

1 ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.

2 REBUTTAL TESTIMONY OF MR. THOMAS G. WILLIAMS

3 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

4 DOCKET NO. 001797-TP

5 MAY 23, 2001

6

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

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11 A. My name is Thomas G. Williams. I am employed by BellSouth as Product  
12 Manager for Line Sharing for the nine-state BellSouth region. My business  
13 address is 3535 Colonnade Parkway, Suite E511, Birmingham, Alabama,  
14 35242.

15

16 Q. WHAT IS YOUR PROFESSIONAL EXPERIENCE AND  
17 EDUCATIONAL BACKGROUND?

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19 A. My career at BellSouth spans over 14 years and includes positions in  
20 various product management positions. I also have seventeen years service  
21 with AT&T and Southern Bell, during which I held various positions in sales,  
22 marketing, and operations. I have a bachelor's degree in Marketing.

23

24 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE OTHER STATE  
25 COMMISSIONS?

1 A. Yes. I previously testified before the Georgia, Louisiana, and Alabama Public  
2 Service Commissions and the Public Service Commission of South Carolina.

3

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

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6 A. I respond to the testimonies of Messrs. Thomas Allen, Joseph Riolo and Ms.  
7 Elizabeth Kientzle, in regard to line sharing issues.

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9 Q. DOES BELLSOUTH SUPPORT LINE SHARING ARRANGEMENTS?

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11 A. Yes. BellSouth has been providing line sharing since June 6, 2000, in  
12 compliance with requirements of the Federal Communications Commission's  
13 (FCC) *Line-sharing Order* and *Line-sharing Reconsideration Order*.  
14 BellSouth continues to work with ALECs to streamline the processes to  
15 provision line sharing.

16

17 Q. DO YOU AGREE WITH MR. ALLEN'S STATEMENT ON PAGE 5 OF HIS  
18 TESTIMONY THAT BELLSOUTH FIRM ORDER CONFIRMATION IN  
19 TWO (2) BUSINESS DAYS?

20

21 A. No. BellSouth has reduced their interval to return a Firm Order Confirmation in  
22 18 hours.

23

24 Q. DO YOU AGREE WITH MR. ALLEN'S STATEMENT ON PAGE 27 OF HIS  
25 TESTIMONY THAT BELLSOUTH SHOULD PROVIDE A DAILY

1 COMPLETION REPORT TO COVAD FOR LINE SHARING ORDERS?

2

3 A. No. BellSouth agrees that it must provide accurate information to the ALECs  
4 concerning the status of its line sharing orders. Line sharing is a non-designed  
5 unbundled network element (UNE) and should be handled like other non-  
6 designed UNE services. Mr. Allen states that BellSouth should “send Covad a  
7 service order completion like it does for other loop orders”. Line sharing is not  
8 provisioned like other loop orders. Because line sharing works on existing  
9 analog voice telephone lines it uses plane old telephone service (POTS)  
10 processes. POTS processes do not include a service order notification process.  
11 BellSouth does provide completions information to Covad. BellSouth’s CLEC  
12 Service Order Tracking System (CSOTS) provides the status of its UNE orders,  
13 including line sharing. In fact, BellSouth has developed additional capabilities  
14 in CSOTS for line sharing. CSOTS provides the status of both the billing and  
15 provisioning orders. Additionally, BellSouth provides ALECs with a “Line  
16 Sharing COSMOS or SWITCH Report” that provides the status of the  
17 BellSouth line sharing work order. Covad simply has to check that report and it  
18 will be advised as to the current status of its order.

19

20 Q. DO YOU AGREE WITH MR. ALLEN’S STATEMENT ON PAGE 31 OF HIS  
21 TESTIMONY THAT BELL SOUTH SHOULD USE ITS SUNSET TEST SET  
22 TO TEST COVAD’S DATA SIGNAL ON ITS LINE SHARING ORDERS?

23

24 A. No. BellSouth is responsible for correctly wiring ALEC’s line sharing orders.  
25 BellSouth is willing to test the continuity of its wiring. BellSouth has made it

1 clear that in addition to testing the voice service it will also test the wiring of the  
2 high frequency spectrum for line sharing orders. In January 2001, BellSouth  
3 announced to the line sharing collaborative that it would begin using the new  
4 Line Sharing Verification Transmitter (LSVT), to test the wiring of the high  
5 frequency spectrum within its central offices. The device is now deployed and  
6 use of this device has been included in procedures for installation and  
7 maintenance of line sharing loops.

