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COMMONWEALTH OF KENTUCKY

JUL 26 2006

BEFORE THE PUBLIC SERVICE COMMISSION

**PUBLIC SERVICE
COMMISSION**

Petition of.)
Dialog Telecommunications for)
Arbitration of Certain Terms and)
Conditions of Proposed Agreement with)
BellSouth Telecommunications, Inc.)
Concerning Interconnection Under The)
Telecommunications Act of 1996)
_____)

Case No. 2006-00099

Filed March 3, 2006

DIRECT TESTIMONY OF STEVEN E. TURNER

ON BEHALF OF

DIALOG TELECOMMUNICATIONS

JULY 26, 2006

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1 **I. INTRODUCTION OF WITNESS**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Steven E. Turner. My business address is Kaleo Consulting, 2031
4 Gold Leaf Parkway, Canton, Georgia 30114.

5

6 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

7 A. I own and direct my own telecommunications and financial consulting firm,
8 Kaleo Consulting.

9

10 **Q. PLEASE DESCRIBE YOUR EDUCATION BACKGROUND.**

11 A. I hold a Bachelor of Science degree in Electrical Engineering from Auburn
12 University in Auburn, Alabama. I also hold a Masters of Business Administration
13 in Finance from Georgia State University in Atlanta, Georgia.

14

15 **Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

16 A. From 1986 through 1987, I was a Research Engineer for General Electric in its
17 Advanced Technologies Department developing high-speed graphics simulators.

18 In 1987, I joined AT&T¹ and, during my career there, held a variety of
19 engineering, operations, and management positions. These positions covered the
20 switching, transport, and signaling disciplines within AT&T. From 1995 until

¹ In this section of my testimony describing my work experience, when I use the name "AT&T", I am referring to the AT&T entity prior to its merger with SBC. To differentiate the ILEC entity in this case, I refer to it as AT&T-SBC.

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1 1997, I worked in the Local Infrastructure and Access Management organization
2 within AT&T. In this organization, I gained familiarity with many of the
3 regulatory issues surrounding AT&T's local market entry, including issues
4 concerning the unbundling of incumbent local exchange company (incumbent)
5 networks. I was on the AT&T team that negotiated with Southwestern Bell
6 Telephone Company concerning unbundled network element definitions and
7 methods of interconnection. A copy of my resume is provided as Exhibit SET-1.

8

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED OR FILED TESTIMONY**
10 **BEFORE A PUBLIC UTILITY OR PUBLIC SERVICE COMMISSION?**

11 A. I have testified or filed testimony before the commissions in the states of
12 Alabama, Arkansas, California, Colorado, Delaware, Florida, Georgia, Hawaii,
13 Illinois, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Michigan,
14 Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New
15 York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, South
16 Dakota, Tennessee, Texas, Washington, and Wisconsin. Additionally, I have
17 filed testimony before the Federal Communications Commission ("FCC").

18

19 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY RELATED TO HOT**
20 **CUTS IN ANY PROCEEDINGS?**

21 A. Yes. I have participated in proceedings establishing TELRIC-based ("Total
22 Element Long Run Incremental Cost") rates for hot cuts in a number of states.
23 Specifically, I participated in proceedings in the following states: California

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1 (R.95-04-043 and I.95-04-044), Illinois (ICC Docket No. 03-0593), Indiana
2 (Cause No. 42500-S1), Ohio (Case No. 04-34-TP-COI), Oklahoma (Cause No.
3 PUD 200300646), and Texas (Docket No. 29175). Further, I have directly
4 observed the performance of hot cuts by incumbent LEC personnel. I will address
5 these observations later in this testimony.

6 **II. PURPOSE OF TESTIMONY**

7 **Q. WHY ARE YOU FILING TESTIMONY?**

8 A. I have been asked by Dialog Telecommunications (“Dialog”) to address Issue No.
9 1 in its arbitration with BellSouth Telecommunications Inc. (“BellSouth”). Issue
10 No. 1 is stated as follows: “What is the appropriate TELRIC rate for batch or
11 bulk migrations when Dialog requests conversion from a UNE-P loop and port
12 combination to a UNE loop configuration?”² As noted above, I have participated
13 in addressing precisely this question in six other state proceedings and was asked
14 by Dialog to address the same question in this proceeding.

15

16 **Q. PLEASE DESCRIBE THE HOT CUT PROCESS?**

17 A. The hot cut process is simply a means for converting working service from one
18 telecommunications provider to another telecommunications provider. The
19 reference to “hot” in the term “hot cut” is that the service is currently operating

² Commonwealth of Kentucky, Before the Public Service Commission, *Petition of: Dialog Telecommunications for Arbitration of Certain Terms and Conditions of Proposed Agreement with BellSouth Telecommunications, Inc. Concerning Interconnection Under The Telecommunications Act of 1996*, Case No. 2006-0099_, Filed March 3, 2006, *Petition of Dialog Telecommunications for Arbitration with BellSouth under the Telecommunications Act of 1996*, p. 4.

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1 and therefore special care must be taken to ensure that the working service stays
2 working when it moves from one telecommunications provider to another. The
3 reference to a “batch” or “bulk” hot cut process is simply that the conversion
4 process between the two telecommunications carriers is performed on multiple
5 lines at a time.

6 **III. CURRENT STATUS OF HOT CUT RATES IN KENTUCKY**

7 **Q. COULD YOU BRIEFLY REVIEW WHY IT IS NECESSARY FOR THE**
8 **COMMISSION TO ESTABLISH A TELRIC RATE FOR BATCH OR**
9 **BULK MIGRATIONS IN KENTUCKY?**

10 A. Yes. First, it is important to understand that issues related to batch hot cuts are
11 critically important to companies such as Dialog that have historically utilized
12 UNE-P combinations to provide telecommunications services to their retail
13 customers. The UNE-P combination refers to the combination of unbundled
14 network elements consisting of an unbundled local loop, local switching, port, and
15 shared transport elements. As the Commission is aware, the FCC eliminated
16 unbundled local switching as a Section 251 unbundled network element effective
17 in March 2006. As a result, Dialog has been required to obtain and utilize its own
18 switch to provide the switching function for its customer’s loops that Dialog
19 previously obtained from BellSouth under the UNE-P platform.

