred by the company in that period.
12	
13	Mr. Donovan offers no support for his criticism. Furthermore, Interest During
14	Construction constitutes a small fraction of the sum of the Other loading factor.
15	Also, the source of the data used in the development of these "bottoms-up" factors
16	is the same source as originally used in the development of the in-plant factors – a
17	1998 base year extract from the Resource Tracking Analysis and Planning
18	("RTAP") system. Thus, no new system, extract, or methodology was used to
19	gather the data needed to develop this factor.
20	
21	Q. MR. PITKIN CLAIMS THAT "BELLSOUTH USES INFLATION RATES
22	THAT ARE TOO HIGH AS WELL AS UNRELIABLE." (PAGE 12, LINE
23	15) PLEASE COMMENT.
24	A. This Commission has extensively reviewed the inputs and methodology used by
25	BellSouth to account for changes in the price of goods in this proceeding. In fact,

1	the Commission's decision with respect to the application of inflation factors was a
2	specific issue for which BellSouth sought reconsideration. Thus, the Commission
3	not only reviewed inflation factors in issuing its original order, but also reviewed
4	them again as part of BellSouth's request for reconsideration. In Order No. PSC-
5	01-2051-FOF-TP, this Commission stated: "we hereby reconsider our decision to
6	reject BellSouth's proposed inflation factor, because it was based upon a
7	misinterpretation of the facts presented." (Page 5) Thus, this Commission has
8	ruled that BellSouth's inflation factors, as originally filed, are appropriate.

Mr. Pitkin claims that "BellSouth has provided no information supporting its 10 11 development of these inflation factors." (Pitkin Testimony, Page 13, Lines 3-4) 12 Mr. Pitkin is wrong. BellSouth has provided the spreadsheet used to develop its 13 inflation factors as part of the original cost study filed in this docket, file 14 InflnLv2.xls. Additionally, BellSouth has responded to data requests in this docket 15 concerning inflation factor development and application. Indeed, in response to Staff's 10<sup>th</sup> set of interrogatories/ production of documents ("PODs"), BellSouth 16 17 provided the back up to the development of these factors. (POD Item #94) In fact, 18 it is Mr. Pitkin who offers no evidence or support for his inflation factors beyond a 19 vague reference to C. A. Turner Telephone Plant Indices. Further, Mr. Pitkin's 20 "inflation factors" as shown in Exhibit BFP-5 do not even differentiate by field 21 reporting code. To imply that computer equipment (530C), a declining account, 22 and copper cable, increasing accounts, experience the same trend in material prices 23 is simply wrong. Further, to present an almost 5% decline for 2000 for any 24 account makes little sense. Exhibit DDC-4\_120 Day illustrates the actual trend in 25 cable-related accounts for 1995-1997. (This is an extract from the Inflation Factor

