1 BELLSOUTH TELECOMMUNICATIONS, INC.

2 REBUTTAL TESTIMONY OF D. DAONNE CALDWELL

3 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

4 DOCKET NO. 990649-TP

5 (PHASE 1)

6 JUNE 29, 2000

7

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

9

10 A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,

11 N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth

12 Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of

13 responsibility relates to economic costs.

14

15 **Q. ARE YOU THE SAME D. DAONNE CALDWELL THAT FILED DIRECT**

16 **TESTIMONY ON MAY 1, 2000 IN THIS DOCKET?**

17

18 A. Yes.

19

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

21

22 A. The purpose of my testimony is to respond to cost development issues raised in the

23 testimony filed by intervening parties. Specifically, I respond to allegations made

24 by AT&T/MCI WorldCom witness, Mr. Jeffrey King, BlueStar/Covad/Rhythms

25 Links witness, Ms. Terry Murray, Supra witnesses, Ms. Carol Bentley and Mr.

1   David Nilson, and Z-Tel witness, Dr. George Ford concerning Issues 5, 6, and 7(d).

2

3   **Issue 5: "For which signaling networks and call-related databases should rates**

4   **be set?"**

5

6   **Q. PLEASE DESCRIBE THE COST SUPPORT BELLSOUTH DEVELOPED**

7   **FOR UNBUNDLED SIGNALING NETWORKS AND DATABASES.**

8

9   A. The Federal Communications Commission's ("FCC's") Third Report and Order

10   defines BellSouth's obligations with respect to Signaling Networks and Call-

11   Related Databases in Appendix C of that order. The FCC states that Signaling

12   Networks include signaling links and signaling transfer points. Additionally,

13   BellSouth is obligated to provide access to the signaling network "in the same

14   manner in which it obtains such access itself."

15

16   In outlining BellSouth's obligations with respect to unbundling Call-Related

17   Databases, the FCC states:

18

19   "an incumbent LEC shall provide access to its call-related

20   databases, including but not limited to, the Calling Name

21   Database, 911 Database, E911 Database, Line Information

22   Database [LIDB], Toll Free Calling Database, Advanced

23   Intelligent Network [AIN] Databases, and downstream number

24   portability databases".

25

1   Thus, in response to these FCC mandates, BellSouth filed costs for 800 Access,

2   Line Information Database ("LIDB") Access, and CCS7 Signaling Transport and

3   database access items, Calling Name ("CNAM"), Local Number Portability

4   ("LNP"), and E911.

5

6   Furthermore, the FCC also stated in Appendix C that BellSouth must "provide a

7   requesting telecommunications carrier the same access to design, create, test, and

8   deploy Advanced Intelligent Network-based services at the service management

9   system [SMS]." Thus, BellSouth developed TELRIC based costs for Service

10 Management System Access and AIN Toolkit. AIN Toolkit is a product designed

11 to provide an ALEC with the ability to create and offer AIN service applications to

12 their end users. Service applications are created in a BellSouth-provided Service

13 Creation Environment ("SCE") using a BellSouth-provided Graphical User

14 Interface ("GUI"). AIN SMS Access provides access to the SCE and supports

15 administrative activities (e.g., inputting end user specific data or accessing usage

16 reports) associated with the service applications that are created using AIN Toolkit.

17

18 Q. **AT&T/MCI WITNESS, MR. KING, INCLUDES DIRECTORY**

19 **ASSISTANCE ("DA") DATABASE ACCESS IN HIS LIST OF DATABASES**

20 **FOR WHICH THE COMMISSION SHOULD ESTABLISH RATES. IS**

21 **BELLSOUTH'S DA DATABASE A "CALL-RELATED DATABASE"?**

22

23 A. No. The FCC did not identify DA database as a call-related database and it is not a

24 database that is "used in signaling networks for billing and collection or the

25 transmission, routing or other provision of telecommunications service." (Third

-3-

1   Report and Order, ¶403) Furthermore, I explained in my direct testimony and as

2   discussed by Mr. Varner, the FCC exempted operator services and directory

3   assistance from an incumbent's unbundling obligations if the incumbent provides

4   customized routing, which BellSouth does. (Third Report and Order, ¶441) It is my

5   understanding that the issues concerning Operator Services/Directory Assistance

6   will be considered in Phase II of this proceeding.