20

21 The FCC, in its Triennial Review Order (“TRO”), acknowledged that the
22 migration of UNE-P customers to a service platform where the CLEC would
23 continue to utilize the unbundled loop but provide for its own switching would

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1 require an efficient process to achieve this transition. Specifically, the FCC
2 noted: “We have found that a seamless, *low-cost* batch cut process for switching
3 mass market customers from one carrier to another is necessary, at a minimum,
4 for carriers to compete effectively in the mass market.”³ The batch hot cut
5 *process* is necessary to allow for the “seamless” switching of Dialog’s customers
6 loops from the UNE-P platform to Dialog’s line termination equipment in its
7 collocation space that ultimately allows Dialog to provide for its own switching.
8 The FCC made it clear that the batch process for hot cuts of UNE-P customers
9 would need to be “low-cost ... for carriers to compete effectively in the mass
10 market.”⁴

11

12 **Q. DID THE FCC OFFER ANY GUIDANCE AS TO HOW A LOW-COST**
13 **BATCH HOT CUT PROCESS COULD BE ACCOMPLISHED?**

14 A. Yes. First, the FCC noted the following: “We conclude that the loop access
15 barriers contained in the record may be mitigated through the creation of a batch
16 cut process by spreading loop migration costs among a large number of lines,
17 decreasing per-line cut over costs.”⁵ The FCC clearly anticipated that the
18 migration of UNE-P lines to an environment where the CLEC would utilize the
19 existing UNE Loop but provide for its own switching would occur across a “large
20 number of lines” since most CLECs – including Dialog – would have a large

³ TRO at ¶ 487. (Emphasis added.)

⁴ *Id.*

⁵ TRO at ¶ 487.

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1 number of existing customers currently being served via the UNE-P platform. As
2 a result of performing the hot cut of these “large number of lines” in an efficient
3 manner, the FCC anticipated that there would be a decrease in the “per-line cut
4 over costs.” This is entirely reasonable since the set-up costs associated with a
5 batch hot cut process, such as deploying personnel to perform the hot cuts, could
6 be efficiently performed once for the entire group of hot cuts required in a central
7 office rather than paid for on a loop by loop basis. In fact, the FCC made this
8 specific finding as follows:

9 Generally, however, we expect these processes to result in
10 efficiencies associated with performing tasks once for multiple
11 lines that would otherwise have been performed on a line-by-line
12 basis. For example, pursuant to the processes in place in at least
13 some states, the incumbent LEC currently will pre-wire circuits on
14 the central office frame, verify the presence of dial tone, and
15 communicate with competitive LECs regarding problems
16 encountered on a line-by-line basis. Under a batch cut process,
17 these activities might be undertaken simultaneously for all lines
18 affected by a given batch order.⁶

19 In short, the FCC concluded that the TELRIC costs for a batch hot cut process
20 would be less than those for the typical provisioning of single unbundled loops.
21 The FCC further anticipated that it would reduce the cost to the CLECs and allow
22 the CLECs “to compete effectively in the mass market” in the absence of access
23 to unbundled local switching or the UNE-P platform.

24

⁶ *Id.*

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1 **Q. DID THE FCC EXPECT THE KENTUCKY PUBLIC SERVICE**
2 **COMMISSION TO ESTABLISH A TELRIC-BASED RATE FOR BATCH**
3 **HOT CUTS?**

4 A. Yes. The FCC indicated in the TRO that: “State commissions must approve,
5 within nine months of the effective date of this Order, a batch cut migration
6 process to be implemented by incumbent LECs that will address the *costs* and
7 timeliness of the hot cut process.”⁷ It is my understanding that this Commission
8 undertook to fulfill this requirement outlined in the TRO, among others, in Case
9 No. 2003-00379 on October 2, 2003. A procedural schedule was set for this case
10 and discovery requests related to the costs of hot cuts were directed by the
11 Kentucky PSC Staff to BellSouth. Specifically, the Kentucky PSC Staff, among
12 other issues, sought discovery from BellSouth regarding “what are the appropriate
13 TELRIC rates for the batch-cut activities?”⁸

14
15 **Q. DID THE KENTUCKY PUBLIC SERVICE COMMISSION COMPLETE**
16 **ITS INVESTIGATION INTO THE COSTS FOR BATCH HOT CUTS AND**
17 **THE ESTABLISHMENT OF TELRIC-BASED RATES CONSISTENT**
18 **WITH THE REQUIREMENTS OF THE TRO?**

19 A. No. On March 2, 2004, the U.S. Court of Appeals for the District of Columbia
20 issued its decision remanding in part and vacating in part the FCC’s *TRO Order*.⁹
21 It is my understanding that the Court’s vacatur created uncertainty as to the role of
22 state commissions in conducting the proceedings required by the TRO. After the

⁷ TRO at ¶ 488. (Emphasis added.)

⁸ Kentucky Public Service Commission, Staff Data Request No. 6(3), October 10, 2003.

⁹ *United States Telecom Association v. FCC*, 359 F.3d 554 (2004) (“*USTA IP*”).

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1 Court of Appeals decision, the Commission issued an order that effectively ended
2 the proceedings in Case No. 2003-00379. As a result, TELRIC-based batch hot
3 cut rates were never established for BellSouth in Kentucky. As discussed by
4 witness Jim Bellina, Dialog was required to utilize the BellSouth batch hot cut
5 process (Bulk Migration) to convert the unbundled loops of its UNE-P customers
6 over to Dialog's line termination equipment and switching facilities by March 11,
7 2006. Despite negotiations with BellSouth, the parties were never able to agree
8 upon an appropriate rate that reflected the efficiencies of a batch hot cut process.
9 As a result, Dialog needs the Commission to establish cost-based rates for the
10 batch hot process. Dialog has requested that I provide the Commission with an
11 appropriate cost-based rate for the batch hot cut process.

12

13 **IV. EVALUATION OF THE PRESENT RATE FOR HOT CUTS IN**
14 **KENTUCKY**

15 **Q. ARE YOU ABLE TO PROVIDE THE COMMISSION WITH A SENSE OF**
16 **THE RATES FOR HOT CUTS THAT DIALOG IS PRESENTLY BEING**
17 **CHARGED BY BELLSOUTH IN KENTUCKY?**

18 A. Yes. Exhibit SET-2 represents a sample of the charges that Dialog has been
19 billed by BellSouth in Kentucky for the bulk migration hot cuts to cross connect
20 Dialog customers' loops from the UNE-P configuration to the line termination
21 equipment in Dialog's collocation space. Specifically, there are three main
22 nonrecurring charges that BellSouth imposes: (1) CLEC Service Request
23 Processing, per Mechanized LSR (USOC – SOMEK) of \$3.50; (2) Physical

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1 Expanded Interconnection Two-Wire Cross Connect, Provisioning (USOC –
2 PE1P2) of \$33.67; and (3) Unbundled Voice Loop, 2-Wire, Loop and Ground
3 Start UVL-SL1 Only (USOC – UEASL) of \$46.66 for a total nonrecurring charge
4 of \$83.83. This charge of \$83.83 is for a customer that Dialog has already been
5 serving utilizing a loop that has already been provisioned. And yet, BellSouth
6 imposes a nonrecurring charge for the provisioning of a standalone loop even
7 though the loop serving the Dialog customer is already provisioned and in service.
8 My testimony will address the appropriateness of each of these charges to a batch
9 or bulk hot cut process.

