

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**Review of the Federal Communications    )**  
**Commission's Triennial Review Order    )**       **Case No. 2003-00379**  
**Regarding Unbundling Requirements    )**  
**for individual Network Elements        )**

**SURREBUTTAL TESTIMONY OF JAY M. BRADBURY**  
**ON BEHALF OF**  
**AT&T COMMUNICATIONS OF THE SOUTH CENTRAL STATES, LLC**

**APRIL 13, 2004**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION**  
2 **TITLE.**

3 A. My name is Jay M. Bradbury. My business address is 1200 Peachtree Street, Suite  
4 8100, Atlanta, Georgia 30309. I am employed by AT&T Corp. (“AT&T”) as a  
5 District Manager in the Law and Government Affairs Organization.

6

7 **Q. ARE YOU THE SAME JAY M. BRADBURY THAT PREVIOUSLY FILED**  
8 **DIRECT TESTIMONY IN THIS DOCKET ON FEBRUARY 11, 2004, AND**  
9 **REBUTTAL ON MARCH 31, 2004?**

10 A. Yes, I am.

11

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

13 A. My surrebuttal testimony responds to portions of the rebuttal testimony of  
14 BellSouth’s witnesses W. Keith Milner, A. Wayne Gray, Gary Tennyson, and Eric  
15 Fogle. My responses focus on the operational and economic impairments that arise  
16 from various CLEC network architecture requirements, the impact of those  
17 impairments upon the CLECs, and the role of Electronic Loop Provisioning (ELP) in  
18 this docket.

19

20 **RESPONSES TO MR. MILNER**

21 **Q. ON PAGE 2-3 OF HIS REBUTTAL TESTIMONY, MR. MILNER**  
22 **CHALLENGES YOUR STATEMENT THAT CLEC SWITCHES ARE**

1           **ALWAYS LOCATED REMOTELY FROM THE ILEC CENTRAL OFFICE**  
2           **WHERE THE EXISTING LOCAL LOOPS TERMINATE. HE NOTES THAT**  
3           **CLECS HAVE THE OPTION TO PLACE SWITCHES IN THEIR**  
4           **COLLOCATION ARRANGEMENTS IN BELLSOUTH'S CENTRAL**  
5           **OFFICES. DOES MR. MILNER'S INFORMATION DISPROVE YOUR**  
6           **STATEMENT?**

7    A.    No. Mr. Milner has simply attempted to provide the proverbial exception that proves  
8           the rule. Further, the FCC's findings in the TRO support the general validity of my  
9           statement (TRO ¶480, ¶464, FN 1406, ¶ 424, FN 1298, ¶ 429.) Mr. Milner fails to  
10          provide even one example of where a CLEC has chosen to install a switch within its  
11          collocation arrangements in a BellSouth central office in Kentucky. The reason is  
12          simple – there are no collocated CLEC switches in Kentucky.

13          Additionally, placing switches in collocations will exponentially increase collocation  
14          costs (preparation, space, power, etc.) for the CLEC. Were such arrangements truly  
15          viable, one would expect to see many companies doing so.

16

17    **Q.    ON PAGES 3-4 OF HIS REBUTTAL TESTIMONY MR. MILNER ALSO**  
18           **CHALLENGES YOUR USE OF THE FCC'S FINDINGS RELATED TO THE**  
19           **CLECS' NEED TO USE SWITCHES LOCATED "RELATIVELY FAR FROM**  
20           **THE END USER'S PREMISES" RESULTING IN "MUCH LONGER LOOPS**  
21           **THAN THE INCUMBENT ". HE STATES THAT A CLEC COULD "HOUSE**  
22           **ITS SWITCH IN A BUILDING DIRECTLY ACROSS THE STREET FROM**  
23           **THE ILEC'S CENTRAL OFFICE", AND REFERENCES CITATIONS IN HIS**

1           **DIRECT TESTIMONY TO AT&T TESTIMONY IN AN EARLIER**  
2           **ARBITRATION PROCEEDING. PLEASE RESPOND.**

3    A.    Mr. Milner admits I have quoted the FCC correctly, but then goes on to state that he  
4           disagrees with the FCC.