8  
9 BellSouth uses Sunset test equipment to test its own ADSL data signal from its  
10 DSLAM. BellSouth has no responsibility to test Covad's data signal from its  
11 DSLAM. BellSouth may or may not have test equipment that could test  
12 Covad's data signal. ALECs use different data equipment with different  
13 protocols that require different test equipment. Obviously, BellSouth must  
14 perform nondiscriminatory testing of line sharing orders. It would be  
15 unreasonable for BellSouth to have several test sets compatible with the  
16 various ALECs involved with line sharing. BellSouth's use of the LSVT  
17 confirms that the data portion of the line share circuit is correctly wired and  
18 this should meet its responsibility. The FCC addressed the request for ILECs  
19 to test ALEC's data service and rejected the notion with paragraph 123 of the  
20 Line Sharing Order, cited above. Paragraph 123 says, "BellAtlantic also states  
21 that it will not be able to use its own equipment to test the data portion of the  
22 shared line, making BellAtlantic's ability to maintain those competitors' xDSL  
23 services 'more difficult'. The record does not indicate nor do we foresee, that  
24 incumbent LECs such as BellAtlantic would have occasion to test a  
25 competitive LEC's xDSL equipment or products." (Emphasis added.)

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Q. DO YOU AGREE WITH MS. KIENTZLE AND MR. RIOLO, AS THEY STATE ON PAGES 12 AND 13 OF THEIR TESTIMONY, THE SPLITTER SHOULD BE FRAME MOUNTED SPLITTER OR WITHIN 25 FEET OF THE MDF?

A. No. The most efficient architecture to deploy line sharing when BellSouth owns the splitter is to place the splitter in a rack either in the common area close to the collocation area or in a rack in the BellSouth lineup. Also, to use the frame-mountable splitter would ignore the experience gained in the Line Sharing trial pilot. BellSouth found, during the Line Sharing pilot in Atlanta, Georgia, that main distributing frame-mounted splitters could not accommodate the manual test access jacks (the so-called "bantam jacks") that BellSouth provides to each ALEC. These bantam jacks provide the ALEC direct access to the outside plant cable pair for testing. In BellSouth's proposed architecture, the bantam jacks are located adjacent to the rack-mounted splitter shelves in the ALEC's common area. The Collaborative agreed that frame-mounted splitters allowed more room for testing with the bantam jacks and eliminated the possibility of accidentally loosing other cross-connections on the frame.

Many central offices where ALECs have ordered splitters have COSMOS frames. It is not possible to mount a splitter on a COSMOS frame. While BellSouth recognizes that locating splitters on a central office frame is

1           technically feasible, BellSouth feels that splitters are better located in a relay  
2           rack in the ALEC common area.

3

4 Q.       DO YOU AGREE WITH MS. KIENTZLE AND MR. RIOLO, AS THEY SAY  
5           ON PAGE 13 OF THEIR TESTIMONY, THAT EARLY LINE SHARING  
6           PROPOSALS INDICATE THAT BELL SOUTH ORIGINALLY PLANNED  
7           TO PLACE THE SPLITTER ON THE MDF?

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9 A.       No. Several different architectures were considered but frame mounted splitters  
10          was at no time the desired architecture.

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12 Q.       DO YOU AGREE, AS MS. KIENTZLE AND MR. RIOLO SAY ON PAGE 13  
13          AND 14 OF THEIR TESTIMONY, THAT COVAD SHOULD NOT HAVE  
14          TO PAY FOR THE BANTAM TEST SHELF?

15

16 A.       No. Paragraph 118 of the FCC line sharing order required ILECs to provide  
17          access to the loop for testing. Paragraph 118 says, “We require that, at a  
18          minimum, incumbents must provide requesting carriers with loop access either  
19          through a cross-connection at the competitor’s collocation space, or through a  
20          standardized interface designed for to provide physical access for testing.”  
21          (Emphasis added.) BellSouth believes that the bantam-type test jack is that  
22          “standard interface” and its use is a good solution to provide ALECs direct  
23          access to the loop for testing for line sharing. When BellSouth proposed using  
24          the bantam test jack shelf in the line sharing collaborative, the participants did  
25          not object. Current interconnection agreements preclude ALECs, including

1 Covad, from direct testing from the frame but the bantam jack solution offers  
2 the same electrical equivalent. The bantam jack allows the ALEC to test the  
3 loop from the splitter to the NID. This bantam jack is made to accept a test  
4 cord. When the cord is inserted, the voice and data signals and associated  
5 central office wiring are isolated from the outside plant copper loop. This  
6 leaves the loop ready for unobstructed wideband testing by the ALEC  
7 technician, with no central office battery or DC blocking capacitors to interfere  
8 with the test results. If testing via the bantam jack is not adequate for the  
9 ALEC, they could choose to own the splitter. This would allow the ALEC to  
10 view the circuit from the loop side of the splitter. BellSouth does not deploy  
11 the bantam test shelf with the ALEC owns the splitter.