10

11 **Q. DO THESE CHARGES REPRESENT TELRIC-BASED RATES FOR A**
12 **BATCH OR BULK MIGRATION HOT CUT AS REQUIRED BY THE**
13 **FCC IN THE *TRO*?**

14 A. Absolutely not. As an initial matter, BellSouth, to my knowledge, did not provide
15 a Batch or Bulk Hot Cut TELRIC cost study to reflect the efficiencies noted by
16 the FCC anywhere in its territory, as other incumbents did.

17

18 For example, SBC developed a comprehensive Batch or Bulk Hot Cut Cost Study
19 that I reviewed in detail and filed testimony on this cost study in the six states that
20 I referenced earlier. I also reviewed the Verizon Batch or Bulk Hot Cut Cost
21 Study in detail. My point being that at least these two large incumbents
22 recognized that the activities involved in performing a Batch or Bulk Hot Cut and
23 the requirements of the FCC's *TRO* necessitated the development of a separate

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1 cost study for this element. BellSouth never undertook such a study to my
2 knowledge. As a result, the nonrecurring rates that BellSouth proposes simply
3 represent the standalone charges that BellSouth would typically charge for the
4 new installation of a new unbundled loop cross connected to the CLEC
5 collocation equipment. BellSouth's proposed rates do not reflect any of the
6 efficiencies that the FCC explicitly noted should be evident when performing hot
7 cuts in a bulk or batch process.

8

9 **Q. ARE YOU ABLE TO PROVIDE THE COMMISSION WITH A SENSE OF**
10 **THE RATES FOR PROVISIONING A STANDALONE LOOP UNDER**
11 **BELLSOUTH'S RATE SCHEDULE PRESENTLY?**

12 A. Yes. Dialog provided to me what I have provided as Exhibit SET-3. In this
13 document there are also three main nonrecurring charges that BellSouth imposes:
14 (1) CLEC Service Request Processing, per Mechanized LSR (USOC – SOMEK)
15 of \$3.50; (2) Physical Expanded Interconnection Two-Wire Cross Connect,
16 Provisioning (USOC – PE1P2) of \$33.67; and (3) Unbundled Voice Loop, 2-
17 Wire, Loop and Ground Start UVL-SL1 Only (USOC – UEASL) of \$46.66. I
18 would note that these are the exact same nonrecurring charges that BellSouth
19 would impose for the provisioning of an unbundled loop regardless of whether
20 there is a batch hot cut process in place or not. The fact that BellSouth charges no
21 differently for a Batch or Bulk Hot Cut for the bulk migration of an existing base
22 of UNE-P loops than it does for the provisioning and cross connecting of a single
23 new stand-alone unbundled loop certainly indicates that BellSouth has not

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1 reflected any of the efficiencies that the FCC requires in its bulk or batch hot cut
2 rates.

3

4 **Q. HAVE YOU HAD AN OPPORTUNITY TO REVIEW THE BELLSOUTH**
5 **COST STUDIES THAT UNDERLY THE RATE ELEMENTS THAT**
6 **BELLSOUTH IS CHARGING?**

7 A. Yes. I have had a brief opportunity to review the specific cost studies for
8 Kentucky that underlie these nonrecurring charges. I have also participated in
9 cost proceedings involving BellSouth in Florida, Georgia, and North Carolina
10 where I have reviewed these same rate elements in great detail. As such, I am
11 familiar with the types of work activities that BellSouth incorporates into the
12 development of these cost studies.

13 **A. CLEC Service Order Nonrecurring Charge**

14 **Q. DO YOU HAVE ANY COMMENTS REGARDING THE RATE LEVEL**
15 **OR APPLICATION OF THE CLEC SERVICE ORDER CHARGE**
16 **IMPOSED BY BELLSOUTH?**

17 A. Generally, it is reasonable to anticipate that a service order charge would be
18 appropriate for a Batch or Bulk Hot Cut. Consistent with the requirements of the
19 FCC's *TRO*, a more appropriate manner in which to calculate the service order
20 costs would be to recognize that multiple hot cuts will be placed in a batch or bulk
21 migration order resulting in some potential efficiencies in the ordering process.
22 However, BellSouth's rate for the nonrecurring service order charge does not
23 appear to have considered these potential efficiencies since BellSouth charges

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1 precisely the same service order nonrecurring charge in both circumstances – a
2 Bulk Hot Cut or a one-at-a-time addition of a new customer loop.

3 **B. Physical Expanded Interconnection Two-Wire Cross Connect**

4 **Q. DO YOU HAVE ANY COMMENTS REGARDING THE RATE LEVEL**
5 **OR APPLICATION OF THE NONRECURRING CHARGE IMPOSED BY**
6 **BELLSOUTH FOR TWO-WIRE CROSS CONNECTS?**

7 A. There are numerous issues that need to be evaluated relative to the application of
8 this rate element with regard to batch or bulk hot cuts.

9
10 In its more recent updated cost studies, it is apparent that BellSouth does not
11 believe that a nonrecurring charge for this element is appropriate. In Georgia,
12 where one of the more recent BellSouth cost proceedings took place, I testified
13 regarding the nonrecurring charges generally as well as the collocation rate
14 elements in BellSouth's cost studies. The Physical Expanded Interconnection
15 Two-Wire Cross Connect was one of the rate elements that I reviewed. In the
16 Georgia cost proceeding, BellSouth did not even seek a nonrecurring charge for
17 the Physical Expanded Interconnection Two-Wire Cross Connect rate element.
18 Rather, in BellSouth's cost study and rate proposal, BellSouth proposed only a
19 recurring rate element of \$0.0197 per cross connect per month. In Kentucky, the
20 Physical Expanded Interconnection Two-Wire Cross Connect rate element also
21 has a recurring charge component of \$0.0333 per cross connect per month.