5           Placing a CLEC switch across the street from one of several ILEC central offices  
6           being served by that CLEC switch, as Mr. Milner suggests, clearly does nothing to  
7           change the fact that the CLEC switch will still be “relatively far” from the end user’s  
8           premises and require “much longer” loops than the ILEC for every end user premises  
9           NOT served from that ILEC central office. A CLEC switch that is close to an ILEC  
10          central office, by definition, means that it is “relatively far” from other ILEC central  
11          offices and the end users being served through those central offices.

12          Even for the single location where the CLEC switch is “directly across the street”  
13          from the ILEC central office, the CLEC will still require a collocation arrangement  
14          within the central office and backhaul to cross the street. Any cost reductions from  
15          such an arrangement (at the one location) would be incremental and would not  
16          eliminate the impairment that results from the significant cost disadvantage required  
17          to backhaul the loop from multiple ILEC central offices where the mass market  
18          customer loops terminate.

19          I have already addressed Mr. Milner’s (and BellSouth’s other witnesses’)  
20          inappropriate use of the statements in AT&T’s Arbitration testimony in my rebuttal  
21          testimony on pages 12-14. In short, Mr. Milner’s reliance upon AT&T’s arbitration  
22          testimony is misplaced because the issues in that case are different from the issues in

1 this docket. The fact that AT&T is entitled to the tandem switching rate because its  
2 switches serve widely dispersed enterprise customers (the issue in the arbitration)  
3 does not demonstrate that CLECs are not impaired in attempting to serve the mass  
4 market in the absence of unbundled switching (the issue in this docket).

5  
6 **Q. ON PAGE 4 OF HIS REBUTTAL TESTIMONY MR. MILNER**  
7 **CHALLENGES THE NEED FOR CLECS TO “ESTABLISH A**  
8 **COLLOCATION ARRANGEMENT IN EVERY ILEC WIRE CENTER”.**  
9 **CAN YOU ADDRESS THIS?**

10 A. Yes. Mr. Milner’s direct testimony and my response to BellSouth’s Interrogatory No.  
11 154 in Florida TRO Docket No. 030851-TP both indicate that CLECs may generally  
12 have three options in the use of collocation arrangements to extend loops to their  
13 switches to serve the mass market. CLEC arrangements may include (1) collocations  
14 in ILEC wire centers that directly extend loops to the CLEC switch, or (2)  
15 collocations in ILEC wire centers that are “hubbed” to collocations located in another  
16 wire center through the use of “transport,” with the receiving collocation equipped to  
17 directly extend the “hubbed” collocation loops to the CLEC switch, or (3) extending  
18 loops from a wire center without a collocation to a wire center that does have a  
19 collocation through the use of DS0 Enhanced Extended Links (EEL), with the  
20 receiving collocation equipped to directly extend the EEL loops to the CLEC switch.

21 Only the third option (DS0 EELs) allows the potential for a CLEC to serve a wire  
22 center without having a collocation in that wire center. However, CLECs have found  
23 that the use of DS0 EELs to serve mass market customers is operationally and

1 financially infeasible. BellSouth reports in its response to AT&T's Interrogatory 122  
2 that there are only 7 DS0 EELs in service from only 5 wire centers in Kentucky.  
3 Thus, as a practical matter, collocation in each wire center is required.

4

5 **Q. ON PAGES 4-5 OF HIS REBUTTAL TESTIMONY MR. MILNER**  
6 **CHALLENGES YOUR STATEMENT THAT ILEC CHARGES TO**  
7 **TRANSFER LOOPS FROM THE ILEC TO THE CLEC OR BETWEEN**  
8 **CLECS ARE EXORBITANT. WHERE CAN THE COMMISSION LOOK TO**  
9 **FORM AN OPINION ABOUT THE LEVEL OF ILEC CHARGES FOR LOOP**  
10 **TRANSFERS?**

11 A. The Authority can look directly to the TRO.

12 The FCC stated that the “record evidence indicates that the non-recurring costs  
13 associated with cutting over large volumes of loops would likely be prohibitively  
14 expensive for a competitive carrier seeking to provide service without the use of  
15 unbundled local circuit switching.” TRO at ¶ 470. The FCC found that “a seamless,  
16 *low-cost* batch cut process for switching mass market customers from one carrier to  
17 another is necessary, at a minimum, for carriers to compete effectively in the mass  
18 market.” TRO at ¶ 487 (emphasis added). This batch cut process must “render the  
19 hot cut process more efficient and reduce per-line hot cut costs.” TRO at ¶ 460.