12

13 Q. DO YOU AGREE, AS MS. KIENTZLE AND MR. RIOLO SAID ON PAGE  
14 14 OF THEIR TESTIMONY, THAT PLACEMENT OF THE SPLITTER ON  
15 THE MDF ELIMINATES UNNECESSARY CABLING AND OTHER  
16 COSTS?

17

18 A. No. Most of the 470 central offices in BellSouth's region where ALECs have  
19 ordered splitters to date have COSMIC style main distributing frame and Main  
20 Distributing Frame (MDF), where ALECs interconnect. As I stated, it is not  
21 possible to mount a splitter on a COSMOS frame.

22

23 The witnesses testified on page 14 that a frame located splitter arrangement  
24 requires six frame-mountable splitter blocks, each of which are capable of  
25 serving sixteen end user line sharing lines. This is inefficient due to the frame

1 space that approach requires. This architecture requires 6 blocks to serve 96  
2 end user lines. BellSouth's preferred rack-mounted architecture requires four  
3 frame mounted blocks, or 89 type blocks, which can serve 96 end user lines.  
4 The rack-mounted architecture is one third more efficient than mounting the  
5 splitter on the frame. This frame-mounted architecture proposed by Covad  
6 would cause BellSouth to prematurely exhaust its frame and is, therefore,  
7 much less efficient than the rack-mounted approach.

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9 Q. DO YOU AGREE WITH MS. KIENTZLE AND MR. RIOLO THAT  
10 PLACING A SPLITTER ON A DIFFERENT FLOOR FROM THE MDF  
11 COULD ADD A THOUSAND FEET OF UNNECESSARY CABLING, AS  
12 HE SAYS ON PAGE 16 OF THEIR TESTIMONY?

13  
14 A. No. The maximum additional distance added to an ALEC loop, of which I am  
15 aware is in BellSouth's region was is in the Marietta, Georgia Main CO. There  
16 the ALEC data signal has to traverse up and down two floors vertically with  
17 approximately 250 feet being added to the circuit.

18  
19 Q. DO YOU AGREE WITH THE SPLITTER OPTIONS PROPOSED BY MS.  
20 KIENTZLE AND MR. RIOLO ON PAGE 19 OF THEIR TESTIMONY?

21  
22 A. No. The witnesses proposed the following options:

- 23
- 24 • BellSouth owned splitter mounted on the MDF
  - 25 • Covad owned splitter mounted on the MDF



- 1 • Covad owned splitter in Covad's collocation area

2 I previously explained that placement of the splitter on the frame is a poor  
3 choice. Most of the offices with splitters have a COSMIC frame. It is not  
4 possible to place a splitter on the COSMIC frame and placement of the splitter  
5 on the MDF unnecessarily takes one third more frame space than the rack  
6 mounted option. The second option is an incredibly bad choice. This option  
7 would place the splitter on the BellSouth side of the demarcation point.  
8 Covad's interconnection agreement with BellSouth clearly states that  
9 BellSouth is responsible for all work on that side of the demarcation point.  
10 Placing a Covad owned splitter on BellSouth's frame would be potentially  
11 confusing to BellSouth's technicians. If Covad wishes to own the splitter, it is  
12 welcome to do so, provided they place the splitter in their collocation space,  
13 the third option. Covad may also choose to own the splitter in a virtual  
14 collocation arrangement.  
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18 Q. DO YOU AGREE WITH MS. KIENTZLE AND MR. RIOLO, AS THEY  
19 STATE ON PAGE 26 OF THEIR TESTIMONY, THAT BELL SOUTH  
20 SHOULD PROVIDE LINE SHARING INTERVALS OF 24 HOURS IF THE  
21 LOOP REQUIRES NO DECONDITIONING?

