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September 10, 1999

Mrs. Blanca S. Bayó  
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Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Docket No. 990649-TP (UNEs)

Dear Ms. Bayó:

Enclosed please find the original and fifteen copies of BellSouth Telecommunications, Inc.'s Rebuttal Testimony of D. Daonne Caldwell, Dr. Richard D. Emerson, Jerry Hendrix and Alphonso J. Varner, which we ask that you file in the above-referenced matter.

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,  
*Michael P. Goggin*  
Michael P. Goggin

cc: All Parties of Record  
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Nancy B. White

> 10917 Caldwell  
10918 Emerson  
10919 Hendrix  
10920 Varner

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**CERTIFICATE OF SERVICE**  
**Docket No. 990649-TP**

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**BELLSOUTH TELECOMMUNICATIONS, INC.**  
**REBUTTAL TESTIMONY OF D. DAONNE CALDWELL**  
**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
**DOCKET NO. 990649-TP**  
**SEPTEMBER 10, 1999**

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

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

**Q. ARE YOU THE SAME D. DAONNE CALDWELL WHO FILED DIRECT TESTIMONY IN THIS DOCKET?**

A. Yes. I filed direct testimony on August 11, 1999, that outlined requirements BellSouth believes should be imposed on recurring and nonrecurring cost preparation for unbundled network elements ("UNEs"), combinations of network elements, and deaveraged offerings. Additionally, I addressed the underlying cost methodology, the models, and the major inputs BellSouth believes are appropriate in cost support development.

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

1 A. The purpose of my rebuttal testimony is to respond to comments made by witnesses  
2 with respect to cost development. In particular, I reply to AT&T witness Dr.  
3 August Ankum, COVAD witness, Ms. Terry Murray, e.spire witness, Mr. James  
4 Falvey, and Intermedia witness, Ms. Julia Strow. Additionally, I briefly discuss the  
5 cost study proposals offered by GTE and Sprint.

6

7 **Q. SEVERAL OF THE WITNESSES DISCUSS COST METHODOLOGY.**  
8 **PLEASE COMMENT.**

9

10 A. There appears to be a general consensus that the Federal Communications  
11 Commission ("FCC")-defined Total Element Long Run Incremental Cost  
12 ("TELRIC") methodology is the appropriate foundation for determining the costs  
13 for network capabilities offered to Alternative Local Exchange Carriers ("ALECs").  
14 In fact, all parties believe that the TELRIC methodology should be utilized to  
15 determine cost, regardless of whether the network capability is a UNE, a  
16 combination of UNEs, or a deaveraged element. BellSouth agrees with this  
17 assessment. However, it is apparent that the application of the TELRIC  
18 methodology is open for interpretation.

19

20 **Q. DO PARTIES AGREE ON CERTAIN ASPECTS OF THE TELRIC COST**  
21 **METHODOLOGY?**

22

23

24 A. Yes. As I stated in my direct testimony, the attributes of a cost study based on  
25 TELRIC methodology, as recognized by the Florida Public Service Commission  
("Commission"), are:

1           (1)    **Efficient network configuration** – the cost should be based on the use  
2           of the most current telecommunications technology presently available and the  
3           economically efficient configuration, given the existing wire center locations.

4           (2)    **Long run** – the studies should consider a timeframe long enough to  
5           reflect the variability of the cost components.

6           (3)    **Volume sensitive and volume insensitive costs are considered** – both  
7           volume sensitive and volume insensitive costs should be considered. These are  
8           the costs that will be avoided by discontinuing, or incurred by offering, an entire  
9           product or service, holding all other products or services offered by the firm  
10          constant. A corollary to this directive is the principle of cost causation, i.e., the  
11          costs included in the study are those that are caused because BellSouth offers  
12          an unbundled network element.

13          (4)    **Forward-looking** – inputs (e.g., cost of capital and depreciation rates)  
14          should be based on a forward-looking perspective.