-14-

1	Methodology contained in the BellSouth Cost Calculator. Also, refer to
2	BellSouth's response #105 to the Staff's 7 <sup>th</sup> Set of Interrogatories.) Note that with
3	the exception of the digital carrier equipment (357C), not one of the accounts
4	reflects an overall decrease of 5%. It is improbable that from 1998-2000 the trends
5	would change dramatically. In reviewing Mr. Pitkin's comparison of inputs,
6	Exhibit BFP-7, it is interesting to note that he uses different inflation factors for
7	different accounts, but never explains how he transitions from one exhibit to the
8	other. For these reasons, Mr. Pitkin's concerns are unfounded and his proposed
9	adjustments should be ignored.
10	
11	OTHER BSTLM "BOTTOMS-UP" INPUTS
12	Q. ON PAGES 11 THROUGH 16 OF MR. DONOVAN'S TESTIMONY, HE
13	DISCUSSES BELLSOUTH'S ENGINEERING FACTORS USED IN ITS
14	FILING. PLEASE COMMENT.
15	
15 16	A. First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL
15 16 17	<ul> <li>First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL</li> <li>UNE Order, and has filed costs using a linear Engineering Factor." (Donovan</li> </ul>
15 16 17 18	<ul> <li>First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL</li> <li>UNE Order, and has filed costs using a linear Engineering Factor." (Donovan</li> <li>Testimony, Page 11, Lines 4-5) I disagree with Mr. Donovan. The underlying</li> </ul>
15 16 17 18 19	<ul> <li>First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL</li> <li>UNE Order, and has filed costs using a linear Engineering Factor." (Donovan</li> <li>Testimony, Page 11, Lines 4-5) I disagree with Mr. Donovan. The underlying</li> <li>premise of this 120-day proceeding was that since BellSouth had a model (the</li> </ul>
15 16 17 18 19 20	<ul> <li>First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL UNE Order, and has filed costs using a linear Engineering Factor." (Donovan Testimony, Page 11, Lines 4-5) I disagree with Mr. Donovan. The underlying premise of this 120-day proceeding was that since BellSouth had a model (the BSTLM) with the functionality to do a bottoms-up study, BellSouth should</li> </ul>
15 16 17 18 19 20 21	<ul> <li>First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL UNE Order, and has filed costs using a linear Engineering Factor." (Donovan Testimony, Page 11, Lines 4-5) I disagree with Mr. Donovan. The underlying premise of this 120-day proceeding was that since BellSouth had a model (the BSTLM) with the functionality to do a bottoms-up study, BellSouth should make use of that functionality so as to allow the Commission to compare the</li> </ul>
15 16 17 18 19 20 21 22	A. First, Mr. Donovan claims that "BellSouth has ignored the Commission's FL UNE Order, and has filed costs using a linear Engineering Factor." (Donovan Testimony, Page 11, Lines 4-5) I disagree with Mr. Donovan. The underlying premise of this 120-day proceeding was that since BellSouth had a model (the BSTLM) with the functionality to do a bottoms-up study, BellSouth should make use of that functionality so as to allow the Commission to compare the results produced using that methodology with those produced using in-plant

- 24
- 25 The BSTLM, as originally filed, was designed to calculate engineering as a

1	percentage of non-exempt material in the same manner as the BellSouth Cost
2	Calculator functions. However, upon embarking on the Commission-ordered
3	bottoms-up study, BellSouth discovered that the BSTLM contained only one
4	engineering factor that would be applied to all categories of plant. While
5	modifying the model to allow for multiple engineering factors for various plant
6	types, BellSouth attempted to add modifications to make the engineering expense
7	less linear by reflecting engineering costs as a factor of material and installation
8	costs. The engineering factors used in the bottoms up study are the same factors
9	used in BellSouth's Outside Plant Construction Management ("OSPCM") system.
10	BellSouth witness Mr. Kephart discusses the OSPCM system in further detail in
11	his testimony.
12	
13	Q. ON PAGE 16, MR. DONOVAN FINALLY RECOMMENDS TO THE
14	COMMISSION THAT AN ENGINEERING FACTOR OF 10% BE
15	USED. PLEASE COMMENT.
16	
17	A.A. The 10% is an arbitrary factor selected by Mr. Donovan simply because the
18	Federal Communications Commission ("FCC") uses that figure in its universal service
19	model. He provides no other support for using 10%. Mr. Donovan states that
20	BellSouth, as a co-sponsor of the BCPM advocated the use of an engineering
21	component of 5% of outside plant costs. While it is true the BCPM was populated
22	with a 5% default value, BellSouth did not use that input when running the model. In

- 23 fact, BellSouth does not use a 5% engineering factor in any of its UNE, retail service,
- 24 or universal service (BCPM) cost studies. In all of these situations, engineering costs
- 25 have been captured through in-plant factors developed as a percentage of material

costs. The engineering factors used by BellSouth in the "bottoms-up" study reflect
 values consistent with previously used in-plant factors. BellSouth engineers have
 found to best estimate actual engineering costs-incurred. These factors, as Mr. Kephart
 discusses, are used in BellSouth's own planning tools.