20 Clearly, the FCC was aware the non-recurring costs had been set in state proceedings,  
21 and found them "prohibitively expensive.”

22

1 **Q. ON PAGE 5 OF HIS REBUTTAL TESTIMONY MR. MILNER**  
2 **CHALLENGES THE VALIDITY OF COMPARING THE LOOP TRANSFER**  
3 **PROCESS WITH THE UNE-P OR PRIMARY INTEREXCHANGE CARRIER**  
4 **(PIC) CHANGE PROCESSES. ARE THESE VALID COMPARISONS?**

5 A. Yes. The FCC itself established the UNE-P process as a standard.

6 This review is necessary to ensure that customer loops can be transferred from  
7 the incumbent LEC main distribution frame to a competitive LEC collocation  
8 *as promptly and efficiently as incumbent LECs can transfer customers using*  
9 *unbundled local circuit switching.”* TRO at n.1574 (emphasis added).

10

11 My discussion serves to demonstrate what must happen in order to eliminate the  
12 operational impairment caused by the manual hot cut processes Mr. Milner  
13 references. However, as I discuss in my direct testimony and later in this document,  
14 the Commission should establish a separate docket to investigate ways to eliminate  
15 this operational impairment, such as Electronic Loop Provisioning (ELP), after it  
16 confirms through its deliberations in this docket that the FCC’s impairment findings  
17 still apply in Kentucky.

18

19 **Q. ON PAGE 6 OF HIS REBUTTAL TESTIMONY MR. MILNER ASSERTS**  
20 **THAT CLECS DO NOT NEED TO PERFORM THE FUNCTIONS YOU**  
21 **DISCUSS (DIGITIZATION, CONCENTRATION, MULTIPLEXING, AND**  
22 **AGGREGATION) FOR THEMSELVES BUT CAN RELY UPON**  
23 **BELLSOUTH’S UNBUNDLED LOOP CONCENTRATION (ULC)**  
24 **OFFERING. ARE YOU AWARE OF THIS OFFERING AND IS IT THE**  
25 **SUBSTITUTE MR. MILNER CLAIMS?**

1 A. Yes, I am aware of this offering and no, it is not the solution Mr. Milner would have  
2 this Commission believe.

3 First, it is important to note that Mr. Milner does not dispute that these functions  
4 (digitization, concentration, multiplexing, and aggregation) must be performed in  
5 order for a CLEC to backhaul its customer's traffic to its own switch. Therefore, a  
6 legitimate question is whether the CLEC should lease or purchase the equipment to  
7 perform these functions. BellSouth's ULC offer might be thought of as the option to  
8 lease the equipment rather than purchase.

9 However, BellSouth's ULC offering introduces a number of operational problems not  
10 present when a CLEC installs its own Digital Loop Carriers (DLC). A major  
11 operational problem is the ordering of BellSouth's ULC offering. All ordering of  
12 service for the ULC arrangement must be performed manually, using facsimile  
13 transmission of the Local Service Request (LSR). Further, there is not one word of  
14 instruction as to how to fill out such an LSR in the BellSouth Local Ordering  
15 Handbook, which may be found and searched for "Unbundled Loop Concentration"  
16 or "ULC" on-line at

17 [http://www.interconnection.bellsouth.com/guides/leo/bbrlo\\_releases/14\\_0/pdf/140-](http://www.interconnection.bellsouth.com/guides/leo/bbrlo_releases/14_0/pdf/140-3.pdf)  
18 [3.pdf](http://www.interconnection.bellsouth.com/guides/leo/bbrlo_releases/14_0/pdf/140-3.pdf).

19 Additional operational concerns include the fact that the use of BellSouth's ULC  
20 offering and the provisioning of a CLEC Digital Subscriber Line (DSL) service are  
21 incompatible and that CLEC testing and repair of the DLC portion of its backhaul  
22 arrangement is eliminated. BellSouth's ULC offering is clearly inferior to CLEC  
23 owned DLCs installed in the CLEC's collocation.



1 Evidently, neither BellSouth nor Mr. Milner considers ULC to be a creditable  
2 solution, since Mr. Milner's direct testimony does not mention it as part of any  
3 network architecture option available or useful to CLECs, and BellSouth's own  
4 BACE model does not include the use of the ULC offering in its manipulations.

