STATE OF bearging COUNTY OF K,14

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Thomas G. Williams, BellSouth Telecommunications, Inc., being by me first duly sworn deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in "Investigation Concerning the Propriety of InterLATA Services by BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996," KY PSC Case No. 2001-105, and if present before the Commission and duly sworn, his direct testimony would be set forth in the annexed transcript consisting of $\underline{32}$ pages and $\underline{30}$ exhibit(s).

mas & Williams

Thomas G. Williams

SWORN TO AND SUBSCRIBED BEFORE ME this 15th day of Ma 2001.

NOTARY PUBLIC

MICHEALE F. HOLCOMB Notary Public, Douglas County, Georgia My Commission Expires November 3, 2001

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF THOMAS G. WILLIAMS
3		BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION
4		CASE NO. 2001-105
5		May 18, 2001
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH
8		TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR
9		BUSINESS ADDRESS.
10		
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 EDUCATIONAL
17		BACKGROUND?
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19	A.	My career at BellSouth spans over 14 years and includes positions in various
20		product management positions. I also have seventeen years service with
21		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 TESTIFIED PREVIOUSLY?
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26	A.	Yes. I previously testified before the Georgia and Louisiana Public Service

Commissions and the Public Service Commission of South Carolina, and have
 filed testimony with the Kentucky, and Florida Public Service Commissions
 and the North Carolina Utilities Commission.

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Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

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7 A. The purpose of my testimony is twofold. First, I will demonstrate that 8 BellSouth provides nondiscriminatory access to the high frequency portion of 9 the loop in compliance with requirements of the Federal Communications Commission's (FCC) Line-sharing Order and Line-sharing Reconsideration 10 11 Order.¹ Second, I will demonstrate that a single competing carrier, or two 12 separate competing carriers acting together, can provide voice and data 13 services over a single unbundled loop obtained from BellSouth (the FCC refers to the latter arrangement as "line splitting.").² 14

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16 Q. WHAT IS LINE-SHARING?

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A. Line-sharing allows a Competitive Local Exchange Carrier (CLEC) to provide
high-speed data services to BellSouth voice customers. The CLEC's data
service is provisioned over the high frequency portion of a copper loop. The
high frequency portion of the loop is the frequency range above the voice band
on a copper loop facility that is being used to carry analog circuit switched

¹ Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order CC Docket No. 98-147 and Fourth Report and Order CC Docket No. 96-98, 14 FCC Rcd 20,912 (1999)("Line-sharing Order"); Deployment of Wireline Services Offering Advanced Telecommunications Capability, Order on Remand, CC Docket Nos. 98-147, 98-11, 98-26, 98-32, 98-78, 98-91 (1999)("Line-sharing Reconsideration Order").

² Line-sharing Reconsideration Order, ¶ 16-18.

voice band transmissions.³ The data signal typically is split off from the voice
signal by a splitter and then delivered to a digital subscriber line access
multiplexer (DSLAM) located in the CLEC's network at its collocation space.
The DSLAM converts the data signal into packets for transmission over the
CLEC's network.

BellSouth developed its line-sharing product in conformance with the
obligations set forth in the FCC's *Line-sharing Order* and the *Line-sharing Reconsideration Order*. In these Orders, the FCC created a new Unbundled
Network Element ("UNE") that consists of the high frequency portion of the
copper loop over which the Incumbent Local Exchange Carrier ("ILEC")
provides analog voice service to the end user. According to the FCC, linesharing consists of the following:

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- Two carriers one voice provider (ILEC) and one data provider (Data LEC) serving a customer at a single address, i.e., one customer per loop. (*Line-sharing Order*, 14 FCC Rcd at 20,948, ¶ 74);
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xDSL technologies that do not use the frequencies immediately
above the voice band, (i.e. ADSL), preserving a "buffer" zone to
ensure the integrity of the voice band traffic (*Id.*, at 14 FCC Rcd
at 20,943-44, ¶64);

³ 47 C.F.R. §51.319(h)(1).