- 6 A. MR. DONOVAN CLAIMS THAT BELLSOUTH IS ATTEMPTING TO
  7 RECOUP NON-TELRIC EXPENDITURES THROUGH A "CLOSING
  8 FACTOR" SPREAD OVER ALL STRUCTURE COSTS. (PAGE 18) IS
  9 HE CORRECT?
- 10

5

11	A.	Absolutely not. BellSouth developed outside plant contractor costs by
12		reviewing the actual activity occurring in Florida and developing BSTLM
13		inputs based on those activities. It is true that BellSouth included
14		miscellaneous contractor costs totaling 25.43% of costs. These are real costs
15		that are often overlooked in other proxy models such as the HAI and the FCC's
16		Synthesis Model. However, as Mr. Kephart explains, these are legitimate
17		costs, and they certainly belong in a TELRIC study. A complete list of all
18		miscellaneous items was included in Attachment 3 to BellSouth's bottoms-up
19		filing (CostCode Misc).
20		
21	Q.	MR. DONOVAN STATES THAT BELLSOUTH HAS INCORRECTLY
22		ASSIGNED RESTORATION COSTS ONTO "BURIED CABLE" AND

- 23 "BORE BURIED CABLE" ACTIVITIES RATHER THAN
- 24 REFLECTING THOSE COSTS UNDER THE PROPER CATEGORIES
- 25 IN THE BSTLM. (PAGE 23) DO YOU AGREE?

2	A.	No. While Mr. Donovan seems to agree that these restoration costs are
3		appropriate costs to include in the bottoms-up study, he appears to disagree
4		with the manner in which BellSouth has spread those costs over buried cable
5		placement and boring costs. Rather than argue about subject matter expert
6		based estimates in the BSTLM of how often these restoration costs actually
7		occur, BellSouth chose to spread these costs out over buried cable placements,
8		underground placements, buried boring and underground boring to develop the
9		average placement costs based upon what actually occurred in Florida. If one
10		accepts Mr. Donovan's argument, that restoration costs should not be
11		associated with boring and chooses to spread all restoration costs over the
12		remaining excavation activities (less boring), the result is an increase in the
13		costs of those remaining activities. That is apparently what Mr. Donovan has
14		recommended since costs in the urban and suburban zones increase after his
15		modifications. However, BellSouth's proposed method of recovering these
16		restoration costs is a straightforward accurate method that reflects actual data
17		and should be adopted by this Commission.
18		
19	Q.	ON PAGE 25, MR. DONOVAN CONTENDS THAT BURIED SPLICE
20		PIT COSTS BE EXCLUDED FROM THE STUDY. IS HE CORRECT?
21		
22	A. No	. Mr. Donovan states that buried splice pits are not needed for normal buried
23	spl	icing operations because such splices are routinely placed in above ground
24	ped	estals. Further, he states that since pedestals are exempt materials, all such

costs should be excluded from the study. First, the actual data, i.e., the 2000

1		contractor activity in Florida (Attachment 3 of BellSouth's filing), clearly shows
2		that costs associated with buried splice pits, including digging, shoring and other
3		costs, do occur. Furthermore, even if the Commission were to accept Mr.
4		Donovan's recommendation that all buried splices should occur above ground in
5		pedestals, he has not accounted for all of the costs in his proposed inputs. While
6		the pedestal material would be captured through the Miscellaneous Material
7		loading (i.e., the exempt material is calculated), the labor associated with placing
8		the pedestal is not currently reflected in the model. These pedestal placing costs
9		would need to be identified and included in the BSTLM costs.
10		
11	Q	MR. DONOVAN, ON PAGE 25, CLAIMS THAT BELLSOUTH SHOULD
12		HAVE INCLUDED THE COST OF STEEL PIPE, PVC PIPE AND FLEX-
13		PIPE IN WITH THE "PUSH PIPE AND PULL CABLE" CATEGORY OF
14		COSTS RATHER THAN SPREADING THE COST OF SUCH PIPE OVER
15		THE TOTAL BORING ACTIVITY COSTS. DO YOU AGREE?
16		
17	Α.	No. BellSouth's approach is based upon the contract, which lists the referenced
18		Steel Pipe, PVC pipe, and Flex pipe as added costs in the Bidding Agreement.
19		That is, these are actual incurred costs as a result of directional boring. As a result,
20		BellSouth loaded these added costs appropriately into the boring activity. This
21		resulted in every foot of boring assuming a fraction of pipe costs (less than 25%).
22		This is a reasonable and factually based approach for identifying the pipe costs. It
23		does not imply that every foot of boring requires a pipe of some sort. Mr.
24		Donovan prefers to identify the cost of the pipe in the push pipe pull cable
25		category, in reality ignoring the contractual facts. In effect, Mr. Donovan's