22

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1 I am not trying to address the absolute rate levels here or attempting to guess why
2 BellSouth would charge 69 percent more in recurring rates in Kentucky for
3 substantially the same costs as are incurred in Georgia. However, based on my
4 detailed review of the BellSouth cost study in Georgia and the related
5 nonrecurring rate elements, there is certainly no need for there to be a specific
6 nonrecurring charge for this element in Kentucky, just as BellSouth has found to
7 be the case and implemented in Georgia. The reason for this is that BellSouth
8 recovers the nonrecurring work activities and costs associated with the cross
9 connects in its “Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-
10 SL1 Only” nonrecurring rate element, which I will address in more detail below.
11 My point here is that if the Commission were to require BellSouth to
12 comprehensively evaluate the costs associated with a hot cut, one would find that
13 there is no incremental nonrecurring work associated with the Physical Expanded
14 Interconnection Two-Wire Cross Connect rate element that is not already being
15 recovered in other non-recurring charges. BellSouth found as much in Georgia in
16 one of its most recent cost proceedings and reflected as much in its cost studies
17 and rate proposal.

18

19 **Q. IS IT POSSIBLE THAT BELL SOUTH MIGHT NOT RECOVER THE**
20 **CROSS-CONNECT WORK ACTIVITIES IN THE 2-WIRE LOOP**
21 **NONRECURRING CHARGE?**

22 A. This does not appear to be the case. Moreover, this was one of the reasons that I
23 sought to see the BellSouth cost studies used to set the nonrecurring rates

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1 currently in effect in Kentucky. One of the tasks included in the BellSouth-
2 Kentucky cost study for the 2-Wire Analog Loop is “CO Field wires circuit at
3 collocation site.”¹⁰ For a Service Level 2 Loop, BellSouth has included
4 *****PROPRIETARY ■ END PROPRIETARY***** minutes for this wiring
5 work at the collocation site.¹¹ For a Service Level 1 Loop, BellSouth has included
6 *****PROPRIETARY ■ END PROPRIETARY***** minutes for this wiring
7 work at the collocation site.¹² In other words, BellSouth includes in its cost
8 development for the nonrecurring 2-Wire Analog Loop NRC the cost to perform
9 wiring work for the collocation arrangement. This work is performed by central
10 office technicians (referred to in the cost study as a labor code of “431X”
11 technicians).¹³

12
13 Precisely the same type of technician (431X) performs the “Connect & Test”
14 function in the 2-Wire Cross-Connects element in BellSouth-Kentucky’s Physical
15 Collocation Cost Study. BellSouth does not provide in either of the cost studies
16 (the 2-Wire Loop or the 2-Wire Cross-Connect) much in the way of detail
17 regarding the tasks performed by this technician. In the 2-Wire Cross-Connect

¹⁰ BellSouth-Kentucky Cost Study, “KY-2W__Inputs” Workbook, “INPUTS_CONNECT&TEST” Worksheet, Rows 44-45.

¹¹ BellSouth-Kentucky Cost Study, “KY-2W__Inputs” Workbook, “INPUTS_CONNECT&TEST” Worksheet, Cell E44.

¹² BellSouth-Kentucky Cost Study, “KY-2W__Inputs” Workbook, “INPUTS_CONNECT&TEST” Worksheet, Cell E45.

¹³ BellSouth-Kentucky Cost Study, “KY-2W__Inputs” Workbook, “INPUTS_CONNECT&TEST” Worksheet, Cells D44 and D45.

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1 cost study, BellSouth has included *****PROPRIETARY ■ END**
2 **PROPRIETARY***** minutes for this wiring work at the collocation site.¹⁴
3 However, the important point here is that BellSouth has included in its Kentucky
4 cost studies wiring work for the collocation arrangement in both the 2-Wire
5 Analog Loop NRC and the 2-Wire Cross-Connect NRC with roughly the same
6 amount of time. As noted above, in Georgia BellSouth did not retain both of
7 these nonrecurring charges eliminating the nonrecurring charge associated with
8 the 2-Wire Cross-connect in that the labor was already included in the 2-Wire
9 Loop. The same needs to take place in Kentucky.
10
11 I would also point out that BellSouth did not receive a significantly higher NRC
12 for the 2-Wire Analog Loop given that it was not seeking an NRC for the 2-Wire
13 Cross-Connect. In Georgia (where there is no nonrecurring charge for the
14 Physical Expanded Interconnection Two-Wire Cross Connect rate element)
15 BellSouth charges a nonrecurring charge of \$40.02 for the Unbundled Voice
16 Loop, 2-Wire, Loop and Ground Start UVL-SL1 nonrecurring rate element. In
17 Kentucky, the same rate element has a nonrecurring charge of \$46.66. There
18 should not be a significant difference in nonrecurring activities, labor rates, or
19 probabilities that a task would occur depending on whether a cross connect is
20 performed in Kentucky or Georgia. As such, the relative similarity of these rates
21 (\$40.02 in Georgia and \$46.66 in Kentucky) would indicate to me that generally

¹⁴ BellSouth-Kentucky Cost Study, "KYPHYCOL__Input" Workbook, "INPUTS_Nonrecurring" Worksheet, Cell H16.

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1 the same costs associated with work activities are included in both and that
2 BellSouth is recovering the cross-connect work in its 2-Wire Analog Loop
3 nonrecurring cost in Kentucky just as it does in Georgia. The bottom line is that
4 there is no justification for the nonrecurring charge that BellSouth is imposing for
5 the Physical Expanded Interconnection Two-Wire Cross Connect rate element --
6 either in a Batch or Bulk Hot Cut scenario or for a new loop scenario either.

7 **C. Unbundled Voice Loop Nonrecurring Charge**

8 **Q. DO YOU HAVE ANY COMMENTS REGARDING THE RATE LEVEL**
9 **OR APPLICATION OF THE NONRECURRING CHARGE IMPOSED BY**
10 **BELLSOUTH FOR UNBUNDLED VOICE LOOP?**

11 A. Yes. This rate element is designed to allow BellSouth to recover the cost for
12 provisioning a new loop from the central office to a customer premises and then
13 for that loop to be cross-connected to the designated frame in the collocation
14 space where the CLEC collocation space where the CLEC connects its equipment.
15 Based on my experience in reviewing numerous BellSouth's cost studies for this
16 rate element in other states as well as briefly here in Kentucky, the typical
17 activities and costs associated with this rate element include (1) loop engineering
18 work, (2) order assignment to field personnel for work in provisioning the new
19 loop, (3) the actual provisioning of the loop in the field, (4) coordination with the
20 dispatched technicians, and (5) wiring and testing at the Main Distribution Frame
21 in the central office. With the exception of the last step in this process -- the
22 wiring and testing at the Main Distribution Frame in the central office -- an
23 existing working loop being utilized by a Dialog UNE-P customer is simply not

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1 going to require the loop engineering work, order assignment to field personnel,
2 provisioning of the new loop in the field, and the coordination with these
3 dispatched field technicians. As such, there simply is no valid basis for this same
4 nonrecurring charge to be applied to both a new installation (which I have shown
5 BellSouth to do) as well as to a batch or bulk hot cut migration of a CLEC's
6 UNE-P base of customers. The work activities for bulk or batch hot cuts for an
7 existing UNE-P customer are significantly different than the work activities
8 associated with provisioning a new loop and should contain more efficiencies and
9 take considerably less time to perform.