15          (5)    **Shared and common costs are considered.**

16          Parties filing testimony in this docket espouse their belief that these principles  
17          should be incorporated into future filings. BellSouth agrees. In fact, BellSouth  
18          used these guidelines in the studies it filed with the Commission in Docket Nos.  
19          960757-TP, 960833-TP, and 960846-TP. Additionally, BellSouth will adhere to  
20          these principles in future filings.

21

22          Let me mention that all Public Service Commissions, Alabama, Florida, Georgia,  
23          Kentucky, Louisiana, Mississippi, North Carolina, and South Carolina, (with the  
24          exception of Tennessee) within the BellSouth region have also adopted these  
25          standards for cost development. (The Tennessee Regulatory Authority has not

1 issued a final order in the generic cost docket, but the preliminary order reflects the  
2 use of TELRIC methodology.)

3 **Q. PLEASE EXPAND ON THE POTENTIAL CONTROVERSY**  
4 **SURROUNDING THE APPLICATION OF THESE PRINCIPLES.**  
5

6 A. It is probably the first and fourth points from the list that cause the most  
7 controversy. These two principles essentially ask, "What constitutes a forward-  
8 looking, least-cost, efficient network?" Also, one needs to consider the question,  
9 "Whose network should be considered?" This Commission in Order No. PSC-96-  
10 1579-FOF-TP recognized that consideration must also be given to the costs  
11 BellSouth will incur. It found BellSouth's studies were appropriate because, "they  
12 reflect BellSouth's efficient *forward-looking* costs." (Order at Page 32, emphasis  
13 added) Thus, the only appropriate network that should be considered is the one  
14 BellSouth will deploy because only that network will account for the costs  
15 BellSouth will incur. However, the network should reflect future deployment  
16 characteristics. BellSouth's current cost studies reflect the forward-looking  
17 criteria. Additionally, the methodology BellSouth proposes will also adhere to this  
18 forward-looking guideline.

19  
20 Let me highlight some of the criticism made against BellSouth's cost methodology  
21 related to this issue. On page 13 of his testimony, expert witness, Mr. Falvey,  
22 claims that BellSouth's cost studies utilized in the recent UNE dockets are  
23 inconsistent with forward-looking pricing principles. Mr. Falvey further asserts on  
24 page 14 that, "BellSouth's interconnection, UNE and collocation pricing are  
25 inconsistent with the FCC's designated pricing standards." First, Mr. Falvey offers

1 no concrete examples of where BellSouth has deviated from the forward-looking  
2 requirement. Further, this Commission has accepted BellSouth's cost study  
3 methodology as appropriate in Docket Nos. 960757-TP, 960833-TP, and 960846-  
4 TP.

5  
6 GTE witness, Mr. Tucek, highlights the dilemma cost analysts experience when  
7 trying to determine forward-looking costs. On page 9 of his testimony, he states;  
8 "To be useful, the costs must be grounded in reality. Although the cost estimates  
9 should reflect the forward-looking economic costs of provisioning elements, the  
10 existing network cannot be ignored." On the other hand, on page 17 of his  
11 testimony, AT&T witness, Dr. Ankum, would have you believe that "cost analysts  
12 should simply answer the question of which technology would be most cost  
13 efficient." Dr Ankum's approach is exactly the one rejected by the FCC in  
14 Paragraph 683 of the Order. The FCC stated; "This approach, however, may  
15 discourage facilities-based competition by new entrants because new entrants can  
16 use incumbent LEC's existing network based on the cost of a hypothetical least-  
17 cost, most efficient network." Instead, the FCC adopted an approach that "closely  
18 represents the incremental costs that incumbents actually expect to incur in making  
19 network elements available to new entrants." (¶685) The FCC recognized the  
20 existing network design and existing infrastructure must be considered.

21  
22 Let me emphasize, I am not advocating using 100% of the current technology in  
23 determining cost, but neither am I advocating 100% of any one type of technology  
24 based solely on that technology representing the most forward-looking design.