-

1 approach is not based on fact and will result in inaccuracies. BellSouth sees no 2 reason for the Commission to require that BellSouth re-do its cost studies with Mr. 3 Donovan's approach since it is not factually based and is less accurate than 4 BellSouth's method. 5 6 Q. MR. DONOVAN, ON PAGE 30 OF HIS TESTIMONY, STATES THAT HE 7 WAS UNABLE TO DETERMINE HOW BELLSOUTH WENT FROM ITS PROPOSED CONDUIT MATERIAL COST PER FOOT PLUS THE 25.43% 8 MISCELLANEOUS LOADING TO THE INPUT VALUES USED IN THE 9 BSTLM FOR CONDUIT MATERIAL COST. CAN YOU EXPLAIN? 10 11 A. Yes. The attached exhibit to this testimony, Exhibit DDC-5\_120 Day, displays the 12 13 development of a factor applied to the conduit material costs. 14 15 Q. WHY IS THIS LOADING APPROPRIATE? 16 17 A. The miscellaneous material, sales tax, supply expense, and other loadings factors, which provide for exempt material, sales tax, right of way, indirect plant labor, 18 19 interest during construction, etc., are developed as a ratio of non-exempt material 20 for all plant categories. The BSTLM then applies these factors to non-exempt 21 material computed by the model. However, BellSouth used the contracted conduit 22 costs as input into the model. The BSTLM, as currently constructed, places all 23 contractor costs into the EF&I columns in the model. Since these Conduit (and for 24 that matter, Manhole) material costs do not appear in the BSTLM's material fields, 25 the miscellaneous factor is not applied. Hence, if the miscellaneous loading

1	factors were applied to the conduit account (4C) as it applies to other accounts, the
2	factor would be multiplied by \$0 material costs and miscellaneous costs would not
з	be captured. Therefore, to properly capture these incurred miscellaneous material
4	costs for conduit, BellSouth developed a miscellaneous loading factor for Field
5	Reporting Code ("FRC") 4C as a percentage of total contractor installation costs
6	(which includes labor and material) and then applied these factors to the contractor
7	conduit costs (which include labor and material) outside of the BSTLM to properly
8	compute conduit miscellaneous costs. BellSouth's 40% factor for these loadings is
9	based on calculations set forth in Exhibit DDC-5_120 Day. This 40% value is
10	conservative and approximately equals the data for 1998. As can be seen on DDC-
11	5_120 Day, if later data had been used the factor would have been even higher
12	(49%).
13	
14	In fact, in reviewing the above noted Conduit loading approach, BellSouth
15	discovered that it failed to apply the proper loading to the smaller manhole sizes
16	(1, 2, and 3) and to the underground excavation labor. Since the 4C loading was
17	based upon incurred contractor costs (material and labor), BellSouth intended to
18	apply it to all contractor costs. However, inadvertently the factor was only applied
19	to Conduit and the largest manhole. Thus, in effect BellSouth understated its
20	miscellaneous material costs associated with smaller sized manholes and all
21	underground excavation costs in the filed cost study. This error has been corrected
22	in the January 28, 2002 filing in order to accurately reflect the costs associated
23	with underground excavation and structure.
24	

# Q. ON PAGES 33 AND 34, MR. DONOVAN RECOMMENDS THAT BELLSOUTH'S PROPOSED STRUCTURE SHARING PERCENTAGES BE REJECTED AND REPLACED WITH HIS PROPOSED SHARING FACTORS. ARE HIS PROPOSALS REALISTIC AND APPROPRIATE FOR THE COMMISSION TO ADOPT?