5

6 **Q. ON PAGE 6 OF HIS REBUTTAL TESTIMONY MR. MILNER**  
7 **CHALLENGES YOUR REASONS FOR THE CLECS' USE OF DLC,**  
8 **ASSERTS THAT YOUR TESTIMONY STATES THAT ONLY CLECS MAKE**  
9 **USE OF DLC EQUIPMENT, AND NOTES THAT ILECS USE DLC**  
10 **EQUIPMENT ROUTINELY. HOW DO YOU RESPOND?**

11 A. In his rebuttal Mr. Milner manages to ignore the contents of the very next paragraph  
12 of my testimony that states:

13 The equipment digitizes, encodes, concentrates and multiplexes the analog  
14 signals received from the customer so that the CLEC can extend the loop  
15 signal back to its remote switch in a manner the (1) provides service quality  
16 that will meet customer expectations and (2) minimizes the CLEC's costs to  
17 transport its customers' traffic back and forth from its switch. (Bradbury,  
18 direct, page 26, lines 12-17.)

19

20 I make no suggestion that DLC equipment is only useful for differences in  
21 transmission quality. (Milner, rebuttal, page 7, line 10).

22 At the central office, the need to use DLCs in their collocations to interface with  
23 analog DSO mass market loops is unique to CLECs and not required for the ILEC's  
24 interface with those very same loops. BellSouth's response to AT&T's Interrogatory  
25 118 in Florida Docket No. 030851-TP, prepared by Mr. Milner, confirms this. When  
26 asked to provide the number and percentage of loops converted to T1 (DS1) level  
27 interfaces through the use of DLCs located in the central office, Mr. Milner replied:

1 This question cannot be answered as posed because any multiplexing of  
2 copper subloops (that is, individual cooper loop distribution pairs) unto DS1  
3 of higher level digital transmission facilities occurs at the DLC Remote  
4 Terminal (“RT”), rather than within the central office.

5 CLECs must use DLCs in their ILEC central office collocations to receive analog  
6 communications from the loop, and digitize, concentrate, and multiplex the  
7 communications so that the connecting backhaul facility can be used efficiently; the  
8 CLEC’s switch can provide the customer with dial tone, ringing, and other functions;  
9 and customer service quality will meet expectations. The ILEC is able to achieve all  
10 of this with the “jumper” wire pair I discussed on page 18 of my direct testimony.

11  
12 **Q. ON PAGE 8 OF HIS REBUTTAL TESTIMONY MR. MILNER ATTEMPTS**  
13 **TO ADDRESS THE “LUMPY” CHARACTERISTICS OF DLC EQUIPMENT,**  
14 **AND DIGITAL CROSS CONNECTION (DSX) EQUIPMENT. DO HIS**  
15 **COMMENTS ALTER THE PRINCIPLE YOU DISCUSS OR THE IMPACT**  
16 **UPON THE CLECS?**

17 **A.** No. There are DLCs that come in sizes smaller than used in my example. The tool  
18 used by Mr. Turner to conduct the DSO Impairment Analysis allows for this  
19 flexibility, as does BellSouth’s BACE model. However, CLECs electing to use  
20 DLCs installed in smaller increments will then have to bear the increased cost of  
21 more frequent installations. It is a decision that means the CLEC will be selecting  
22 between which kinds of lumps it wants in its cost equation – equipment cost lumps or  
23 installation cost lumps. In either case, CLEC costs to serve the same mass market  
24 customers are greater than ILEC costs.

1 While Mr. Milner's comments are generally factual, he has provided mis-information  
2 about DSX-3 and DSX-1 equipment. A DSX-1 is not a smaller version of a DSX-3.  
3 These two pieces of equipment operate at different digital single levels. If you need a  
4 DSX-3, a DSX-1 cannot be substituted.