- 1 xDSL technologies that do not interfere with analog voice band 2 transmission. (Id. at 14 FCC Rcd at 20,946-47, ¶¶ 70-71); and 3 4 Lines that carry traditional Plain Old Telephone Service (POTS) 5 analog voice band services provided by the ILEC. If the ILEC's 6 retail POTS service is disconnected, the Data LEC must purchase 7 the entire stand-alone loop if it wishes to continue providing 8 xDSL to the customer. Similarly, ILECs are not required to 9 provide line-sharing to a requesting carrier when the CLEC 10 purchases a combination of network elements known as the UNE 11 platform. (*Id.*, at 14 FCC Rcd at 20,947-48, ¶¶ 72-73). 12 13 BellSouth offers line-sharing in accordance with FCC rules. Specifically, line-14 sharing is available to a single requesting carrier, on loops that carry 15 BellSouth's POTS, so long as the xDSL technology deployed by the requesting 16 carrier does not interfere with the analog voice band transmissions. BellSouth 17 allows line-sharing CLECs to deploy any version of xDSL that is presumed 18 acceptable for shared-line deployment in accordance with FCC rules and that 19 will not significantly degrade analog voice service. To facilitate line-sharing, 20 BellSouth will perform Unbundled Loop Modification (line conditioning) at 21 the request of a CLEC on any loop, regardless of loop length, unless such 22 conditioning would significantly degrade the customer's analog voice service 23 provided by BellSouth. 24 25 HOW WAS BELLSOUTH'S LINE-SHARING OFFERING DEVELOPED? Q.
- 26

1 In accordance with the suggestion in the FCC's Line-sharing Order,⁴ A. 2 BellSouth developed its line-sharing product through a collaborative process 3 with all interested CLECs. BellSouth invited CLECs to a collaborative line-4 sharing meeting in Atlanta on January 26, 2000. Twelve CLECs participated 5 in the meeting. The participants agreed to form several working teams to 6 develop, test, and refine the procedures for use by CLECs and BellSouth to 7 implement line-sharing successfully. The first meeting of the working teams 8 was held on February 2, 2000. The participants jointly decided to have two 9 sub-committees: a technical sub-committee and a systems/process sub-10 Each sub-committee would meet one day each week. committee. The 11 technical sub-committee worked on technical issues, such as systems/network 12 architecture and testing. The systems/process sub-committee focused on the 13 pre-ordering, ordering, provisioning, maintenance, and billing issues associated 14 with line-sharing. Each sub-committee listed and prioritized issues and action 15 items. The sub-committees addressed and resolved issues essential to the 16 development of the architecture and operations plan for the line-sharing 17 product. Beginning April 12, 2000, the collaborative consolidated the two subcommittees and conducted the collaborative meetings on one full day each 18 19 week.

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21 Q. WHAT WAS THE GOAL OF THE COLLABORATIVE MEETINGS?

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A. The primary goal of the collaborative meetings was to jointly develop
 procedures and operations plans to implement central office-based line sharing. Attached to my testimony are several exhibits that the participants

⁴ *Line-sharing Order,* 14 FCC Rcd at 20,971-72, ¶ 128.

1 developed in the collaborative to assist in the development of the line-sharing 2 product. Exhibit TGW-1 demonstrates the order flow for the ordering and 3 provisioning of line-sharing splitters. Exhibit TGW-2 details the ordering and 4 provisioning process for end user line-sharing orders. Exhibit TGW-3 is the 5 Line-Sharing Ordering Document ("LSOD") that CLECs use for ordering 6 splitters or making changes in splitters. Exhibit TGW-3A is the Line-sharing 7 LSR Field Information. Exhibit TGW-4 is a document entitled "Job Aid for 8 Loop Qualification System (LQS),"which assists the CLECs in qualifying 9 loops for xDSL services. Exhibit TGW-5 is the "BellSouth Business Rules for 10 Local Orders" to assist CLECs in preparing line-sharing LSRs. Exhibit TGW-11 6 is a jointly developed maintenance flow that shows how troubles are reported 12 and handled both for voice and data over line-shared loops. Exhibit TGW-7 is 13 a document that was provided to the CLECs at the collaborative meeting and 14 that explains how CLECs can access BellSouth's Trouble Administration and 15 Facilitation Interface ("TAFI") to report troubles, check the status of a reported 16 trouble, or to run a mechanized loop test ("MLT") for line-shared loops. This 17 exhibit is an extract from the CLEC TAFI documentation on the BellSouth Interconnection web site. Exhibit TGW-8 shows the Trouble Receipt Process 18 19 Flow for CLECs to report line-sharing data troubles to BellSouth and shows 20 how the CLEC uses BellSouth's TAFI for line-sharing.