6

7 A. No, they are not realistic and should not be adopted by this Commission.

8 BellSouth witness Mr. Kephart explains why Mr. Donovan's proposed inputs are 9 inappropriate. However, I will comment on his claim that BellSouth is "creating 10 severe barriers to entry" based on the amount structure sharing assumed in the cost 11 study. (Donovan Testimony, Page 33, Line16) Mr. Donovan compares BellSouth 12 cost study assumption that only .07% of conduit space is leased to Verizon's claim 13 that "more than 30 different companies occupy its conduits in Manhattan" to arrive 14 at his faulty conclusion. (Donovan Testimony, Page 33, Lines 14-15) First, it is 15 not valid to compare the entire state of Florida to Manhattan. Customer density 16 and dispersion and intensity of competition are very different between the two 17 areas. Second, without further information, it is impossible to know exactly what 18 Verizon was discussing. In other words, does the "30 different company" figure 19 reflect actual leasing arrangements in duct space in Verizon-owned conduit, 20 sharing of costs and ownership of underground excavation and conduit systems 21 with other companies, or merely access to conduit systems through the purchase of 22 unbundled elements? 23 Leasing of duct space is not the same as sharing the construction cost and 24 ownership of conduit. Duct leasing is included in BellSouth's studies in the

25 Conduit Plant-Specific factor. Expenses associated with BellSouth leasing duct

-22-

1	space n	other parties' ducts are netted with revenues received from other parties
2	leasing	BellSouth owned ducts and included in the conduit (4C) plant-specific
3	expense	es. BellSouth used the percentage of duct space leased to other parties in
4	Florida	as a surrogate of potential opportunities for underground structure sharing.
5	In effec	t, Mr. Donovan's proposal will double count the actual sharing since he
6	made n	o adjustment to the expense factors which already reflect sharing of
7	structur	es. As Mr. Kephart explains, Mr. Donovan's recommendation of assuming
8	a 50%/5	50% sharing in rural density zones is completely unrealistic and the
9	33%/33	%/33% sharing in suburban and urban density zones is even less credible.
10	Such sh	aring assumptions along with the double counting would clearly result in a
11	signific	ant under-recovery of a major portion of BellSouth's investments.
12		
12	O FYHIR	IT BEP. SE REFLECTS & 50% REDUCTION TO MANHOLE
10	Q. LAIID	IN DEF-OF REFLECTS A 50% REDUCTION TO MANHOLE
14	Q. EXHIB MATE	RIAL AND PLACING COSTS. IS THIS APPROPRIATE?
14 15	Q. EAIIB MATE	RIAL AND PLACING COSTS. IS THIS APPROPRIATE?
14 15 16	A. No. The	RIAL AND PLACING COSTS. IS THIS APPROPRIATE?
13 14 15 16 17	A. No. The own the	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission
14 15 16 17 18	A. No. The own the rule mar	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission idates that BellSouth "sell" a piece of the network to an ALEC. Further, if
14 15 16 17 18 19	A. No. The own the rule mar BellSou	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission idates that BellSouth "sell" a piece of the network to an ALEC. Further, if th were to share in the material cost of the manhole, it implies that the
14 15 16 17 18 19 20	<ul> <li>A. No. The own the rule man BellSour ALEC w</li> </ul>	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission indates that BellSouth "sell" a piece of the network to an ALEC. Further, if th were to share in the material cost of the manhole, it implies that the would have a free reign to go and come as it pleases. This "joint