10

11 **Q. DO YOU KNOW HOW MUCH OF THE COST ASSOCIATED WITH THE**
12 **ACTIVITY OF WIRING AND TESTING AT THE MAIN DISTRIBUTION**
13 **FRAME IN THE CENTRAL OFFICE IS CONTAINED IN THE**
14 **BELLSOUTH'S NONRECURRING CHARGE FOR THE UNBUNDLED**
15 **VOICE GRADE LOOP IN KENTUCKY?**

16 A. Yes. For a Service Level 1 unbundled loop, BellSouth's cost study demonstrates
17 that approximately *****PROPRIETARY [REDACTED] END PROPRIETARY*****
18 percent of the total nonrecurring cost is associated with the activity of wiring and
19 testing at the main distribution frame in the central office.¹⁵ When this percentage
20 is applied to the total nonrecurring charge of \$46.66, the resulting charge
21 associated with the activity of wiring and testing at the main distribution frame in

¹⁵ BellSouth-Kentucky Cost Study, "A.1.1" Workbook, "NRB Direct" Worksheet, Cells O14 and O33. The percentage is developed by taking the value in Cell O14 which is the cost for the frame work and dividing this by the total cost found in Cell O33.

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1 the central office is approximately *****PROPRIETARY** [REDACTED] **END**

2 **PROPRIETARY***.**

3 **Q. BASED ON YOUR OBSERVATIONS IN OTHER JURISDICTIONS**
4 **WHAT ARE THE APPROXIMATE TIMES AND COSTS ASSOCIATED**
5 **WITH THE WIRING AND TESTING AT THE CENTRAL OFFICE?**

6 A. In the context of an SBC case to establish cost-based rates for the bulk or batch
7 hot cut process pursuant to the TRO, I was able to observe SBC technicians
8 performing these testing and wiring activities in a large central office in Indiana.
9 I literally held a stopwatch as I observed the activities of the SBC technicians
10 involved in performing cross-connects on both an intermediate distribution frame
11 (“IDF”) and on a main distribution frame (“MDF”). I would note that in my
12 experience, intermediate distribution frames are rarely needed and should not be
13 considered as forward-looking technology in developing a TELRIC cost study.
14 However, in the particular hot cuts that I observed, cross-connects were required
15 on both the IDF and MDF to complete the circuit from the unbundled loop to the
16 collocation arrangement.

17
18 As the first step in the process, the technician printed out an order that identified
19 the cross-connects that were necessary to implement the hot cut. The time for
20 performing this activity was less than a minute. Next, the technician was required
21 to perform the wiring work and cross connections between the appearance on the
22 MDF of the unbundled loop to the appearance on the IDF (in this particular
23 instance) of the CLEC’s expanded interconnection collocation arrangement.

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1 Because of the use of an MDF and IDF, two cross-connects were required. The
2 activity necessary to make the cross-connect on the IDF required the technician to
3 obtain approximately 100 feet of wiring and required a total time of four minutes.
4 This time is slightly longer than the time that I would recommend for a cost study
5 due to two factors. *First*, each of the cross-connects that the technician performed
6 were at the very top of the IDF requiring a ladder on both ends of the cross-
7 connect and the lengths of the cross-connects were approximately 100 feet each.
8 In other words, these were very close to worst-case scenario cross-connects.
9 *Second*, the technician was performing this work in front of audience of around 30
10 people and his hands were visibly shaking when he was performing his work. My
11 point being that even in an environment where the technician had to work in what
12 was close to a worst case scenario in front of an audience of 30 people, the time
13 that he took to perform the cross-connect was four minutes.

14
15 A different SBC technician then performed a cross-connect on the MDF. This
16 cross-connect was shorter in distance (approximately 10-15 feet in length) and the
17 cross-connect took approximately one minute to perform. In other words, while
18 this is certainly not a statistical sample, the average time per cross-connect for
19 these two that I observed was around 2.5 minutes. Based on my prior wiring
20 experience at AT&T, the wiring time for cross-connects would typically be

PUBLIC VERSION

1 around two to three minutes -- so the activities I observed with the SBC
2 technicians was well within this range.¹⁶

3

4 **Q. DID THIS COMPLETE YOUR OBSERVATION OF THE ACTIVITIES**
5 **NECESSARY TO PERFORM A CROSS CONNECT AND HOT CUT?**

6 A. No. There were two other tasks that we observed. First, prior to the due date of a
7 hot cut, the technician will perform a Dial Tone and Automatic Number
8 Identification ("ANI") Test on the loop as part of the "pre-due date" tasks. In my
9 observation, this testing took virtually no time to perform. Specifically, the
10 technician carries with him/her a telephone test device that has two clips for the
11 two wires that make up a jumper cross-connect. The technician strips off a short
12 piece of the insulation on the wires so that the technician can clip on the telephone
13 test set. The SBC technician performed this work in literally five seconds.¹⁷ The
14 technician then clips the test set onto the pair of exposed wires and checks for dial
15 tone. This work also only takes a matter of seconds. Finally, if dial tone exists on
16 the line, the technician dials a code to have the switch identify the ANI for the

¹⁶ The SBC technicians in Indiana actually performed the cross-connects for two lines requiring a total of four cross-connects -- two on the IDF and two on the MDF. The second cross-connects on the IDF and MDF were the same times as the initial that I have described above.

¹⁷ It is possible that the reader of this testimony will have tried to strip off wires at home and will wonder how this could be done in five seconds. I would point out that the technician has a tool that he/she carries that is perfectly designed to do this work. In addition, frame technicians perform this work countless numbers of times. Finally, the gauge of wire that do-it-yourselfers deal with at home is much thicker than the gauge of wire used for cross-connects making the cross-connect stripping much simpler (although trained electricians with the right tools can also perform the work in our homes very quickly).