5  
6 **Q. ON PAGES 8-9 OF HIS REBUTTAL MR. MILNER CLAIMS TO BE**  
7 **SPEAKING TO YOUR TESTIMONY LISTING THE STEPS IN**  
8 **BELLSOUTH'S HOT CUT PROCESS AND STATES THAT HE SEES SOME**  
9 **SORT OF IRONY THAT YOUR EARLIER TESTIMONY FOUND THIS**  
10 **PROCESS TO BE INADEQUATE. HOW DO YOU RESPOND?**

11 A. Mr. Milner offers no rebuttal of my testimony and there is no irony. The paragraph  
12 he is citing concludes "the process is inadequate to service mass market customers."  
13 Clearly Mr. Milner had some agenda other than rebutting my testimony and the  
14 Commission should disregard the entire question and answer in Mr. Milner's  
15 testimony.

16  
17 **Q. ON PAGES 9-10 OF HIS REBUTTAL TESTIMONY MR. MILNER**  
18 **CHALLENGES YOUR STATEMENT CONCERNING THE NEED FOR**  
19 **COPPER LOOPS OF LESS THAN 18,000 FEET IN ORDER TO PROVIDE**  
20 **DSL SERVICES, STATING THAT A CLEC "COULD LIKEWISE**  
21 **COLLOCATE ITS DSLAM (DIGITAL SUBSCRIBER LINE ACCESS**  
22 **MULTIPLEXER) AT THE REMOTE TERMINAL." IS IT REALLY THAT**  
23 **SIMPLE?**

1 A. No. CLECs do not have “remote terminals” as Mr. Milner is using the term. A  
2 CLEC’s “terminals” (DLCs) are located in the central office. BellSouth will not  
3 allow a CLEC to place a CLEC DSLAM card in a BellSouth remote terminal.  
4 Therefore, to have a “remote terminal collocation”, a CLEC would have to build it  
5 and provide or arrange transport facilities from it to the CLEC’s central office  
6 collocation.

7 While the technology for remote collocation exists, the economics do not. This is  
8 evidenced by the fact that, to the best of my knowledge, there are no CLEC remote  
9 terminal collocations in BellSouth’s territory. If this were a valid solution one would  
10 expect to see CLECs requesting and performing remote terminal (RT) collocations.  
11 They are not.

12 I would note that this is another case in which BellSouth and Mr. Milner apparently  
13 do not believe in the validity of their own proposals, since Mr. Milner’s direct  
14 testimony mentions remote terminal collocation only in passing and BellSouth’s  
15 BACE model does not include the use of remote terminal collocation in its  
16 manipulations.

17

18 **Q. ON PAGES 10-11 OF HIS REBUTTAL TESTIMONY MR. MILNER**  
19 **CHALLENGES YOUR STATEMENT THAT THE CLECS’ LACK OF**  
20 **ECONOMIES OF SCALE WILL MAKE THEIR CALL TERMINATION**  
21 **ARRANGEMENTS MORE RELIANT ON THE ILEC’S TANDEM**  
22 **NETWORK. HOW DO YOU RESPOND?**

1 A. Once again, Mr. Milner is providing the exception that proves the rule. While the list  
2 of factors both the CLECs and the ILECs use in the calculus of determining whether  
3 to direct or tandem trunk are the same, the values in each parties equations will be  
4 vastly different. The values in a CLEC's equations will always result in a higher  
5 reliance upon tandem trunking because of the CLEC's relative lack of scale in  
6 comparison to the ILEC. Where a CLEC does have sufficient scale (volume)  
7 between two offices to justify direct trunking, I would expect that CLEC to make the  
8 proper economic decision.

9 Having a higher reliance upon ILEC tandem trunking increases the CLEC's cost of  
10 call termination and the greater potential for call blockage if the ILEC fails to  
11 properly manage the tandem trunk network.

12

13 **RESPONSES TO MR. GRAY**

14 **Q. ON PAGES 7-8 OF HIS REBUTTAL TESTIMONY MR. GRAY**  
15 **CHALLENGES THE NEED FOR CLECS TO HAVE A COLLOCATION**  
16 **ARRANGEMENT IN EVERY ILEC WIRE CENTER IN ORDER TO OFFER**  
17 **FACILITIES BASED MASS MARKET SERVICES. IS THIS CHALLENGE**  
18 **ANY DIFFERENT FROM THAT MADE BY MR. MILNER?**

19 A. No. Mr. Gray's comments are the same as those made by Mr. Milner, discussed  
20 previously. As a practical matter, collocation in each wire center is required to serve  
21 the analog DS0 loop mass market customer, EELs and assembly points  
22 notwithstanding. I would note that assembly points were not mentioned in Mr.