7

8   **Q. Z-TEL WITNESS, DR. FORD, MAINTAINS THAT BELLSOUTH MUST**

9   **DEVELOP THE COST OF "INTERFACING BELLSOUTH SWITCHES**

10   **WITH Z-TEL PROVIDED CALL-RELATED DATABASES OR SCPS."**

11   **(PAGE 6) IS HE CORRECT?**

12

13   A. No. The FCC rejected a similar request by Low Tech Designs that the FCC

14   mandate the interconnection of ALEC-provided AIN Service Control Points

15   ("SCPs"). The FCC stated: 'We decline this request because we find that there is

16   not enough evidence in the record to make a determination as to the technical

17   feasibility of interconnecting third-party SCPs and Intelligent Peripherals to

18   incumbent LECs' signaling networks." (Third Report and Order, ¶407) Thus,

19   BellSouth is not obligated by FCC rules to offer this interconnection.

20

21   **Q. DID THE FCC LEAVE OPEN THE POSSIBILITY THAT A STATE**

22   **COMMISSION MAY ADDRESS THE ISSUE OF DIRECTLY**

23   **INTERCONNECTING AN ALEC'S SCP WITH BELLSOUTH'S**

24   **SIGNALING NETWORK?**

25

1 A. Yes. However, this Commission has already considered and rejected an ALEC's

2   direct interconnection with BellSouth's SCP. In its Order No. PSC-96-1579-FOF-

3   TP issued December 31, 1996, the Commission stated that "BellSouth shall be

4   allowed to use mediation mechanisms as necessary" when allowing access to its

5   SS7 network. (Page 21) While the Commission's decision did not directly address

6   the interconnection between an ALEC's SCP and BellSouth's SS7 network, the

7   rationale is the same. Thus, Z-Tel must interconnect its SCP with the mediation

8   mechanism, i.e., BellSouth's Signal Transfer Point ("STP") gateway, in order to

9   prevent intentional and unintentional disruption of BellSouth's network either for

10   BellSouth's end users or the end users of the ALEC.

11

12 **Q. WHAT ARE MEDIATION DEVICES?**

13

14 A. Mediation devices are computer programs which during call processing determine

15   the effect of routing instructions or other information returned as a result of an SCP

16   query and then cause appropriate activities to be taken. These devices evaluate the

17   request to determine if it is potentially harmful to BellSouth's network.

18

19 **Q. HAS BELLSOUTH DEVELOPED COSTS THAT WOULD ALLOW Z-TEL**

20   **TO INTERCONNECT ITS SCP WITH BELLSOUTH'S NETWORK WITH**

21   **A MEDIATION DEVICE?**

22

23 A. Yes. However, as I have stated previously, Z-Tel must interconnect through

24   BellSouth's STP gateway, not directly to the end-office. In fact, this is the

25   architecture BellSouth has deployed for its own SS7 network; SCPs connect with

-5-

1   STPs, which in turn connect to the end-office (Service Switching Point).

2

3   The cost study filed on April 17, 2000 contains all of the unbundled components

4   necessary to interconnect Z-Tel's SCP to BellSouth's STP; the facility between the

5   SCP and STP, the termination on the STP, and usage of BellSouth's SS7 network.

6

7 **Q. DR. FORD ALLEGES THAT BELLSOUTH HAS DOUBLE COUNTED**

8 **THE COST OF THE AIN TRIGGERS. (PAGE 7) DO YOU AGREE WITH**

9 **DR. FORD?**

10

11 A. No. Dr. Ford is clearly wrong. BellSouth has not "double counted" the cost of

12   AIN triggers as he alleges. Trigger costs associated with the end office have

13   appropriately been captured in the vertical feature costs that BellSouth developed

14   since they are part of the features and functions provided by the switch. There are

15   no trigger-related investments in the AIN SMS or AIN Toolkit. Dr. Ford also

16   erroneously states that BellSouth "Trigger Access Charge" is unsupportable. Work

17   activities as outlined in the cost study are required in order to establish, route and

18   translate the specific type of trigger required by the ALEC. The labor costs

19   associated with these activities are reflected in the cost study filed on April 17,

20   2000.