PUBLIC VERSION

1 line (the telephone number of the customer), this recording is provided audibly to
2 the technician. In total this work only requires approximately 30 seconds.

3

4 Now, if this test fails, then the technician must perform cross-office testing to
5 ensure connectivity. Again, this testing is only done if the simpler tests described
6 above fail. The SBC technicians demonstrated this testing as well (although it
7 was not required) and I observed that this took approximately two minutes. In
8 other words, in most instances with a hot cut, the testing time will be
9 approximately 30 seconds, but will be an additional two minutes when this initial
10 test indicates that the line is not working properly. Based on my experience and
11 review of BellSouth and other cost studies, it would be reasonable to anticipate
12 that the longer cross-office testing would only be required approximately 10
13 percent of the time. Thus, if the amount of time for the initial test and any
14 subsequent tests are properly weighted using these percentages, the resulting
15 average time for performing the testing in the central office to perform the hot cut
16 testing would be 0.70 minutes.

17

18 Finally, there is the removal of the old cross-connect between the unbundled loop
19 and the unbundled switch port. It should be noted that there are good reasons why
20 this cross-connect removal cost should not be borne by the CLEC at all.

21

22 Specifically, if this connection between the loop and port were initially
established by the retail customer, then the cost of removal of the connection upon

PUBLIC VERSION

1 the discontinuance of its use would have been recovered in the retail charges paid
2 by the retail customer. However, even if the Commission were to include this
3 type of activity in estimating the time involved in a hot cut, I observed that the
4 SBC technicians took approximately 10 seconds to remove the old cross-connect.
5 SBC technicians have a simple plastic tool that allows them to reach into the
6 MDF and quickly lift the cross-connect off of the two terminals that it is tied to.
7 With this done, the technician simply pulled the jumper wire out of the frame.¹⁸
8 This part of the task took literally no more than five seconds. Thus, even if
9 BellSouth were allowed to double recover for these costs from both the CLEC
10 and the retail customer, the maximum amount of time that the Commission should
11 consider as being reasonable is 0.25 minutes.

12

13 **Q. BASED ON THIS AMOUNT OF LABOR TIME WHAT ARE THE**
14 **APPROXIMATE COSTS OF PERFORMING THIS ACTIVITY TO**
15 **CROSS CONNECT A UNE LOOP TO A CLEC'S FACILITIES IN THE**
16 **COLLOCATION SPACE?**

17 A. The following table summarizes the tasks and times:

Tasks	Time
Print Out Order	1.00
Perform Cross-Connect	2.50
Perform Testing	0.70
Remove Old Cross-Connect	0.25
Close Out Order	1.00
Total	5.55

18

¹⁸ When the technician lifted the first end of the cross-connect, the technician also snipped off the end of the jumper so as to ensure that when it was pulled through, it would not cause a nick in any of the jumpers that it would pass by when being pulled.

PUBLIC VERSION

1 Based on my experience in reviewing BellSouth's cost studies, I have assumed a
2 loaded labor rate of approximately \$55 per hour. Based on this loaded labor rate
3 and the approximate and reasonable amount of time it takes to perform these
4 tasks, the rate for a Batch or Bulk Hot Cut of an existing UNE-P customer's line
5 should be approximately \$5.09. With the existing \$3.50 service order charge, this
6 leads to approximately a \$8.50 hot cut of an existing UNE-P customer instead of
7 the \$83.83 that BellSouth is currently charging regardless of whether the hot cut is
8 part of a Batch or Bulk Hot Cut process or is simply the provisioning of a new
9 customer for the CLEC.

10 **V. COMMISSION RECOMMENDATION**

11 **Q. WHAT THEN WOULD YOU RECOMMEND THAT THE COMMISSION**
12 **DO REGARDING THE CURRENT NONRECURRING CHARGES THAT**
13 **BELLSOUTH IMPOSES FOR A BATCH OR BULK HOT CUT**
14 **MIGRATION OF DIALOG'S UNE-P CUSTOMER BASE?**

15 A. *First*, even though I believe there may be opportunities to identify efficiencies in
16 the existing service order nonrecurring charge of \$3.50, I would recommend that
17 the Commission retain this charge as continuing to be applicable in a hot cut
18 environment. The scope of this arbitration does not specifically include reopening
19 existing rates that this Commission has already set. As such, I would leave this
20 rate alone.

21
22 *Second*, I believe that the Commission should clarify that the Physical Expanded
23 Interconnection Two-Wire Cross Connect nonrecurring charge of \$33.67 should

PUBLIC VERSION

1 not be applicable. As discussed earlier in my testimony, the work activities
2 associated with the cross-connects between the collocation arrangement
3 appearance at the IDF/MDF and the loop appearance at the MDF are already
4 included in the 2-Wire Loop nonrecurring charge. BellSouth's recent cost filing
5 in Georgia did not even seek a nonrecurring charge for this element. BellSouth
6 only charges a recurring rate which already exists in Kentucky.

7

8 *Third*, the Commission needs to establish a Batch or Bulk Hot Cut nonrecurring
9 charge that would apply in instances where the migration is from an existing
10 working loop and there is already service on the unbundled loop. No provisioning
11 of the loop is required in that the same loop continues serving the customer. Only
12 the cross-connect work that I have described in detail above would be necessary.
13 My time estimates from direct observation of SBC personnel in Indiana would
14 lead to an estimated cost of \$5.09. However, the scope of this Arbitration is not
15 specifically related to the details of cost studies in order for me to make specific
16 adjustments to the times and costs associated with wiring and testing at the central
17 office for a Batch or Bulk Hot Cut.