14 15 16 17 18 19 20 21	<ul> <li>A. No. The own the rule man</li> <li>BellSour</li> <li>ALEC works</li> </ul>	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission idates that BellSouth "sell" a piece of the network to an ALEC. Further, if th were to share in the material cost of the manhole, it implies that the yould have a free reign to go and come as it pleases. This "joint ip" arrangement is unmanageable, a security risk, and as stated previously,
14 15 16 17 18 19 20 21 22	<ul> <li>A. No. The own the rule man BellSour</li> <li>ALEC work ownershis not real</li> </ul>	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission idates that BellSouth "sell" a piece of the network to an ALEC. Further, if th were to share in the material cost of the manhole, it implies that the would have a free reign to go and come as it pleases. This "joint ip" arrangement is unmanageable, a security risk, and as stated previously, quired by any Commission or FCC order. From a cost perspective, the
14 15 16 17 18 19 20 21 22 23	<ul> <li>A. No. The own the rule man BellSour ALEC wo ownersh is not rea only app</li> </ul>	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission adates that BellSouth "sell" a piece of the network to an ALEC. Further, if th were to share in the material cost of the manhole, it implies that the yould have a free reign to go and come as it pleases. This "joint ip" arrangement is unmanageable, a security risk, and as stated previously, quired by any Commission or FCC order. From a cost perspective, the ropriate sharing of underground structures occurs on a very limited basis
14 15 16 17 18 19 20 21 22 23 24	<ul> <li>A. No. The own the rule man BellSour</li> <li>ALEC wo ownershis not rea only app through</li> </ul>	RIAL AND PLACING COSTS. IS THIS APPROPRIATE? e implication of such an adjustment is that BellSouth and the ALEC jointly structure (i.e., the manhole). To my knowledge, no FCC or Commission adates that BellSouth "sell" a piece of the network to an ALEC. Further, if th were to share in the material cost of the manhole, it implies that the would have a free reign to go and come as it pleases. This "joint ip" arrangement is unmanageable, a security risk, and as stated previously, quired by any Commission or FCC order. From a cost perspective, the ropriate sharing of underground structures occurs on a very limited basis the leasing of conduits. Further, it is my understanding that the BSTLM

routine does not incorporate any conduits "owned" by ALECs. Thus, if Mr. Pitkin
wishes to adjust the manhole price for sharing, he must also adjust the manhole
sizing routine in the BSTLM, something he has not done. Therefore, Mr. Pitkin's
50% adjustment to the manhole material price is totally inappropriate and should
be discarded by this Commission.

6

## 7 Q. MR. DONOVAN CLAIMS ON PAGES 30-32 THAT THE MANHOLE 8 COST DEVELOPMENT IS FLAWED. FROM A COST DEVELOPMENT 9 PERSPECTIVE, CAN YOU RESPOND?

10

A. Yes. Mr. Donovan states, on pages 31 and 32, that BellSouth distributed the costs
of 207 manhole covers and collars over 7 installed manholes. While this is
mathematically correct, one must consider that it was BellSouth's aim in the input
development to create simple, understandable, and supportable inputs. In regard to
Manhole costs, BellSouth <u>originally</u> chose to use cubic feet as the approach to
develop costs. Thus, all incurred manhole costs were divided by the installed
cubic feet. In most areas and circumstances this simple method is appropriate.