25

1 Q. CAN YOU OFFER EXAMPLES THAT WOULD ILLUSTRATE THIS  
2 POINT?

3

4 A. Yes. For example, BellSouth currently deploys two basic types of digital loop  
5 carrier, integrated and universal. In the past, intervening parties have argued that  
6 integrated digital loop carrier is the most "forward-looking". They have gone even  
7 further and defined the type of integrated digital loop carrier to be 100% TR303  
8 compliant. I would not contest the point that integrated digital loop carrier is the  
9 most forward-looking for switched lines, however, the contention that it should be  
10 100% TR303 is inappropriate. BellSouth has less than 1% of its lines served by  
11 TR303, a figure that will not change significantly in the future. Additionally, I  
12 would need to add an additional caveat; integrated carrier is the forward-looking  
13 technology for specific applications. There are circumstances where it would make  
14 economic sense to deploy universal digital loop carrier, not integrated, for example,  
15 isolated demand for non-switched circuits. Since the cost studies are based on the  
16 network as a whole, the impact of these cases where universal digital loop carrier is  
17 placed must be considered in developing cost. Additionally, this mixture of  
18 technologies, universal and integrated, will continue into the future. Thus, the  
19 question becomes one of what constitutes a forward-looking mix of technologies,  
20 not which particular technology should be used exclusively. BellSouth would  
21 support using a projected mix of future deployment, not the current mix. In fact,  
22 on page 16 of his testimony, Dr. Ankum appears to agree with this methodology.  
23 He states, "the appropriate technology mix to be used in cost studies may not  
24 correspond to actual technologies that the company may actually be deploying or  
25 has deployed in the past." Of course, the question, of the "appropriate technology

1 mix" remains and will be answered in Phase II of these proceedings when specific  
2 inputs are discussed. BellSouth asserts that the technology mix utilized in cost  
3 development should reflect BellSouth's future deployment plans, not an arbitrary  
4 estimate.

5

6 **Q. ARE THERE EXAMPLES DR. ANKUM PRESENTS WITH WHICH**  
7 **BELLSOUTH CAN AGREE?**

8

9 A. Yes. Dr. Ankum does offer an example with which BellSouth agrees. On page 19,  
10 he advocates excluding analog switches from cost studies. BellSouth feels this is  
11 appropriate since BellSouth is no longer deploying analog switches in its network.  
12 The forward-looking, replacement technology is digital and thus is the appropriate  
13 input into cost development. In other words, the future projected mix of  
14 analog/digital switch deployment is 0%/100%. In fact, BellSouth takes Dr.  
15 Ankum's suggestion one step further by only including the latest generic of the  
16 digital switch and the most advanced processor the vendors offer to BellSouth.

17

18 **Q. IN ADDITION TO NETWORK DESIGN, ARE THERE OTHER ASPECTS**  
19 **OF THE FORWARD-LOOKING PRINCIPLE THAT NEED TO BE**  
20 **ADDRESSED?**

21

22 A. Yes. On page 20 of his testimony, Dr. Ankum alleges that the forward-looking  
23 principle mandates that fill factors be based on the utilization of facilities "over the  
24 entire economic life of the facility."

25

1 First, let me reference the discussion from the FCC Order that mentions fill or  
2 utilization. The FCC, in paragraph 682, outlines the methodology that should be  
3 utilized with respect to fill factors. It states that per unit costs associated with a  
4 particular element "must be derived by dividing the total cost associated with the  
5 element by a reasonable projection of the actual total usage of the element." Thus,  
6 the FCC is advocating the use of a projected, actual fill factor.