18

19 That said, there is an alternative existing rate element in BellSouth-Kentucky
20 territory that I would recommend that the Commission use instead. Specifically,
21 the rate element is the "CLEC to CLEC Conversion Charge without Outside
22 Dispatch" (USOC – UREWO) which has a nonrecurring charge of \$14.27 for the

PUBLIC VERSION

1 initial cross-connect and a nonrecurring charge of \$7.43 for the additional cross-
2 connect. This \$7.43 charge for the additional “CLEC to CLEC Conversion
3 Charge without Outside Dispatch” is reasonably close to the time and cost I
4 estimated above. My understanding of the wiring and testing work that a
5 BellSouth technician must perform for a CLEC to CLEC Conversion Charge is
6 the closest analog in the existing set of rates that this Commission has already
7 approved to what would be required to cross connect an existing Dialog UNE-P
8 customer with a working loop to Dialog’s line termination equipment in its
9 collocation space. With this rate element, the nonrecurring charge covers
10 BellSouth’s work to move the cross-connects for the loop appearance at the MDF
11 from one CLEC to another CLEC. If one considers that one of the “carriers”
12 could be BellSouth, then the cost of moving the loop appearance from BellSouth
13 to another CLEC (*i.e.* a “hot cut”) should be estimated as either the “initial”
14 \$14.27 nonrecurring charge for this element or the “additional” \$7.43
15 nonrecurring charge for this element. Given that the “initial” labor times in
16 BellSouth’s cost studies typically include travel time to the work site and that
17 with a Batch or Bulk Hot Cut, the vast majority of the lines being cut-over (all but
18 the first) would not involve any travel, it is the “additional” charge of \$7.43 that
19 should apply to Batch or Bulk Hot Cuts in Kentucky.

20

21 Finally, given that my estimate attempts to extract the work activities and costs
22 associated with wiring and testing for the cross- connect from the Two-Wire Loop

PUBLIC VERSION

1 nonrecurring charge, the Two-Wire Loop nonrecurring rate element should not be
2 applicable. The other activities and costs recovered through that charge – the loop
3 engineering work, order assignment to field personnel, provisioning of the new
4 loop in the field, and the coordination with these dispatched field technicians – is
5 simply not applicable in this instance in that a new loop is not being provisioned.
6 The customer’s working loop is simply being migrated from the UNE-P platform
7 over to Dialog’s collocation equipment.

8

9 **Q. DO YOU HAVE ANY OPINION ON WHEN THIS RATE ELEMENT**
10 **SHOULD BE APPLIED?**

11 A. Yes. As I noted at the beginning of this testimony, the FCC in the *TRO*
12 envisioned a situation where CLECs would lose access to § 251 unbundled
13 switching and have to replace this element with their own switching facilities.
14 Consistent with this approach, the FCC also required the following: “We
15 conclude that the loop access barriers contained in the record may be mitigated
16 through the creation of a batch cut process by spreading loop migration costs
17 among a large number of lines, decreasing per-line cut over costs.”¹⁹ The FCC
18 clearly anticipated that the migration of UNE-P lines to an environment where the
19 CLEC would utilize the existing UNE Loop but provide for its own switching
20 would occur with “decreasing per-line cut over costs.”

¹⁹ TRO at ¶ 487.

PUBLIC VERSION

1 As discussed by witness Jim Bellina, Dialog was required to utilize the BellSouth
2 batch hot cut process (Bulk Migration) to convert the unbundled loops of its
3 UNE-P customers over to Dialog's line termination equipment and switching
4 facilities by March 11, 2006. The cut over of unbundled loops consistent with
5 this deadline should have been performed consistent with the "decreasing per-line
6 cut over costs" required by the FCC's *TRO*. In other words, the Batch or Bulk
7 Hot Cut rate that this Commission approves today should have been in effect prior
8 to the loss of unbundled switching. The FCC saw a low-cost hot cut process as
9 being tied together with the elimination of unbundled switching. The fact that
10 BellSouth was able to take back unbundled switching prior to implementing a
11 cost-based Batch or Bulk Hot Cut rate should not negate the fact that it should
12 have applied back to the cutovers associated with the March 11, 2006 date.

13

14 In short, this Commission should find that the \$7.43 additional "CLEC to CLEC
15 Conversion Charge without Outside Dispatch" charge should apply for all hot
16 cuts back to the March 11, 2006 date or any hot cuts that took place attempting to
17 meet that date.

18

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

20 A. Yes it does.

Case No. 2006-00099
Testimony of Steven E. Turner
July 26, 2006

EXHIBIT SET - 1

STEVEN E. TURNER

2031 Gold Leaf Parkway
Canton, Georgia 30114

678-493-9700 (Voice)
678-493-9701 (FAX)

KALEO CONSULTING EMPLOYMENT EXPERIENCE:

TELECOMMUNICATIONS AND FINANCIAL CONSULTANT (Jan 1997-Present)

- Provide expert testimony on technical issues surrounding the unbundling and interconnection to incumbent Local Exchange Company (ILEC) networks. The testimony includes analysis of ILEC unbundling and interconnection per the Telecommunications Act of 1996 (Section 271) as well as other technical issues of local market entry. Further, the testimony includes evaluating and conducting unbundled element and interconnection cost studies.
- Provide expert testimony on the level and extent of facilities-based competition in the local market place. This testimony which quantitatively and economically evaluates the extent of competition results in an assessment of ILEC compliance with Section 271 proceedings.
- Develop models to aid companies in developing market entry plans for the local telecommunications market. This assistance includes evaluating what market entry alternatives as well as which geographies provide the best profit opportunities for the new entrant.

AT&T EMPLOYMENT EXPERIENCE:

DISTRICT MANAGER - CONNECTIVITY NETWORK PLANNING - LI&AM (Feb 1996-Dec 1996)

- Managed the development of AT&T's Infrastructure Plans of Record for the Southwest region. These plans entailed defining the right mix of built and leased infrastructure to meet AT&T's local offer needs at the least cost.
- Managed AT&T's dedicated access inventory in the Southwest region. This effort involved identifying the optimum supplier(s) in each market for AT&T's access needs to meet both financial and strategic objectives.

MANAGER - STRATEGIC ACCESS PLANNING - Access Strategic Planning (Nov 1994-Feb 1996)

- Managed the development of strategic models to analyze alternatives for entering the local market. These models considered various technologies for entering local that would optimize the contribution to AT&T from a revenue, expense, and capital perspective.

RE-ENGINEERING MANAGER - Network Operations (Jul 1994-Oct 1994)

- Directed a CCS-NSD management-union team in re-engineering the engineering, provisioning, and maintaining of the Operator Services network. Delivered a re-engineered process that reduced operational expense significantly while mitigating the impacts on customers and employees.

PROJECT MANAGER/SYSTEM ENGINEER - CCS Centralized Test Center (Jan 1992-Jun 1994)

- Coordinated implementation plans and system development for new services and network elements in the Common Channel Signaling (CCS) Network. The planning scope included provisioning, monitoring, and maintaining the T1.5 facilities for the CCS signaling circuits.
- Acquired funding (development, capital, and head count) through writing and defending business cases in support of projects for new services or network elements in the CCS Network. Upon approval, coordinated the implementation of system development and capital projects affecting the CCS Centralized Test Center.