21

22 **Issue 6: "Under what circumstances, if any, is it appropriate to recover non-**

23 **recurring costs through recurring rates?"**

24

25 **Q. BLUESTAR/COVAD/RHYTHMS LINKS WITNESS, MS. MURRAY,**

1 **STATES THAT NONRECURRING COSTS ARE SUNK COSTS. IS SHE**

2 **CORRECT?**

3

4 A. No. On page 4 of her testimony, Ms. Murray defines a sunk cost as "a cost that,

5 once incurred, a firm cannot recover if it ceases business." I agree that once

6 BlueStar/Covad/Rhythms pays BellSouth for provisioning a UNE, that cost is

7 "sunk" from BlueStar/Covad/Rhythms' viewpoint. However, presumably neither

8 BlueStar, Covad, Rhythms, nor any other ALEC, would incur a cost without

9 anticipating recovering that cost from the ultimate end user. Once this Commission

10 establishes nonrecurring rates, BlueStar/Covad/Rhythms will know the up-front

11 costs it will incur and thus, what and how it needs to charge its end users in order

12 to conduct its business.

13

14 From a cost development perspective, BellSouth's sunk costs are excluded from

15 consideration. After all, another definition of a sunk cost is a cost that has been

16 incurred **in the past** and cannot be changed by any current or future decision. Since

17 sunk costs were incurred "in the past," sunk costs are, by definition, embedded.

18 The FCC's TELRIC methodology specifically prohibits the inclusion of embedded

19 costs and thus, they are excluded from BellSouth's study. It is important to

20 remember that the nonrecurring activities associated with UNE provisioning are

21 only begun at the request of an ALEC. Thus, they cannot be "sunk". In other

22 words, only after an ALEC requests a UNE does BellSouth undertake activities to

23 provide the requested UNE. The ALEC initiates the actions and causes BellSouth

24 to incur costs for which BellSouth legitimately should be compensated.

25

1 Q. **MS. MURRAY COMPARES THE LOOP INVESTMENT TO THE**

2 **NONRECURRING COST TO DELOAD A LONG UNBUNDLED COPPER**

3 **LOOP. (PAGES 9-11) IS HER COMPARISON VALID?**

4

5 A. No. Ms. Murray's apples-to-oranges comparison is not particularly insightful since

6 there is no correlation between the two types of costs. Investments result from the

7 purchasing, engineering, and installing of equipment required to provide the UNE,

8 i.e., the physical plant. Nonrecurring costs are directly proportional to the amount

9 of time required to complete the task. The process of unloading a cable is

10 extremely labor-intensive, thus the perceived "high" cost.

11

12 However, even if one were to give some weight to Ms. Murray's argument, her

13 comparison is still flawed. Ms. Murray compares an activity performed in

14 conjunction with a long loop. Thus, assuming that the exercise in which she is

15 engaging was relevant, the proper comparison would be to the investment for the

16 same type of loop. For some reason, Ms. Murray compares the nonrecurring cost

17 associated with unloading an unbundled long loop to a 2-wire analog loop of

18 average length. For discussion purposes the investment associated with a 2-wire

19 unbundled copper loop – long is $2,466, as compared to the investment used by

20 Ms. Murray of $835.

21

22 As I explained in my direct testimony, BellSouth will unload only one pair at a time

23 for long copper loops in order to maintain the integrity of the other loops carrying

24 voice grade service within the same cable.

25

1　Q. **ARE THERE OTHER COMMENTS THAT MS. MURRAY MAKES THAT**

2　　**REQUIRE COMMENT?**

3

4　A. Yes.　There are several incorrect statements Ms. Murray makes in her testimony to

5　　which I must respond.　On page 8, she states that "BST has proposed a charge of

6　　$772.31 for removing **the first load coil** from a loop of greater than 18,000 feet."