7  
8 Therefore, it makes no sense to attempt to isolate a single facility and determine the  
9 utilization "over the entire economic life of the facility." The telecommunications  
10 network grows in lumps; cross sections of loops range from less than 20% fill to  
11 the point where relief is necessary. BellSouth is placing new facilities throughout  
12 its network in Florida, therefore, this situation will continue in the future. Thus,  
13 only by looking at the network as a whole can one determine an accurate projection  
14 of utilization. This Commission has reviewed fill factors previously in Docket Nos.  
15 960757-TP, 960833-TP, and 960846-TP and has agreed with BellSouth's  
16 interpretation of the FCC Order and its application in cost studies. In Order No.  
17 PSC-98-0604-FOF-TP, this Commission ruled, "... we find it appropriate to accept  
18 BellSouth's definition of utilization or fill factor for use in these proceedings."  
19 (Order at Page 79) "BellSouth defines the utilization factor as the number of  
20 assigned cable pairs divided by the number of available pairs." (Order at Page 78)  
21 Additionally, if Dr. Ankum's definition is implemented, the "actual" requirement of  
22 the FCC principle will never be fulfilled.

23

24 **Q. SEVERAL WITNESSES HAVE IMPLIED THAT USE OF COMPANY-**  
25 **SPECIFIC DATA REFLECTS AN EMBEDDED, INEFFICIENT**

1 NETWORK AND THUS, THE INCORRECT COST. PLEASE COMMENT.

2

3 A. This false conclusion was based on the fundamental theorem that the incumbent  
4 provider is, by default, inefficient. In Docket Nos. 960757-TP, 960833-TP, and  
5 960846-TP this identical argument was presented before this Commission. Other  
6 parties have gone so far as to present cost models based on non-Florida input, e.g.,  
7 depreciation lives from Bell Atlantic, drop investment from a 1993 New Hampshire  
8 study, and structure sharing percentages derived from unrealistic "expert"  
9 estimates, in a misguided attempt to present forward-looking data. (Commission  
10 Order PSC-96-1579-FOF-TP, Pages 27-28) However, in its Order, this  
11 Commission rejected these models and their inputs because they did "not produce  
12 estimated costs which are representative of the costs of BellSouth's network in  
13 Florida." (Commission Order PSC-96-1579-FOF-TP, Page 29) BellSouth reaffirms  
14 its stand that only by utilizing BellSouth-specific input would the final cost result  
15 reflect the cost BellSouth incurs.

16

17 Additionally, BellSouth's cost models incorporate the current network deployment  
18 guidelines. These guidelines have been formulated to ensure that BellSouth's  
19 network will be (1) forward-looking and (2) economically efficient. Since the  
20 models are based on these current engineering rules, any past "inefficiencies" have  
21 been eliminated, with older technologies being superceded by newer ones.

22 However, past technologies are not inefficient. They were the correct technology  
23 at the time they were deployed and have application even today. Additionally,  
24 these engineering rules detail where and when it is appropriate to deploy a certain  
25 technology. In other words, there are caveats associated with the placements that

1 are considered in BellSouth's cost studies.

2

3 BellSouth utilizes historical information only as a starting point in developing cost  
4 study inputs. Future projections of expense and investment-related expenditures  
5 are used to develop the final input. Integrated into these future projections are  
6 productivity improvements, savings gleaned from advances in technology, and  
7 contractual agreements resulting in discounts.

8

9 **Q. YOU MENTIONED CONTRACTS, SEVERAL PARTIES ASSERT THAT**  
10 **CONTRACTS ARE RELEVANT TO DETERMINING FORWARD-**  
11 **LOOKING COSTS. PLEASE RESPOND.**

12

13 A. COVAD witness, Ms. Murray, and AT&T witness, Dr. Ankum, specifically cite  
14 contracts as an important consideration in determining forward-looking costs. I  
15 would have to agree. However, their contention that BellSouth is obligated to  
16 provide copies of proprietary information to all parties is extreme. BellSouth  
17 foresees several potential problems with their request: (1) confidential data can  
18 become public, (2) contractual terms can be presented out-of-context, and (3)  
19 contractual caveats/limitations can be ignored. Thus, BellSouth is reluctant to  
20 release contracts. However, BellSouth is willing to come to some mutually  
21 agreeable resolution whereby this Commission will be assured the most current  
22 discounts are reflected in the cost studies without the potential violation of  
23 proprietary agreements and misrepresentations of the contracts.