1 Milner's direct testimony and that the BellSouth BACE model does not include them  
2 in its manipulations.

3

4 **Q. ON PAGES 8-10 OF HIS REBUTTAL TESTIMONY MR. GRAY ADDRESSES**  
5 **THE ISSUE OF PLACING SWITCHES IN COLLOCATIONS. DOES THIS**  
6 **DISCUSSION PROVIDE THE COMMISSION WITH ANY MEANINGFUL**  
7 **INFORMATION?**

8 A. No. As I discussed previously, the meaningful information is the fact that no CLECs  
9 have found such an arrangement to be economically attractive in Kentucky.

10

11 **Q. ON PAGES 10-14 OF HIS REBUTTAL TESTIMONY MR. GRAY DISCUSSES**  
12 **A NUMBER OF CHARGES AND FEES ASSOCIATED WITH**  
13 **COLLOCATION ARRANGEMENTS. DOES ANY OF THIS INFORMATION**  
14 **SIGNIFICANTLY CHALLENGE OR CHANGE THE FACT THAT THESE**  
15 **COSTS OF COLLOCATION EXIST FOR CLECS?**

16 A. No. Mr. Gray's comments provide clarification about how these costs are billed to  
17 CLECs by BellSouth, but otherwise confirm that the costs exist and are significant  
18 factor in any CLECs attempts to serve mass market customers using analog DS0  
19 loops.

20

21 **RESPONSES TO MR. TENNYSON**

22 **Q. ON PAGES 3 THROUGH 6 OF HIS REBUTTAL TESTIMONY MR.**  
23 **TENNYSON COMMENTS ON ELECTRONIC LOOP PROVISIONING**

1           **(ELP), CITING TO THE TESTIMONY OF AT&T’S WITNESS MARK VAN**  
2           **DE WATER. DID YOU ALSO ADDRESS ELP IN YOUR TESTIMONY?**

3    A.     Yes. I addressed ELP on pages 42-44 of my direct testimony.

4

5    **Q.     DOES AT&T RECOMMEND THAT THE COMMISSION ORDER**  
6           **IMPLEMENTATION OF ELP AS A RESULT OF THIS DOCKET?**

7    A.     No. AT&T is not proposing that the Commission order the implementation of ELP as  
8           a result of its deliberations in this docket as that was not one of the purposes of this  
9           docket, nor is ELP an identified issue.

10           AT&T recommends that the Commission open a separate docket to address how to  
11           eliminate the impairment it will find here. It is in that docket that ELP and any other  
12           proposals with potential to eliminate impairment should be considered.

13

14   **Q.     WHAT THEN DO YOU SUGGEST THAT THE COMMISSION DO WITH**  
15           **THE INFORMATION ABOUT ELP AND THE OTHER PROPOSALS WITH**  
16           **POTENTIAL TO ELIMINATE IMPAIRMENT BEING PRESENTED IN THIS**  
17           **DOCKET BY VARIOUS PARTIES, INCLUDING AT&T?**

18   A.     The Commission should accept the information that has been presented in this docket  
19           for use in formulating the scope of the follow-on docket in which it would consider  
20           these issues. This would allow the parties and the Commission to focus in the current  
21           docket on the issues specifically requiring consideration in this proceeding by the  
22           TRO.

1 In the separate follow-on docket the parties and the Commission would then not be  
2 constrained by the arbitrary 9-month interval mandated by the TRO. The parties and  
3 the Commission could then devote the appropriate resources necessary to present and  
4 consider the complex technological, cost and policy issues associated with an effort to  
5 eliminate impairment in a more reasoned and less constrained manner.

6

7 **Q. IS THERE SPECIFIC INFORMATION IN MR. TENNYSON’S TESTIMONY**  
8 **TO WHICH YOU WISH TO RESPOND?**

9 A. Yes. In keeping with my view of how the Commission should proceed with regard to  
10 information presented in this docket related to ELP and other proposals with potential  
11 to eliminate impairment, I will limit my comments, with the expectation that there  
12 will be a forum at a later date in which a full investigation of the issues will occur.  
13 Additional detail about ELP in support of the comments I will make below can be  
14 found in Exhibit JMB-SR1, a presentation entitled “Electronic Loop Provisioning  
15 (ELP), Enabling the Competitive, All Service Network of the Future,” dated  
16 November, 2003.