7　　(Emphasis added.) This is inaccurate.　BellSouth's rate is to unload the entire loop,

8　　not just to remove the first load coil.　Within the study, an assumption was made as

9　　to the average number of load coils that would be removed from each loop.

10

11　　On page 9, Ms. Murray states: "it appears that BST is proposing to apply

12　　nonrecurring 'conditioning' charges to every xDSL-capable loop, including those

13　　that do not require 'conditioning'."　Ms. Murray's statement misses the point.

14　　BellSouth has endeavored to expand the universe of xDSL-capable loops for short

15　　loops by unloading 10 pairs each time conditioning takes place.　The cost has been

16　　allocated among those 10 pairs.　Thus, the ALEC pays only $1/10^{th}$ of the total cost

17　　when conditioning is requested on short loops.　The additive is intended to recover

18　　the portion of the cost for conditioning not recovered elsewhere; i.e., not recovered

19　　from retail services or other requests for unbundled xDSL loops.　It is projected

20　　that of the 10 conditioned loops, an ALEC will purchase 2 and BellSouth will

21　　utilize 4 pairs.　That leaves 4 pairs whose conditioning costs will not be recovered.

22　　BellSouth developed an additive that is applied to ADSL-compatible loops, HDSL-

23　　compatible loops, and UCLs in order to be compensated for the unrecovered costs

24　　based on the probability of these xDSL lops requiring conditioning.

25

1 Also on page 9, Ms. Murray discusses additional nonrecurring charges she claims

2 may be required when an ALEC orders ADSL-compatible loops. She states that

3 the "total does not include any charges for manual service order processing, order

4 coordination, manual loop qualification, or specific loop 'conditioning'". (Page 9)

5 Ms. Murray is mistaken. Rebuttal Exhibit DDC-5 shows the input sheet BellSouth

6 included in its April 17th filing. Currently, the first step is a Service Inquiry, i.e.,

7 loop qualification. If the loop does not qualify, i.e., it does not meet the design

8 standards for an ADSL loop, BellSouth informs the ALEC and no charge is

9 assessed. Additionally, BellSouth informs the ALEC if the reason the loop does

10 not qualify is because of load coils or bridge tap. At this point, the ALEC has the

11 option of requesting loop conditioning. If another xDSL loop would qualify (e.g.,

12 UCL-Short), this information is also provided to the ALEC. Note in Exhibit DDC-

13 5 that if the loop does qualify, order coordination is included in the nonrecurring

14 cost.

15

16 **Q. SUPRA WITNESS, MR. NILSON, STATES THAT "NON-RECURRING**

17 **COSTS OF INFRASTRUCTURE, PURCHASE, AND CONSTRUCTION IS**

18 **A COST TO BE SHARED BY THE CARRIERS USING THE FACILITY,**

19 **OVER THE USEFUL LIFE OF THE FACILITY." (PAGE 9) DOES**

20 **BELLSOUTH'S COST STUDY FOR THE UNES UNDER**

21 **CONSIDERATION IN THIS PROCEEDING ADHERE TO THIS**

22 **DEFINITION?**

23

24 A. Yes. Mr. Nilson is describing the capitalized labor included in the cable investment.

25 BellSouth considers these costs in its study through the use of in-plant factors that

1   augment the material price to recognize the associated labor required to install the

2   cable. By including these labor costs as part of the investment, the cost is

3   recovered over the useful life of the plant. Additionally, because these costs are

4   spread over the life of the plant, AT&T/MCI witness, Mr. King's concern that "the

5   first user will be forced to pay more than its fair share" is a not an issue. (Page 6 of

6   King Testimony)

7

8   **Q. MR. NILSON ALSO STATES THAT "TASK RELATED NON-**

9   **RECURRING COSTS ARE SPECIFIC TO A GIVEN CARRIERS ORDER**

10   **FOR A PARTICULAR SERVICE AND SHOULD REMAIN NON-**

11   **RECURRING COSTS." (PAGE 9) DOES BELLSOUTH AGREE?**

12

13   A. Yes, at least from a cost development perspective. The Commission has the option

14   of mandating a recurring rate that is financially equivalent to the nonrecurring costs.