24

25 **Q. THIS COMMISSION HAS ASKED FOR INPUT ON THE**

1       **DEVELOPMENT OF NONRECURRING COSTS AND WITNESSES HAVE**  
2       **PROVIDED COMMENTS. PLEASE PROVIDE YOUR RESPONSE TO**  
3       **THEIR STATEMENTS.**

4  
5    A. Dr. Ankum is correct in his statement that nonrecurring costs should follow the  
6       same TELRIC guidelines imposed on recurring cost development. In particular his  
7       discussion of cost causation is pertinent to nonrecurring cost calculations.  
8       However, the same caution previously discussed with respect to recurring cost  
9       methodology must be exercised when reviewing the implementation of the  
10      nonrecurring cost methodology. Only forward-looking, achievable provisioning  
11      practices should be considered. Additionally, only BellSouth-specific inputs should  
12      be utilized. Thus, Dr. Ankum's statement on page 45 of his testimony, that  
13      nonrecurring costs are "reduced significantly or they become negligibly small" if  
14      integration with BellSouth's operational support systems ("OSS") are achieved,  
15      should be considered with these criteria in mind.

16  
17      This same argument concerning total system integration was made when AT&T  
18      presented its nonrecurring cost model in Docket Nos. 960757-TP, 960833-TP, and  
19      960846-TP. Witnesses supporting the model asserted that nonrecurring costs  
20      should reflect only systems that are consistent with the Total Network Management  
21      ("TNM") guidelines, i.e., the systems have achieved total integration. BellSouth's  
22      network is "consistent" with the TNM guidelines. However, the network is not  
23      100% TNM compliant and never will be 100% compliant. Network management  
24      refers to the equipment, procedures, and operations designed to keep a traffic  
25      network operational. Total Network Management implies an integrated network

1 where each vendor's equipment communicates with other vendor supplied  
2 equipment, operations are seamless, and procedures require no (or little) human  
3 intervention. BellSouth's goal is to evolve toward this standard, but due to the  
4 enormous investment BellSouth has in copper plant, total end-to-end compliance  
5 will never materialize. The substantial capital outlay and labor required to make  
6 this goal a total reality are cost prohibitive, requiring replacement of existing,  
7 functional plant. Also, some orders require manual intervention due to their  
8 complex nature or input error. To relegate nonrecurring cost development to a  
9 hypothetical world based on "the most efficient technology", regardless of its  
10 deployment (or lack thereof) in BellSouth's network is inappropriate  
11  
12

13 **Q. DR. ANKUM STATES THAT NONRECURRING COSTS CAN BE**  
14 **RECOVERED THROUGH RECURRING RATES (PAGE 43). FROM A**  
15 **COST METHODOLOGY PERSPECTIVE, DO YOU AGREE?**  
16

17 A. No. However, Dr. Ankum's statement that this Commission can rule that  
18 nonrecurring costs be recovered through recurring rates is correct. The  
19 Commission has that authority. However, from a cost methodology perspective,  
20 costs should be stated as they naturally occur, i.e., if the costs are one-time  
21 expenses it is appropriate to express them as nonrecurring. If it is an on-going cost,  
22 then the appropriate way to express the cost is as a recurring cost. The operative  
23 word in Dr. Ankum's statement is "recover". Recovery relates to rate structure  
24 design, not cost development.  
25

1 **Q. DR. ANKUM VIRTUALLY ACCUSES BELLSOUTH OF DOUBLE**  
2 **COUNTING NONRECURRING COSTS (PAGE 46) BY INCLUDING**  
3 **THESE ONE-TIME COSTS BOTH AS RECURRING AND**  
4 **NONRECURRING COSTS. IS HE CORRECT?**

5

6 A. No. Dr. Ankum states that if studies are “thoroughly scrutinized”, “one is likely to  
7 find many instances of such double counts.” This is totally without substance.  
8 BellSouth’s nonrecurring costs reflect only the incremental cost of provisioning the  
9 cost object (UNE, combination, or deaveraged element). Additionally, BellSouth  
10 takes precautions to eliminate service order costs from the factor development for  
11 factors that are utilized in developing recurring costs.