17 On page 4, Mr. Tennyson discusses packetizing digital signals into Asynchronous  
18 Transfer Mode (ATM) cells and then asserts “this packetization is not performed in  
19 any DLC systems used in BellSouth today”. This is misleading. All DLCs in  
20 Kentucky that BellSouth has equipped to provide DSL service do perform  
21 packetization to ATM format for the DSL service. BellSouth has not invested in  
22 cards for those DLCs that are capable of packetizing voice or combined voice and



1 DSL. Such cards convert the existing Next Generation DLCs (NGDLCs) into the  
2 “true” NGDLC (tNGDLC) discussed in Exhibit JMB-SR1.

3 At the bottom of page 4 Mr. Tennyson provides the following note and assertion.  
4 “Note that this process (referring to ELP) would require that every loop be connected  
5 to an ATM switch, a switch that does not exist in BellSouth’s network today.” Mr.  
6 Tennyson is wrong on both counts. As can be seen in the diagrams on pages 15, 26  
7 and 27 of Exhibit No. JMB-SR1 in the ELP architecture, once the loop has been  
8 treated by the tNGDLC it is the highly efficient, packetized, high capacity ATM  
9 uplink of the tNGDLC that is connected to the ATM switch, individual loop  
10 connections to the ATM do not exist. Second as Mr. Tennyson later admits (page 6)  
11 BellSouth does have ATM switching capability. Today that capability is used to  
12 support BellSouth’s DSL product lines and others that make use of ATM technology.  
13 The fact that “BellSouth does not have the quantity of switches, or the switch  
14 capacity, necessary to deploy ELP” (Tennyson, rebuttal page 6, lines 9-10) is  
15 unremarkable and does not demonstrate that it could not deploy additional ATM  
16 switching capacity to implement ELP.

17 On page 6, Mr. Tennyson also admits that BellSouth has voice gateways in its  
18 network, but once again makes the unremarkable claim that they are not “in the  
19 necessary capacity, or quantity.” This claim does not demonstrate that BellSouth  
20 could not deploy additional voice gateway capacity to implement ELP.

21 On page 5, Mr. Tennyson makes the claims that “ELP is not the best architecture to  
22 enable DSL and would impede DSL innovation.” These claims are absurd – ELP is

1 built on exactly the same architecture that BellSouth is using to implement DSL --  
2 remote terminal NGDLC deployments using ATM protocols.

3 On pages 5-6, Mr. Tennyson, in discussing how long it might take to deploy ELP,  
4 states "It would take at least several years, given the magnitude of such an  
5 undertaking and given that each and every loop in BellSouth's region will need to be  
6 modified." ELP can be implemented in phases, over time and by "priority", starting  
7 when and where BellSouth desires to be relieved of its obligation to provide  
8 unbundled switching. As each geographic area is converted on BellSouth's (or the  
9 Commission's ordered) schedule, unimpaired competition would be established and  
10 BellSouth would receive the relief it seeks. While, ultimately, modification of "each  
11 and every loop" *may* eventually be required, it also may *never* be required. Only  
12 those loops that actually do become subject to migration to a CLEC need to be  
13 immediately "ELPed," allowing for the use of a managed process like that being used  
14 for the support of BellSouth's DSL deployment. Further, I would note that the UNE-  
15 P to UNE-L transition itself, if BellSouth were granted relief in this docket, would not  
16 complete until May 2007, or several years from now.

17 Finally there is the matter of cost. Mr. Tennyson provides a discussion of cost on  
18 pages 4 and 5, but provides no support for how any of the three major data points he  
19 presents were determined. He claims that with ELP, CLECs would avoid only \$13  
20 per loop in costs compared to the existing hot cut costs. There is no explanation as to  
21 how this number was derived; however, here are some factors that would have to play  
22 in such a calculation: (1) the cost to CLECs of an SL1 hot cut in Kentucky is \$88.22;  
23 (2) the BellSouth central office technician work time per hot cut is approximately 43

1 minutes; (3) an additional hour of BellSouth outside plant technician work time is  
2 required on all loops served by IDLC (18%) in Kentucky). It is difficult to grasp Mr.  
3 Tennyson's determination that only \$13 dollars of cost is avoided by ELP given the  
4 known amount of work that is eliminated. Second, Mr. Tennyson states that there  
5 would have to be an on-going monthly charge of \$6.66 per loop per month. Again no  
6 explanation is provided. Possibly this number was somehow derived from Mr.  
7 Tennyson's third claim that "it would cost BellSouth approximately \$8 billion in  
8 capital expenditures to implement ELP in its network," but there is no indication how  
9 that number was determined, either.