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Six companies regularly participated in the joint CLEC/BellSouth meetings for
central office-based line-sharing: BellSouth, Covad, NorthPoint, Rhythms,
NewEdge, and DuroCommunications. Other companies also participated in
the meetings, although less actively. They include AT&T, MCIWorldCom,
BlueStar, NetworkTelephone, and Sprint.

1 Beginning June 28, 2000, the collaborative formed two additional teams. One 2 team is addressing the development of the CLEC-owned splitter option for 3 central office-based line-sharing. Exhibit TGW-9 is the charter for this 4 collaborative team. Active participants for this collaborative team are the 5 "owners" listed in the charter: BellSouth, Covad, DuroCommunications, 6 NewEdge, Rhythms, and Sprint. NorthPoint was a monitoring member. The 7 second new collaborative team is developing the architecture and procedures 8 for remote-site line-sharing. Covad, Rhythms, DuroCommunications, 9 NewEdge, and Sprint have been regular participants for the Remote Site Line-10 sharing Collaborative. The charter for this collaborative is Exhibit 10. These 11 new collaborative teams meet on alternate weeks for one half day. The CLEC-12 owned splitter arrangement and remote-site line-sharing are discussed in more 13 detail later in my testimony.

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15 One important part of the line-sharing collaborative was the joint test of line-16 sharing procedures which was, in essence, an extensive carrier-to-carrier test of 17 the product. BellSouth and the CLECs jointly created the Atlanta Line-sharing Pilot (the "Pilot") to test and refine the line-sharing procedures for end user 18 service so that BellSouth and the CLECs could successfully implement line-19 20 sharing on June 6, 2000. The specific pilot objectives included various aspects 21 of the line-sharing ordering and provisioning process including qualification of 22 loops for line-sharing, and ordering and provisioning of access to the high 23 frequency portion of the loop for the CLEC to provide data service. All parties 24 agreed to work cooperatively to identify and resolve key ordering, 25 provisioning, maintenance, and repair procedures.

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1 Covad, NorthPoint, and Rhythms participated in the Pilot with BellSouth. 2 These parties all agreed that the results of the Pilot would be shared with all of 3 the participants in the collaborative. 4 5 BellSouth equipped eight Atlanta central offices (Marietta, Roswell, Buckhead, 6 Peachtree Place, Duluth, Sandy Springs, Chamblee, and Toco Hills) with 7 splitters for the Pilot. The CLECs selected and prioritized these pilot sites. 8 9 The Pilot was completed successfully in the second quarter of 2000. During the 10 Pilot, the participants tested the procedures for provisioning of end user line-11 sharing service. Throughout the Pilot, the participants collectively analyzed 12 the line-sharing processes and procedures that had been developed, and then 13 made necessary adjustments to assure a successful line-sharing commercial 14 At each step, BellSouth and the CLEC participants shared the launch. 15 decisions and results of the Pilot with their respective internal implementation 16 organizations responsible for development of the necessary processes and OSS 17 enhancements. 18 19 Q. WHAT STEPS DID BELLSOUTH TAKE TO INSURE IT COULD BEGIN 20 OFFERING LINE-SHARING END USER SERVICE WHEN THE FCC 21 **INTENDED**? 22 23 A. To ensure that CLECs could avail themselves of the line-sharing product on 24 June 6, 2000, BellSouth permitted CLECs to order splitters in advance of the 25 implementation deadline. In Georgia, CLECs began ordering splitter systems 26 on March 26, 2000. In other states, including Kentucky, ordering began on