12

13 **Q. ON PAGE 17 OF HIS TESTIMONY, MR. FALVEY ATTEMPTS TO**  
14 **EQUATE NONRECURRING RATES FOR LOCAL LOOPS TO RETAIL**  
15 **SERVICES. IS THIS AN APPROPRIATE COMPARISON?**

16

17 A. No. This “apples-to-oranges” comparison is without merit. First, BellSouth does  
18 not use unbundled loops, per se, to provide retail service. Retail service is an end-  
19 to-end connection through the network. Thus, the inputs take that situation into  
20 consideration and study assumptions include such things as the ability to test  
21 without dispatch and limited travel. However, the nonrecurring costs associated  
22 with an unbundled loop reflect those work activities required to provide a  
23 connection from the network interface device (“NID”) to the main distributing  
24 frame (“MDF”). In this case, the assumptions are different, the work centers  
25 involved are different and thus, the costs are different.

1

2 Mr. Falvey also states that the Commission should deny BellSouth the ability to  
3 charge for order coordination. This is an optional offering BellSouth makes to  
4 ALECs for coordination above-and-beyond the norm. Since this cost is purely  
5 service order related, this issue should be addressed within the context of the  
6 generic OSS docket. However, BellSouth believes this is a legitimate cost since  
7 BellSouth incurs additional expense in providing order coordination.

8

9 **Q. MR. FALVEY ALSO ASSERTS THAT THIS COMMISSION CAN USE**  
10 **THE TRUNK PORT CHARGE AS A BENCHMARK FOR FRAME RELAY**  
11 **COSTS. (PAGES 16-17) IS HIS OBSERVATION CORRECT?**

12

13 A. No. Mr. Falvey fails to realize that the switch providing frame relay is entirely  
14 different from the switch that provides local switching. The difference in  
15 architecture, equipment, contracts, and discounts makes any comparison  
16 meaningless. Additionally, the frame relay switch is based on packet technology,  
17 whereas the end office switch is based on time-division-multiplexing technology.

18

19 **Q. ON PAGE 13 OF HER TESTIMONY, MS. STROW ARGUES FOR**  
20 **VOLUME AND TERM DISCOUNTS. ARE THESE APPROPRIATE?**

21

22 A. No. Ms. Strow appears to base her argument for additional discounts on perceived  
23 savings that BellSouth obtains from "economies of scale". However, BellSouth  
24 already recognizes the only applicable "economies of scale" in developing costs for  
25 UNEs. These savings only arise from differences in provisioning activities (and

1 costs) when orders contain more than one element and thus only apply to  
2 nonrecurring costs. This is reflected in the rate structure and the cost study that  
3 supports the rates by differentiating between first and additional nonrecurring costs.  
4 However, any additional reduction beyond this to nonrecurring rates and any  
5 attempt to reduce recurring rates are unjustified for the following reasons:

6  
7 1) BellSouth does not receive additional material discounts beyond those  
8 contained in the studies for deploying additional unbundled elements. Thus, there is  
9 no room for providing an additional discount to others.

10

11 2) The state commissions have ordered rates below what BellSouth filed. Thus,  
12 BellSouth does not fully recover the incremental cost when selling unbundled  
13 network elements. Any additional reduction beyond the mandated rates will only  
14 compound the problem.

15

16 3) Fulfillment of this request would obligate BellSouth to restudy the cost for  
17 those customers not receiving volume and term discounts since the cost  
18 methodology is currently based on a statewide average. This would exacerbate the  
19 shortfall between BellSouth's cost and the state mandated rate even further.