22 A. No. Rather than an arbitrary interval, the appropriate comparison for line  
23 sharing provisioning intervals is to BellSouth's ADSL service provided to its  
24 customers. This is the retail analog that BellSouth proposed in Docket No.  
25 000121-TP, which was filed with the FPSL on March 1, 2001. This is

1 contained in exhibit DAC-1 of Dave Coon's direct testimony. BellSouth's  
2 planned interval for ADSL service is four days. BellSouth's plan for line  
3 sharing is to return to the ALEC a firm order confirmation no later than the  
4 next day for an electronic order, and eighteen hours for manual orders. The  
5 planned provisioning interval is three days after return of the firm order  
6 confirmation.

7  
8 It may be possible to provision line sharing loops in some cases in less than  
9 three days if all information flows correctly through all of BellSouth's  
10 provisioning systems. However, if orders fall out of the electronic systems  
11 for manual handling, three days will be required. Therefore, to be sure all  
12 parties, including the end user, have appropriate expectations; three days after  
13 the return of the firm order confirmation is the appropriate interval. This  
14 interval places line sharing at parity with BellSouth's own ADSL offering.

15 Q. DO YOU AGREE WITH MS. KIENZLE AND MR. RIOLO, AS THEY  
16 TATE ON PAGE 28 OF THEIR TESTIMONY THAT BELLSOUTH  
17 SHOULD PROVIDE COVAD ACCESS TO THE PHYSICAL LOOP FOR  
18 TESTING?

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20  
21 A. Yes. But, BellSouth believes that the use of the bantam-type test jack is a  
22 better solution to provide ALECs direct access to the loop for testing for line  
23 sharing. Covad's current interconnection agreements preclude Covad from  
24 direct testing from the frame but the bantam jack solution offers the same  
25 electrical equivalent. The bantam jack allows the ALEC to test the loop from

1 the splitter to the NID. As I previously stated, I believe the FCC envisioned  
2 ALECs testing from their collocation space and from the splitter with a bantam  
3 type testing arrangement.

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6 If the bantam type testing arrangements are not adequate for Covad, they could  
7 choose to own the splitter. This allows Covad to view the circuit from the loop  
8 side of the splitter to the NID.

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11 Q. DO YOU AGREE WITH MS. KIENTZLE AND MR. RIOLO, AS THEY  
12 STATE ON PAGE 31 OF THEIR TESTIMONY THAT BELLSOUTH DOES  
13 NOT PERMIT COVAD TO DEPLOY DSL OVER FIBER FED LOOPS?

14

15

16 A. No. BellSouth does allow Covad and other ALECs to provide DSL over loops  
17 that are fiber fed. Their testimony is a bit confusing. I'm not sure what "line  
18 sharing over fiber" is. It is certainly not line sharing in the sense that it applies  
19 to copper. In the copper sense, line sharing provides the high frequency  
20 spectrum to the ALEC. That is not possible on fiber, as the notion of spectrum  
21 does not apply to fiber. Given that thousands of circuits can be multiplexed  
22 over one fiber, what is accomplished via line sharing? As the witnesses point  
23 out on page 29, the fiber does not extend all the way to the customer, only to  
24 an intermediate point. Copper extends from there to the network interface  
25 device (NID), at the end user's location. It is not clear how Covad would

1 expect the “line sharing over fiber” to work from the intermediate point to the  
2 NID.

3 All current DSL technologies require an all copper dedicated loop. The  
4 witnesses are correct when they say BellSouth widely deploys digital loop  
5 carrier (DLC) systems in Florida because it reduces the cost of loops. Some  
6 DLC is fiber fed and some is copper. Even when it is copper fed, the loop is  
7 not dedicated because DLC is a multiplexer. DSL requires a dedicated copper  
8 loop. The FCC in its Third Report and Order and Fourth Further Notice of  
9 Proposed Rulemaking, CC Docket No. 96-98, released November 5, 1999,  
10 defines the solution that BellSouth proposes in a DLC environment. Paragraph  
11 313 says, “When an incumbent has deployed DLC systems, requesting carriers  
12 must install DSLAMs at the remote terminal instead of at the central office in  
13 order to provide advanced services”. BellSouth established an industry  
14 collaborative to develop a line sharing solution in a DLC environment. Covad  
15 was a participant of this collaborative. BellSouth developed this option as  
16 completely as possible and stands ready to implement it, if requested by Covad  
17 or other ALECs. BellSouth provides its own wholesale ADSL service by  
18 placing its DSLAM at remote terminals to access the copper sub-loop. Covad  
19 could do the same.  
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22 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

23  
24 A. Yes.

25