10 Exhibit No. JMB-SR1 addresses costs on page 21. AT&T's estimate of the total cost  
11 to implement ELP in BellSouth's territory would be approximately one-half  
12 BellSouth's estimate, and that does not take into consideration the costs avoided by  
13 the elimination of collocation costs, hot cuts, etc.

14

15 **Q. SHOULD COST BE THE ONLY CONSIDERATION IN EVALUATING AN**  
16 **ELP PROPOSAL?**

17 A. No, of course not, and that is one of the major reasons behind my recommendation  
18 that the Commission open a separate docket to consider these matters. An investment  
19 in ELP or any other proposal with the potential to eliminate impairment must be  
20 viewed in the context of its benefits. ELP provides significant benefits (including  
21 cost reductions, enhanced features, and increased revenue opportunities) to a broad  
22 range of constituents and telecommunications issues, including:

23 • End-Users

- 1 • Competition
- 2 • CLECs & ILECs
- 3 • Broadband & Advanced Services
- 4 • Local Network Infrastructure
- 5 • Telecommunications Industry / Market
- 6 • U.S. Economy

7 It simply is not possible within the scope and the artificial time constraints placed  
8 upon this proceeding by the TRO for the Commission to make a fully informed  
9 decision about ELP in this docket.

10

11 **RESPONSES TO MR. FOGLE**

12 **Q. ON PAGE 22 OF HIS REBUTTAL TESTIMONY, MR. FOGLE**  
13 **CHALLENGES YOUR STATEMENT THAT CLECS ARE DENIED THE**  
14 **ABILITY TO PROVIDE DSL SERVICE TO CUSTOMERS EXCEPT WHEN**  
15 **A COPPER LOOP OF LESS THAN 18,000 FEET IN LENGTH IS**  
16 **AVAILABLE AND DISCUSSES A NUMBER OF OPTIONS HE STATES A**  
17 **CLEC CAN UTILIZE. IS THERE ANY DIFFERENCE BETWEEN MR.**  
18 **FOGLE’S COMMENTS AND THOSE OF MR. MILNER, TO WHICH YOU**  
19 **RESPONDED ABOVE?**

20 A. Not really. Mr. Fogle’s list of options is longer but contains none that allows any  
21 CLEC to have a DSL reach relative to mass market customers that is anywhere near  
22 equal to BellSouth’s at an economic cost. As I noted in my direct testimony, the  
23 retail product BellSouth provides to the mass market is its FastAccess ® Service. All  
24 of the options Mr. Fogle lists are either (1) prohibited by BellSouth, (2) uneconomic,

1 (3) inappropriate for the mass market, (4) and/or provide an inferior service when  
2 compared to BellSouth's FastAccess ® Service.

3

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

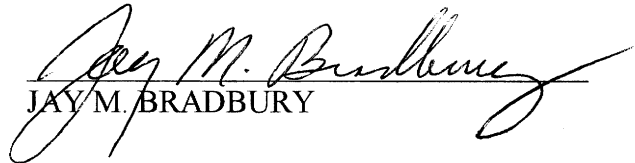
5 A. Yes.

AFFIDAVIT

STATE OF GEORGIA  
COUNTY OF FULTON

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Jay M. Bradbury, who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in Case No. 2003-00379, Review of Federal Communications Commission's Triennial Review Order Regarding Unbundling Requirements for Individual Network Elements, and if present before the Commission and duly sworn, his testimony would be set forth in his Surrebuttal Testimony consisting of 20 pages and 1 exhibit(s)

  
JAY M. BRADBURY

SWORN TO AND SUBSCRIBED BEFORE ME  
THIS 13<sup>th</sup> DAY OF April, 2004

 Notary Public

**MARGARET A. PLASMAN**  
Notary Public, Gwinnett County, Georgia  
My Commission Expires November 21, 2005