15   Additionally, the ALEC also has the option of charging the end user a recurring

16   rate to recover the nonrecurring cost paid to BellSouth. However, BellSouth's

17   cost study reflects the one-time costs that are unique to the request made by the

18   ALEC as nonrecurring costs. However, Mr. Nilson goes on to advocate that these

19   costs could be charged on an Individual Case Basis ("ICB"). The use of ICB billing

20   has been portrayed as a deterrent to the ALEC's ability to accurately project

21   expenditures. Thus, every attempt has been made in BellSouth's cost studies to

22   eliminate ICB charges. Nonrecurring costs are based upon standardized

23   procedures that are used throughout the BellSouth region. Work time estimates

24   reflect subject matter experts' anticipated _average_ requirements.

25

-11-

1 Q. ON PAGE 6, AT&T/MCI WITNESS, MR. KING, DISCUSSES

2   DISCONNECT COSTS. PLEASE COMMENT ON HIS OBSERVATIONS.

3

4 A. Mr. King confuses the disconnect issue by never distinguishing between

5   disconnecting unbundled elements and disconnecting combinations of UNEs. The

6   work effort to disconnect an unbundled element is very different from

7   disconnecting a combination. An unbundled element is not a working circuit; it is

8   only a piece of the network. Thus, an unbundled loop, for example, can never be

9   placed in a "soft dial" tone state as Mr. King asserts. The costs BellSouth

10   calculated for UNE disconnect reflect the physical activities that must be

11   undertaken to disconnect each UNE. For loop/port combinations on a switch-as-is

12   basis, the disconnect costs have been paid by the end-user when they initially

13   purchased service. Thus, no additional disconnect costs are appropriate. For

14   loop/transport combinations, BellSouth must perform physical activities, as

15   reflected in the cost study; in order to disconnect the circuit and disconnect costs

16   should apply.

17

18 Q. ON PAGE 5 OF HIS TESTIMONY, MR. KING APPEARS TO QUESTION

19   BELLSOUTH'S ADHERENCE TO THE FCC'S TELRIC

20   METHODOLOGY IN DEVELOPING NONRECURRING COSTS.

21   PLEASE COMMENT.

22

23 A. Mr. King states that often "nonrecurring charges are based on the activities the

24   ILEC has incurred in the past." (Page 5) To the extent Mr. King is implying that

25   BellSouth has based its nonrecurring costs on an outdated process, he is mistaken.

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1   BellSouth's nonrecurring studies are based upon anticipated work times and

2   forward-looking processes that exist today and will be used to provision UNEs for

3   the foreseeable future.

4

5   **Issue 7: "What are the appropriate assumptions and inputs for the following**

6   **items to be used in the forward-looking recurring UNE cost study?**

7

8   **(d) tax rates.**

9

10   Q. SUPRA WITNESS, MS. BENTLEY STATES THAT "THE ILEC WILL

11   GENERALLY INCUR NO TAX LIABILITY IN THE UNE

12   ENVIRONMENT." (PAGE 10) IS SHE CORRECT?

13

14   A. No. Some states and municipalities tax the revenues that a company receives from

15   services provided within the state/municipality. The taxes may be designed to fund

16   such things as PSC fees, franchise taxes, license taxes, or other similar items, but

17   because the taxes are levied on the basis of revenues they are commonly referred to

18   as a gross receipts tax. Unlike some taxes that are billed to the customer and flowed

19   through to the taxing authority, a gross receipts tax is a cost of doing business to

20   BellSouth. BellSouth receives revenues from the ALECs for the purchase of UNEs

21   and interconnection services and thus must pay this tax. Additionally, BellSouth

22   must pay an ad valorem tax based on the assessed value its property, including the

23   "property" which comprise UNEs leased by ALECs. City and county governments

24   levy these taxes. Both of these taxes are real costs to BellSouth that must be

25   considered in the cost study, as the Florida Commission has previously recognized.