1 April 6, 2000. On June 6, 2000, BellSouth began accepting end user line-2 sharing orders from CLECs. BellSouth provisioned these orders in accordance 3 with the procedures developed in the CLEC/BellSouth Collaborative Meetings 4 and in the Pilot. 5 6 Q. HAS BELLSOUTH **ENTERED** INTO **INTERCONNECTION**

Q. HAS BELLSOUTH ENTERED INTO INTERCONNECTION AGREEMENTS FOR LINE-SHARING WITH CLECS IN KENTUCKY?

9 A. Yes. BellSouth has entered into region-wide interconnection agreements with 10 CLECs such as Covad, NewEdge, BlueStar, NorthPoint, and Rhythms for the 11 ordering and provisioning of line-sharing in the BellSouth region. Copies of 12 these line-sharing agreements are attached as Exhibits TGW-11, TGW-12, 13 TGW-13, TGW-14, and TGW-15 to my testimony. These agreements are 14 current and in effect in Kentucky. Many of the general provisions and 15 operational terms and conditions found in these agreements were worked out in 16 the weekly collaborative meetings. Specific language for each CLEC was 17 negotiated to satisfy the needs of that CLEC. These agreements contain 18 interim rates, subject to true up from the individual state regulatory bodies, 19 including the Kentucky Public Service Commission. BellSouth's proposed 20 rates for line-sharing are currently being considered in Docket No. AC-382. 21 The use of interim rates allowed CLECs to engage in line-sharing by the 22 FCC's June 6, 2000 implementation deadline.

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24 BellSouth also offers line-sharing in its Revised Kentucky Statement of 25 Generally Available Terms and Conditions (SGAT). *See* Exhibit JAR-5 26 attached to Mr. Ruscilli's testimony. Proposed rates for line-sharing are set forth in Attachment A to the SGAT and are supported by cost studies filed with the Commission in Docket No. AC-382. The current version of BellSouth's standard terms and conditions for line-sharing offered to CLECs is attached to my testimony as Exhibit TGW -16.

6 Q. WHAT ARCHITECTURE IS BELLSOUTH USING TO DEPLOY LINE-7 SHARING?

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9 A. Attached to this testimony, as Exhibit TGW-17 is a diagram that illustrates the 10 splitter arrangement for the BellSouth-owned splitter in the central office. 11 BellSouth allows CLECs to order splitters in three different increments: full 12 shelf (96 line units); one-fourth of a shelf (24 line units); or an 8-port option, currently under development. Under these options, BellSouth purchases, 13 14 installs, inventories, leases, and maintains the splitters. BellSouth installs a 15 splitter in its equipment space or in a common area close to the CLEC's 16 collocation area. BellSouth will provide to requesting carriers loop and splitter 17 functionality that is compatible with any transmission technology that the 18 requesting carrier seeks to deploy using the high frequency portion of the loop, 19 provided that such transmission technology is deployable pursuant to Section 20 51.230 of the FCC rules. BellSouth provides a bantam jack at the splitter so 21 the CLEC can test the high frequency portion of the loop.

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Under either of these three options, a group of splitter ports is assigned to a
specific CLEC. The splitter is connected to BellSouth's frame via cabling.
One cable is connected to the splitter carrying the shared voice and data signal
from the frame to the splitter. A second cable carries the voice traffic from the

splitter back to the frame. A third cable carries the data traffic from the splitter to the frame. After the cables are run between the splitter and the frame, the technician performs a "streaker card" test. This test insures appropriate connectivity between the splitter and the BellSouth frame and that the splitter is ready to support end user line-sharing orders.

7 When wiring the end user line-sharing service, collocation cross-connections 8 are used to connect the loop carrying the shared voice and data traffic to the 9 splitter termination on the frame. A second cross-connection carries the voice 10 traffic from the splitter termination to the BellSouth voice switch. The data 11 traffic is then carried to the CLEC collocation space by a cross connection. After the wiring is completed for the end user line service, BellSouth tests the 12 13 voice service and also the cross-connections necessary to provide end user data 14 In order to verify that the data cross-connections are correct, service. BellSouth recently completed work with a supplier who developed a Line-15 16 sharing Verification Transmitter test set. BellSouth technicians use this test 17 set to ensure that the data portion of the circuit is wired correctly for the end 18 user service.