If the Commission finds that BellSouth's approach is improper, then it still should not accept Mr. Donovan's inputs. In fact, Mr. Donovan failed to recognize that BellSouth's simplified inputs also resulted in a "distortion" of the costs for large manholes (Size 5) and the smaller manholes (Sizes 1, 2 and 3). According to the contract, BellSouth incurs a much lower per cubic foot cost for the larger manholes (above 351 cubic feet) than for smaller manholes (under 351 cubic feet). Thus, if the Commission attempts to override BellSouth's simplified inputs on the manhole

1	covers, it must also take the step of applying the appropriate contractor costs for									
2	the size of the manhole.									
3										
4	Q. 1	Q. IF THE COMMISSION DECIDES TO IMPLEMENT MR. DONOVAN'S								
5	I	METH	<b>IODOLO</b>	GY, DO YO	U HAVE A	I YN	RECOM	MEN	DATIO	NS?
6										
7	A. 1	les. G	iven the f	indings state	d above (and	Bell	South's f	ailure	to accur	ately apply
8	t	he Mis	cellaneou	s loading fac	tor, discussed	l pre	viously)	the fol	lowing	tables reflect
9	t	he dev	elopment	of the inputs	that should b	e us	ed <u>.,</u> if Mı	<del>; Don</del>	<del>ovan's r</del>	nethod is
10	Ð	ecepte	d. These	values are ba	sed upon the	actu	al contra	ctor ir	curred o	costs, the
11	а	ppropi	riate size r	nanholes, the	use of one (	1) cc	over and c	ollar	per man	hole (as Mr.
12	I	Donova	in advocat	es), and the p	proper applic	atior	n of the m	iscell	aneous r	naterial
13	14	oading	•							
14										
15	Unit C	ost Devi	elopment fro	m Contractor Ta	ble					
16	(Attac	nment 3	of Appendix	B of BellSouth's	Cost Study det	ails)				
17								Con	tractor	
18						6	ontractor	cost misce	is with	
19				Source (see		co Miso	osts with cellaneous cading	loadi misce materia	ing and llaneous ai loading	
20		Co	ntract Unit Cost	descriptions below table)	Appilcable Manhole sizes	(Col (	umn a *(1+ ).2543))	(Colu (1-	umn d • +0,4))	
21		s	48.06	1	351 cu.ft. <	s	60.28	\$	84,39	
22		\$	16.90	2	>= 351 cu.ft.	\$	21.20	\$	29.68	
23		5	246.48	3		\$	309.16	\$	432.82	

Sources:

24 1: Per Cubic Foot based on M031A value in State Total sheet of the Contractor tables

2: Per Cubic Foot based on M031B value in State Total sheet of the Contractor tables  $\ensuremath{25}$ 

-25-



3: Per Cover costs developed as the sum of total incurred cover costs divided by the number of

## THE VALUE OF 500 FEET RECOMMENDED BY BELLSOUTH. PLEASE COMMENT.

3

4 A. Mr. Donovan notes that none of the BCPM, HAI and HCPM default values for 5 pole spacing are less than 150 feet. As Mr. Donovan points out, BellSouth had 6 previously also agreed with pole spacing defaults used in the BCPM. However, 7 upon analysis of the number of poles owned by BellSouth in Florida, the number 8 of poles owned by power companies in Florida to which BellSouth cable is 9 attached, and the number of sheath feet of aerial cable in Florida, the facts clearly 10 reveal that these other model default values are understated. Clearly, some span 11 lengths may be 150, 200 or 250 feet depending on the size cables carried on the 12 span and a host of other factors. However, there are also those areas of the 13 network - for example, a road intersection with multiple cable routes intersecting -14 where there are several poles at various corners of the intersection all in close 15 proximity to one another. While BellSouth agrees it is a simple task to ride in 16 one's car for a mile and count poles per mile, as Mr. Donovan suggests, this is in 17 no way superior to basing cost study inputs on real data. Spacing for both poles 18 and manholes are actually "designed" for each installation. For example, mid-span 19 clearances, joint use clearances, and right-of-way limitations drive most of the 20 design requirements for poles. Installations have unique characteristics for these 21 elements. In this case, the data speaks for itself – BellSouth's pole spacing of 120 22 feet is an accurate depiction of the reality of the number of poles required to 23 provide the number of sheath feet of aerial cable placed in the network and should 24 be accepted by the Commission.