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1

2   Additionally, Ms. Bentley's statement that "consideration for income taxes have

3   already been factored into the cost of capital" (Page 10) is not correct. It is true

4   that the impact of income taxes is taken into account during the calculation of the

5   capital portion of the annual cost factors. However, income tax is not considered in

6   the development of the cost of capital. Instead cost of capital is considered in the

7   calculation of the income tax expense. Income tax expense is the federal and state

8   taxes levied on "taxable income." While interest to bondholders is book expense

9   and deductible for income tax purposes, the federal government and most state

10   governments levy a tax on the revenues, which are earned to compensate

11   stockholders for the use of their money. BellSouth must pay income taxes on the

12   equity portion of return, but the debt portion is tax exempt.

13

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

15

16 A. Yes.

17

18

19

20

21

22

23

24

25

	A	B	C	D	E	F	G	H
1	STATE:	FL						
2	COST ELEMENT #:	A.6.1						
3								
4	STUDY PERIOD:	2000-2002						
5					WORKTIMES SHOWN ARE IN HOURS			
6	DESCRIPTION	WORK CENTERS / WORK ACTIVITIES	SME	JFC	FIRST INSTALL	FIRST DISCONNECT	ADDTL INSTALL	ADDTL DISCONNECT
7								
8	SERVICE INQUIRY	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for verification of facility availability. Upon completion of job, CRSG informs CLEC facilities are available.	Interconn Svcs.	SDWC	0.5356	0.4250	0.2678	0.2125
9	SERVICE INQUIRY	LCSC receives SI from CRSG, validates for accuracy and processes order.	Interconn Svcs.	230X	0.3900	0.5000	0.0867	0.1667
10	SERVICE INQUIRY	OSPE reviews request, assigns FRN and returns SI to CRSG	Network	JG57	1.3000	0.0000	1.3000	0.0000
11	SERVICE INQUIRY	SAC logs SI in/out which involves interaction with CRSG	Network	4FXX	0.2600	0.0000	0.2600	0.0000
12	ENGINEERING	CPG processes request; designs circuit and generates DLR & WORD document for CLEC and Field.	Network	4N4X	0.0825	0.0442	0.0450	0.0067
13	ENGINEERING	AFIG assigns loop facilities.	Network	4M1X	0.0400	0.0058	0.0400	0.0058
14	CONNECT & TURN-UP TESTING	UNEC pulls info, assigns to work forces; verifies & ensures accuracy of design; creates cut sheets to verify reuse of facilities; ensures dispatch, performs frame continuity and due date coordination and testing; performs manual order coordination	Network	4AXX	1.4212	0.4823	0.9651	0.0500
15	CONNECT & TURN-UP TESTING	WMC coordinates dispatched technicians.	Network	4WXX	0.2500	0.2500	0.0000	0.0000
16	CONNECT & TURN-UP TESTING	CO I&M Field wires circuit at collocation site.	Network	431X	0.2833	0.2125	0.1417	0.0992
17	CONNECT & TURN-UP TESTING	SSI&M processes order; places cross-connect at cross-box, checks continuity and dial tone, resolves trouble, performs test from NID and completes order.	Network	411X	1.9210	0.7833	1.2710	0.1333
18	TRAVEL	SSI&M dispatched to cross-box	Network	411X	0.3333	0.3333	0.0000	0.0000
19								
20	ASSUMPTIONS:							
21	1) Assumes 100% dispatch to connect.							
22	2) OSPE engineering time assumes a 10% fall-out rate requiring manual intervention (RMA) - occurs with unbundling when loop terminates other than in the switch.							
23	3) 90% of loops are new; 10% are reused facilities which require additional UNEC time.							
24	4) Fallout rate for AFIG is 30% on installs and 5% on disconnects.							
25	5) UNEC and CO I&M Field (connect and test) times assume 15% of total are carried in other transport elements.							
26	6) SSI&M travel is captured in Drop/NID investment.							
27	7) CPG time assumes 15% fallout on installations and 10% fallout on disconnects.							
28	8) CRSG, LCSC, OSPE and SAC installation times are adjusted by 52% to reflect situations when loop and modification are ordered at same time.							