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20 Q. DOES BELLSOUTH ASSIST CLECS IN DETERMINING IF LOOPS 21 QUALIFY FOR THE CLEC'S DATA SERVICE?

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A. Yes. BellSouth provides its loop make-up information via the Loop Make Up
service that CLEcs may use to help determine if a loop can support the
CLEC's data service. Loop make-up information for a particular loop is the
same whether the CLEC intends to purchase a stand-along xDSL-capable loop

1		or engage in line-sharing. Thus, there is no difference in the process for
2		obtaining loop make-up information between the two offerings. CLECs can
3		submit requests for loop make-up information manually as described in the
4		testimony of Wiley (Jerry) G. Latham, or the can use the Local Exchange
5		Navigation System (LENS) and Telecommunications Access Gateway (TAG)
6		electronic interfaces described in the OSS testimony of Ron Pate. CLECs may
7		obtain certain pre-qualification information regarding a loop by accessing the
8		Loop Qualification System described in Exhibit TGW-4, and as further
9		explained in Mr. Pate's testimony.
10		
11	Q.	WHAT ARE THE CLEC'S OPTIONS IF THE LOOP IS DETERMINED TO
12		BE UNSUITABLE FOR THE CLEC'S DATA SERVICE?
13		
14	A.	The CLEC may request that BellSouth modify the loop with BellSouth's
15		Unbundled Loop Modification (ULM) offering. ULM allows the CLEC to
16		order removal of load coils or excessive bridged tap. ULM for line-sharing is
17		the same process described in the testimony of Wiley (Jerry) G. Latham.
18		
19		If the CLEC determines that a loop cannot be used or conditioned to provide
20		data service on the high frequency spectrum, the CLEC can attempt to identify
21		alternative loops via the Loop Make-Up process (LMU). If unloaded copper
22		loops are available, the CLEC can reserve the facility for 96 hours. The LMU
23		process will provide the CLEC a facility reservation number (FRN). The
24		CLEC may place the FRN on the line-sharing LSR to have high frequency
25		spectrum provisioned on the reserved loop.

If modifying a loop will significantly degrade the voice services BellSouth currently is providing over the loop, and if the CLEC is unable to locate another loop that satisfies the technical requirements of the CLEC, the CLEC will not be allowed to offer data service on a loop shared with BellSouth. If necessary, BellSouth will make a showing to the state commission that the existing voice service will be degraded and that no alternative loops are available.

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Q. HOW DOES THE CLEC ORDER LINE-SHARING?

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11 Local Service Request ("LSR") for line-sharing is generally the same as an Α. 12 LSR for an unbundled xDSL-capable loop. The only difference is that an LSR 13 for line-sharing requires some additional information, namely a splitter 14 assignment. The purpose of the splitter assignment on the LSR is to direct 15 BellSouth technicians to the correct splitter port for the order. A CLEC LSR 16 for line-sharing specifies the splitter assignment by specifying the CLEC 17 ACNA, central office floor, isle number, relay rack, splitter shelf, and slot. 18 The LSR also specifies the CLEC cable ID and cable pair to access the high 19 frequency portion of the loop. Exhibit TGW-3A to my testimony specifies the 20 fields required on the line-sharing LSR. The process flow for an end user line-21 sharing order is shown in Exhibit TGW-2.

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23 Q. CAN YOU DESCRIBE BELLSOUTH'S PROCESS FOR PROVISIONING 24 LINE-SHARING SERVICE?

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A. BellSouth provisions line-sharing under terms and conditions established with
 the CLECs during the collaborative process described above. These terms and
 conditions regarding provisioning of line-sharing are contained in
 interconnection agreements and BellSouth's Revised SGAT. Exhibits TGW-1
 and TGW-2 to my testimony demonstrate the ordering and provisioning
 processes for line-sharing splitters and end user line-sharing orders.