25

-27-

1	BellSouth does not maintain records of the number of anchors and guys used, so an
2	approach to determine average spacing similar to that taken for poles was not
3	possible. Furthermore, the 1,200 foot anchor and guy spacing included as a filler
4	in the BSTLM was never modified or evaluated since BellSouth had no intention
5	of using that variable prior to this Commission's order for a bottoms-up study. To
6	refer to that value of 1,200 feet as a "default", as Mr. Donovan does, implies that it
7	is a recommended value when it certainly was not.
8	
9	Spacing distances were previously reviewed and approved by the Florida Public
10	Service Commission in the Universal Service proceeding, Docket No. 980696-TP.
11	
12	Furthermore, we reiterate that this is a model, and every spacing scenario cannot be duplicated. We find that territory-specific
13	pole spacing, guy spacing, and relative pole units are appropriate and recommend accepting the values as submitted by GTEFL
14	and BellSouth. (Order No. PSC-99-0068-FOF-TP, Page 114)
15	
16	In an effort to provide more accurate data, BellSouth sought when possible to
17	supplement data previously approved by the Commission with actual data and
18	mathematically derive inputs. Therefore, ARMIS data was used to determine the
19	average spacing of poles. Since no such data exists for anchors and guys,
20	BellSouth relied on these previously reviewed and approved inputs from the
21	BCPM model. Since the BSTLM does not provide for spacing by density zones,
22	averages of all densities were used from the BCPM to derive spacing for the
23	anchors/guys.
24	

1	Q. MR. PITKIN'S EXHIBIT BFP-7 REDUCES BELLSOUTH'S MATERIAL	
2	COSTS FOR POLES FROM \$300.16 TO \$239.31. IS THIS CONSISTENT	
3	WITH TESTIMONY FILED ON BEHALF OF AT&T?	
4		
5	A. No. In fact, Mr. Donovan makes "no issues or recommendations" in his testimony	
6	with regard to aerial structure material costs. (Donovan Testimony, Page 20, Line	
7	1) Further, Mr. Pitkin does not provide justification for this reduction. Thus,	
8	based on this unsupported modification and the numerous other erroneous	
9	adjustments advocated by Mr. Donovan and Mr. Pitkin, the Commission should	
10	ignore the results of Mr. Pitkin's BSTLM run.	
11		
12	<b>Q. HAVE THE LOGIC CHANGES TO THE BSTLM REFERENCED IN MR.</b>	
13	PITKIN AND MR. STEGEMAN'S TESTIMONIES BEEN	
14	<b>INCORPORATED IN THE JANUARY 28, 2002 REVISED FILING?</b>	
15		
16	A. Yes. The two applicable logic changes are reflected in this revised filing.	
17	Specifically, the cell reference problems with the fiber cable EF&I calculation and	
18	with the structure sharing calculation have been made.	
19		
20	<b>Q. HAS BELLSOUTH MADE ANY OTHER REVISIONS TO THE COST</b>	
21	CALCULATIONS IN THE JANUARY 28, 2002 FILING?	
22		
23	A. Yes. BellSouth also modified the Hybrid Copper/Fiber Loop costs to modify work	
24	times. In my direct testimony I stated that commission-ordered reductions to work	
25	times were considered. While this is true for the unbundled network elements	
1		previously reviewed by the Commission, BellSouth failed to consider all of these
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2		modifications in the Hybrid Copper/Fiber loop costs. Thus, in accordance with the
3		Commission's previous ruling, the applicable work times were reduced.
4		Additionally, input errors in the location lives were corrected.
5		
6		Finally, the Feeder/Distribution Interface ("FDF") input to the BSTLM was revised.
7		BellSouth uses contractors to place FDIs with placement costs dependent upon the
8		weight of the equipment being installed. The BSTLM, however, assumes that the
9		TELCO place the FDI. Thus, BellSouth had to convert contractor costs to TELCO
10		placement hours, the BSTLM required input. In performing this conversion
11		calculation, BellSouth made a mathematical error, overstating the placement hours.
12		This has been corrected.
13		
14	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
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16	A.	Yes.
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