20

21 BellSouth witness, Mr. Varner, elaborates further on why volume and term  
22 discounts are inappropriate in his rebuttal testimony.

23

24 **Q. SPRINT WITNESSES ADVOCATE THE DE-AVERAGING OF LOCAL**  
25 **LOOPS, LOCAL SWITCHING, AND INTEROFFICE TRANSMISSION**

1       **FACILITIES. DOES BELLSOUTH AGREE WITH THEIR**  
2       **ASSESSMENT?**

3  
4    A. Not entirely. BellSouth agrees that the cost variation by geographic location makes  
5       the local loop a candidate for further deaveraging. BellSouth witness, Mr. Varner,  
6       discusses other issues that impact the timing of deaveraging in his rebuttal  
7       testimony. Additionally, BellSouth witness, Mr. Jerry Hendrix, outlines  
8       BellSouth's initial proposal for deaveraging.

9  
10       Sprint witness, Mr. Dickerson, does an excellent job of explaining the causes of the  
11       differences in loops found in various geographic locations on pages 4-7 of his  
12       testimony. Note that most of these cost drivers are reflected in the physical  
13       characteristics of the loop and the placing costs associated with that loop: weather,  
14       terrain, distance, and local market conditions. However, none of these factors  
15       impact switching costs to any great degree. The last factor, customer density, also  
16       has little impact on switching costs since the modularity of digital switching  
17       equipment allows BellSouth to grow switches as demand dictates. Also, remote  
18       switch entities can be deployed to serve pockets of customers. One factor Mr.  
19       Dickerson fails to include in his discussion of the causes of variances in switching  
20       costs is the vendor. The two dominant vendors, Lucent and Nortel, have different  
21       switch architectures. The result is that the distribution between traffic sensitive  
22       (\$/Minute of Use) and non-traffic sensitive (port) costs differs depending on the  
23       vendor.

24  
25       Additionally, switching cannot be viewed in the same manner as local loops because

1 logically one cannot isolate one switch from the network. (Of course, as Mr.  
2 Dickerson has shown, one can perform the mathematical exercise for individual  
3 switches to do so. However, this ignores the interrelationships between the switch  
4 entities.) The switch is a part of a total integrated network designed to handle a  
5 call from the originating switch entity to the terminating switch entity. To segment  
6 individual switches based on individual cost differences ignores the  
7 interdependencies between switch entities. This is clearly a problem for remote  
8 switches that are dependent on a host switch for interoffice call processing.

9  
10 The rate structure of the interoffice transport, i.e. \$/mile, already accounts for  
11 geographic differences by eliminating the length from the equation. Thus, there is  
12 no reason to include interoffice transport in the deaveraging scheme. Of course,  
13 some of the physical attributes of the interoffice route will impact the costs just as  
14 they do in the loop, e.g., the type of placement. However, because the cost is  
15 expressed on a per unit (mile) basis these differences are negligible.

16

17 **Q. MR. DICKERSON ALSO DISCUSSES OTHER UNES WHOSE COSTS**  
18 **DON'T VARY DEPENDING ON LOCATION. DOES BELL SOUTH**  
19 **AGREE WITH MR. DICKERSON'S ASSESSMENT?**

20

21 **A. Yes.** Mr. Dickerson discusses the following: Network Interface Devices (NIDs),  
22 Tandem Switching, Signaling Network and Service Management Systems, Call  
23 Related Databases, Service Management Systems, Operations Support Systems  
24 (OSS), and Operator Service and Directory Assistance. BellSouth agrees that the  
25 costs associated with these categories of UNEs do not vary based on geographic

1 location and thus, should not be deaveraged.