8 As with any new product offering, BellSouth has experienced some isolated 9 difficulties in the provisioning process. For example, BellSouth experienced 10 problems in the installation of the splitters that necessitated certain network-11 related remedial actions and additional training. BellSouth is committed to 12 addressing these issues on an ongoing basis through the collaborative process 13 and via one-on-one communications with CLECs. For instance, BellSouth 14 conducted "streaker card tests" for all central offices where line-sharing 15 splitters are installed. A streaker card test determines if the splitter is correctly 16 cabled to the frame. BellSouth has corrected every service-affecting condition 17 that this streaker card test revealed. Moreover, the streaker card test is now 18 part of BellSouth's installation procedures and will be performed on all new 19 line-sharing splitters. In addition, in December 2000, BellSouth enhanced its 20 Mechanized Loop Test (MLT) System such that MLT has the capability to 21 detect the presence of a line-sharing splitter. This capability will allow CLECs 22 to access MLT through CLEC TAFI to verify that the splitter is in place prior 23 to dispatching its technician.

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25 Q. HOW CAN CLECS DETERMINE IF THEIR LINE-SHARING26 INSTALLATION ORDERS ARE COMPLETED?

A. There are two ways. BellSouth's CLEC Service Order Tracking System
(CSOTS) provides CLECs with the status of their line-sharing billing orders.
On April 27, 2001, BellSouth provided an enhancement to let the data LECs
view the status of their provisioning orders. BellSouth will continue to provide
CLECs with a "line-sharing COSMOS report" that provides the status of the
BellSouth line-sharing work order. The data LEC simply has to check either of
these reports and it will be advised as to the current status of its order.

- 9 Q. WHAT PROCESS DOES BELLSOUTH USE FOR MAINTENANCE AND
 10 REPAIR OF LINE-SHARING SERVICE?
- 11

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- 12 As with stand-alone xDSL-capable loops, CLECs can report troubles with line-A. 13 sharing manually or by using one of the maintenance and repair interfaces 14 described in Mr. Pate's testimony. BellSouth provides, on a nondiscriminatory 15 basis, physical test access points to a requesting carrier through a standardized 16 interface commonly referred to as a "bantam test jack" for the purpose of loop 17 testing, maintenance and repair activities. In order to test the voice portion of 18 the loop, CLECs can access MLT through TAFI. In addition, BellSouth has 19 developed interim Line-sharing Joint Meet Procedures that allow BellSouth 20 and CLEC technicians to meet in a central office, when standard trouble 21 reporting procedures do not resolve a trouble. BellSouth expects to 22 discontinue use of this process once it is determined to no longer be necessary.
- Q. WHAT IS BELLSOUTH'S POSITION CONCERNING TESTING DATACONTINUITY?
- 26

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1	A.	As described under provisioning, BellSouth is willing to test continuity of the
2		data circuit wiring. In January 2001, BellSouth advised to the line-sharing
3		collaborative that BellSouth would begin using a new Line-sharing
4		Verification Transmitter (LSVT) to test the wiring of the loops for line-
5		sharing. The device is now being deployed and use of this device has been
6		included in procedures for installation and maintenance of line-sharing service.
7		
8	Q.	HAS BELLSOUTH PROVISIONED LINE-SHARING SERVICE IN
9		KENTUCKY?
10		
11	A.	Yes. As of April 30, 2001, BellSouth has provisioned line-sharing on 172
12		lines in Kentucky and on 2,765 lines region-wide.
13		
14	Q.	IS BELLSOUTH WILLING TO CONSIDER ANY OTHER
15		ARCHITECTURES FOR PROVIDING LINE-SHARING?
16		
17	A.	During the initial meetings of the collaborative, several CLECs requested the
18		option of providing line-sharing via a CLEC-owned splitter located in the
19		CLEC's collocation space. BellSouth agreed to investigate a CLEC-owned
20		splitter option in the collaborative meetings following the successful
21		commercial launch of the BellSouth-owned splitter product on June 6, 2000.
22		As described earlier, the parties established an additional collaborative to serve
23		as a vehicle for these discussions. Again, Exhibit TGW-9 to my testimony is
24		the charter for this initiative. The goal of this collaborative team was to
25		"support the development of, with the mutual agreement to, the processes and
26		procedures required to jointly implement line-sharing utilizing CLEC-owned

splitters collocated in the central office...." See Exhibit TGW-9. This 2 collaborative developed processes and procedures that enable CLECs to 3 engage in line-sharing by means of a CLEC-owned splitter. Rates for line-4 sharing via a CLEC-owned splitter are set forth in Attachment A to 5 BellSouth's Revised SGAT. A diagram for the CLEC-owned splitter option for 6 line-sharing in the central office is Exhibit TGW-18 to my testimony.

8 Despite the initial enthusiasm for a CLEC-owned splitter arrangement, to date 9 no CLEC has installed its own splitter. Sprint committed to test the option 10 beginning in January 2001, but then withdrew. No other CLEC has agreed 11 even to test this option with BellSouth. BellSouth remains committed to testing its offer of line-sharing via a CLEC-owned splitter. 12

14 In the line-sharing collaborative, BellSouth and the CLECs jointly agreed to a 15 schedule for development of methods and procedures for the various 16 requirements of the Line-sharing Order. Exhibit TGW-10 to my testimony is 17 the charter for the remote terminal collaborative team. The stated goal of this collaborative "is to support the development of, with the mutual agreement to, 18 19 the processes and procedures required to jointly implement line-sharing 20 utilizing splitters located in the remote terminal as one of the options to meet 21 the requirements of the FCC line-sharing order." See Exhibit TGW-10. 22 BellSouth has developed the RT Line-sharing option and performed internal 23 testing. Because no CLEC had collocated a DSLAM in a remote terminal, nor 24 demonstrated interest in ordering the RT line-sharing option, however, the RT 25 line-sharing effort has been suspended.

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1 Notwithstanding the schedule developed by the collaborative and the apparent 2 lack of CLEC interest, BellSouth stands ready to provide line-sharing from the 3 remote terminal, if requested. BellSouth provides line-sharing from the remote 4 terminal in its SGAT. BellSouth will work independently with any interested 5 CLEC to provide this service. To provide line-sharing from the remote 6 terminal, the CLEC must collocate in the remote terminal and place a DSLAM 7 in its collocation space. The CLEC may then purchase the high frequency 8 portion of the copper subloop from the remote terminal to the end user 9 customer. To date, however, no CLEC has requested line-sharing from the 10 remote terminal or line-sharing over the copper portion of the loop from the 11 remote terminal to the customer premises.

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13 Q. WHAT IS LINE SPLITTING?

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A. Line splitting occurs when a CLEC provides voice service and a Data LEC
provides data service to the same end user over the same loop and, neither of
the carriers is BellSouth. BellSouth will allow CLECs (either one CLEC or
two CLECs working together) to offer both voice and data over a single
unbundled loop. *See* SGAT, §IV.B9.

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21 Q. HOW DOES BELLSOUTH PLAN TO OFFER LINE SPLITTING?

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A. BellSouth offers the same arrangement to CLECs as that described by the FCC
in the Texas 271 Order and the *Line-sharing Reconsideration Order*.
Specifically, BellSouth facilitates line splitting by CLECs by cross-connecting
an xDSL-capable loop and a port to the collocation space of either the Voice