2

3 **Q. WITNESSES HAVE PROPOSED TIMEFRAMES FOR THE COST**  
4 **STUDIES. PLEASE COMMENT.**

5

6 A. The timeframes range from a low of 30 days (COVAD witness, Ms. Murray) to a  
7 high of (at least) 120 days (GTE witness, Mr. Trimble). In my direct testimony I  
8 proposed 120 days from the time this Commission issues an order to complete the  
9 cost studies. At this point in time, however, it is difficult to estimate the amount of  
10 time required to accomplish this task. All of the defining parameters, e.g., an  
11 element list (unbundled, deaveraged, combined), documentation requirements,  
12 number of geographic areas for deaveraging, retail service studies (if it is  
13 determined that this needs to be done), and model requirements, will impact the  
14 amount of time BellSouth needs. The proper time to establish the cost study due  
15 date is after these issues have been resolved.

16

17 **Q. YOU MENTIONED DOCUMENTATION AS A FACTOR IN THE**  
18 **AMOUNT OF TIME BELLSOUTH WILL REQUIRE TO PRODUCE**  
19 **THEIR COST STUDIES. SEVERAL OF THE WITNESSES PROPOSE**  
20 **DOCUMENTATION STANDARDS. PLEASE PROVIDE YOUR**  
21 **COMMENTS.**

22

23 A. BellSouth respects the needs of this Commission to ascertain the validity of the cost  
24 studies presented by BellSouth. However, the requirements proposed by other  
25 witnesses in this docket are extreme and overly burdensome. BellSouth's cost study

1 in Docket Nos. 960833-TP, 960846-TP, and 960916-TP was in excess of 2,000  
2 pages. (This study did not even include the complete compliment of elements.) If  
3 BellSouth was ordered to fully comply with the documentation specifications  
4 requested, the result would cause the document to swell to over 10,000 pages, an  
5 unmanageable document.

6  
7 COVAD witness, Ms. Murray, out of all the witnesses, probably outlines the most  
8 stringent set of requirements for documentation. She asserts that the studies need  
9 to be accompanied by copies of contracts, methods and procedures, engineering  
10 guidelines, names and titles of individuals providing inputs, and an explanation of  
11 assumptions. (Pages 8-9, Murray Testimony) (It is interesting to note that Ms.  
12 Murray also felt 30 days was sufficient to complete the studies. She wants the most  
13 detail, in the least amount of time.) I have already addressed why BellSouth  
14 believes it is inappropriate to require that contracts be included with the cost study.  
15 As with the contracts, the additional information Ms. Murray requests contains  
16 proprietary information, can potentially be misinterpreted, and can be taken out-of-  
17 context. BellSouth is willing to work with this Commission to deliver all the  
18 information it feels necessary to validate BellSouth's studies. However, the  
19 enforcement of Ms. Murray's standards on a wholesale basis is unnecessary.

20  
21 **Q. YOU ALSO STATED MODEL REQUIREMENTS MAY IMPACT THE**  
22 **COST STUDY DUE DATE. DO YOU HAVE COMMENTS ON WHAT**  
23 **OTHER PARTIES WANT TO SEE IN THE COST MODELS?**

24  
25 A. Yes. On pages 38-40 of his testimony, Dr. Ankum provides a list of characteristics

1 required of a cost model in addition to the underlying methodology. I have already  
2 discussed the potential for disagreements in cost methodology. However, Dr.  
3 Ankum's requests with respect to the workings of the models appear reasonable.  
4 BellSouth's TELRIC Calculator<sup>1</sup> complies with the following attributes:  
5 1) The model is open for review.  
6 2) The model is designed around a user-friendly interface. The current version of  
7 the model reflects enhancements to the previous model.  
8 3) Instructions are included for the loading and running of the model. Sensitivity  
9 analyses can be conducted and stored as separate scenarios.  
10 4) The underlying formulas, data, and computations are included within the model.  
11 5) The user can modify critical assumptions and input.

12  
13 This Commission is familiar with the TELRIC Calculator<sup>1</sup> and approved it as a  
14 viable model in Docket Nos. 960757-TP, 960833-TP, and 960846-TP.

15  
16 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

17  
18 A. Yes.

19  
20  
21  
22  
23  
24  
25 <sup>1</sup> © 1997 BellSouth Corporation  
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