1		CLEC or the Data CLEC. These carriers may then connect the loop and the
2		port to a CLEC-owned splitter, thereby splitting the line themselves.
3		
4	Q.	IF BELLSOUTH IS CURRENTLY THE VOICE PROVIDER AND A
5		PROVIDER OF DATA SERVICES (A "DATA CLEC") IS THE
6		ADVANCED SERVICES PROVIDER, AND THE END USER
7		SUBSEQUENTLY CHOOSES A CLEC FOR VOICE SERVICE (A "VOICE
8		CLEC"), HOW WOULD LINE SPLITTING OCCUR?
9		
10	A.	If the original line-sharing arrangement was established with a Data LEC-
11		owned splitter, then BellSouth would not be involved with the splitter
12		provisioning and, accordingly, any decisions regarding use of the splitter
13		would be left up to the Data CLEC. If, however, the original line-sharing
14		arrangement were established with a BellSouth-owned splitter, then BellSouth
15		would allow the Data LEC to continue leasing the BellSouth splitter under the
16		following conditions:
17		• The existing Data LEC remains the end user's advanced
18		services provider, and
19		• The Data LEC has an agreement with the Voice CLEC to use
20		the upper frequency spectrum of the loop to continue
21		providing the advanced services.
22		
23	Q.	WHAT PLANS DOES BELLSOUTH HAVE TO PROVIDE LINE
24		SPLITTING OTHR THAN CONVERTING FROM LINE-SHARING?
25		

1 A. Where a line-sharing arrangement does not already exist, BellSouth will work 2 cooperatively with Voice CLEC and Data LECs to develop methods and procedures whereby a Voice CLEC and Data LEC may provide services over 3 4 the same loop. Under this process, BellSouth will deliver a loop and port to 5 the collocation space of either the Voice CLEC or the Data LEC. As specified 6 in the *Line-Sharing Reconsideration* Order, the loop and the port cannot be a 7 loop and port combination (i.e. UNE-P), but must be individual stand-alone 8 network elements. The Voice CLEC or the Data LEC shall be responsible for 9 connecting the loop and port to a CLEC-owned splitter. BellSouth shall not 10 own or maintain the splitter used for this purpose.

11

12 To participate in line splitting, either the voice provider, the data provider, or 13 both the voice and data providers will need a collocation agreement with 14 BellSouth and will need an interconnection agreement to order cross-15 connections, loops, and ports. If more than one CLEC is involved, the second 16 CLEC will need an agreement to share the CLEC of record's loop. This 17 arrangement would provide a UNE loop and UNE port to provide the CLEC's 18 end user with voice service. The high frequency portion of the loop would be 19 available for data because of the CLEC-provided splitter, which is accessed via 20 a cross-connection from the frame to the CLEC's collocation space. A second cross-connection would return the voice signal from the splitter in the 21 22 collocation space to the BellSouth voice switch port. BellSouth would bill the 23 CLEC that purchases the loop and the purchaser of the loop will be responsible 24 for all charges associated with the line splitting UNE arrangement. Where the 25 Data LEC is different than the Voice CLEC, the purchaser of the loop may 26 authorize the other party to act on their behalf. For example, the Voice CLEC

- and data LEC may need an arrangement between themselves for the Data LEC
 to report data troubles.
- 3

4 Q. WHAT PLANS DOES BELLSOUTH HAVE FOR A LINE SPLITTING5 COLLABORTATIVE?

6

A. April 19, 2001, BellSouth held a "kick-off" meeting in Atlanta to discuss Line
Splitting and to initiate a Line Splitting Collaborative. Eight Voice CLECs
and Data LECs attended the kick-off and indicated an interest in participating
in the collaborative. The first line splitting industry collaborative was held May
3, 2001. Notwithstanding the Collaborative Schedule, however, BellSouth
stands ready to provide line splitting, if requested. BellSouth will work
independently with any interested CLEC to provide this service.

14

15 Q. WHAT CHARGES DOES BELLSOUTH BELIEVE ARE APPROPRIATE16 FOR LINE SPLITTING?

17

A. The applicable recurring charges to be paid by the Voice CLEC for this tline
splitting arrangement will be for the unbundled loop, the unbundled port, and
two collocation cross-connections, as shown on Exhibit TGW-19. The
applicable nonrecurring charges to be paid by the Voice CLEC for this line
splitting arrangement will be the nonrecurring rate for the loop-port
combination (switch-with-change to add the two cross connections).

The rates for line splitting are not independent rates, but rather are comprised of cost-based rates already set forth in Attachment A to BellSouth's SGAT and in various interconnection agreements.

- 1
- 2 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 3
- 4 A. Yes.
- 5
- 6 #276478