AT&T EMPLOYMENT EXPERIENCE (cont.):

DEPARTMENTAL QUALITY MANAGER - Network Operations (Jan 1990-Jan 1992)

- Developed the Network Operations Quality Management System and implemented it into an organization of 5000 people. Implementation required gaining organizational support for staffing and training 40 Quality Specialists and managing their efforts in transferring the quality technology into Network Operations.

OPERATIONS SUPERVISOR - Regional Network Service Center (Nov 1988-Dec 1989)

- Managed the Regional Network Service Center serving AT&T customers in the Southeastern United States through correcting their service troubles. Responsibilities included leading a team of 20 associates who responded to over 2000 customer troubles per month and escalating with Local Exchange Companies to remove barriers to trouble resolution.

4ESS SWITCH ENGINEER - Network Engineering Services (Dec 1987-Nov 1988)

- Identified current levels of asset utilization, analyzed future needs, and developed a capital budget to purchase and provision the necessary equipment to efficiently meet customer needs. Managed the implementation of over \$10M in capital projects.

GENERAL ELECTRIC EMPLOYMENT EXPERIENCE:

RESEARCH AND DESIGN ENGINEER - Simulation and Control Systems (Jun 1986-Dec 1987)

- Designed and developed a major sub-system for a high-speed graphics simulator supporting both defense and commercial customers.
- Designed and developed a Very Large-Scale Integrated (VLSI) Chip with over 80,000 transistors used in the video display sub-system for the high-speed graphics simulator.

ACHIEVEMENTS:

- Developed the strategic planning system used throughout AT&T Connectivity Planning that identifies the mix of connectivity options (Wireless, CATV, LEC) that AT&T should implement within a market. This model is being used to determine AT&T's local market entry strategy for the entire country.
- Re-engineered the Operator Services operations processes through a collaborative effort of management and union employees yielding \$19.9 million in operational expense savings annually while making the new organization more customer responsive.
- Planned and implemented a modification to the CCS Network data collection architecture resulting in operational expense savings of \$7.3 million per year.
- Significantly advanced the implementation of Total Quality Management in Network Operations through the Quality Specialist strategy initiative begun in 1990.
- Completed development of a Win Back Program for non-AT&T customers who called the Regional Network Service Center in error. This program generated over \$1.6 million in new revenue for AT&T in 1989.
- Designed and developed a Management Information System enabling the measurement of asset utilization in switching equipment at any point in time. The use of the information provided with this system and the resulting changes in engineering practices reduced Network Operations under-utilized switching assets by approximately \$250 million.
- Re-engineered the installation process for switching equipment resulting in a 70% reduction in the installation interval.
- Designed and developed the largest VLSI chip with General Electric at that time in only five months.

EDUCATION:

- August 1990:** **Masters of Business Administration Degree - Finance**
Georgia State University
Atlanta, Georgia
- December 1986:** **Bachelor of Science Degree - Electrical Engineering**
Auburn University
Auburn, Alabama

Case No. 2006-00099
Testimony of Steven E. Turner
July 26, 2006

EXHIBIT SET - 2

MAY 01 06 SO N4B41QX2 PON MA1050
 OCL LOCATION PDCHKYMADS0
 TELEPHONE NUMBER BTN502Q591873EARNING TN270M112711
 CIRCUIT NUMBER 50.TYNU.512698..SC
 CIRCUIT LOCATION 0001
 CHARGE FOR NEW SERVICE
 FROM MAY 02 06 THRU MAY 28 06
 PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning
 LOCAL - KY - EC 5182 .03
 CHARGE FOR NEW SERVICE
 FROM MAY 02 06 THRU MAY 28 06
 PE1PE 1 Physical Expanded Interconnection Services, 2-Wire Cross-Connect POT Bay, per Cross-Connect
 LOCAL - KY - EC 5182 .05
 CIRCUIT LOCATION 0002
 CHARGE FOR NEW SERVICE
 FROM MAY 02 06 THRU MAY 28 06
 UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only
 LOCAL - KY - EC 5182 - ZONE 1 9.50
 CIRCUIT LOCATION 0001
 INITIAL ONE TIME CHARGE
 PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning
 LOCAL - KY - EC 5182 33.67
 CIRCUIT LOCATION 0002
 INITIAL ONE TIME CHARGE
 UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only
 LOCAL - KY - EC 5182 - ZONE 1 46.66
 INITIAL ONE TIME CHARGE
 SOMEK 1 CLEC Service Request Processing, per Mechanized LSR
 LOCAL - KY - EC 5182 3.50

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BILL NO	502 Q59-1873 873	INVOICE NO	502Q591873-06149
		BILL DATE	MAY 29,2006
		OCN 292D	PAGE 25

* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

	BIP	AMOUNT
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+		
CIRCUIT LOCATION 0002 (CONT'D)		
NET EFFECT OF SO N4B41QX2		
PON MA1050		

PER MONTH	FRACTIONAL	ONE-TIME	BILLED AMOUNT
TOTAL - KY - EC 5182			
0.00	9.58	83.83	93.41
MAY 01 06 SO N4B7DQ41 PON RL1055			
OCL LOCATION PDCHKYRLDS1			
TELEPHONE NUMBER BTN502Q591873EARNING TN270M321645			
CIRCUIT NUMBER 50.TYNU.513222..SC			
CIRCUIT LOCATION 0001			
CHARGE FOR NEW SERVICE			
FROM MAY 02 06 THRU MAY 28 06			
PE1P2	1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning		
	LOCAL - KY - EC 5182		.03
CHARGE FOR NEW SERVICE			
FROM MAY 02 06 THRU MAY 28 06			
PE1PE	1 Physical Expanded Interconnection Services, 2-Wire Cross-Connect POT Bay, per Cross-Connect		
	LOCAL - KY - EC 5182		.05
CIRCUIT LOCATION 0002			
CHARGE FOR NEW SERVICE			
FROM MAY 02 06 THRU MAY 28 06			
UEASL	1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only		
	LOCAL - KY - EC 5182 - ZONE 2		13.81
CIRCUIT LOCATION 0001			
INITIAL ONE TIME CHARGE			
PE1P2	1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning		
	LOCAL - KY - EC 5182		33.67
CIRCUIT LOCATION 0002			
INITIAL ONE TIME CHARGE			
UEASL	1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only		
	LOCAL - KY - EC 5182 - ZONE 2		46.66
INITIAL ONE TIME CHARGE			
SOMEC	1 CLEC Service Request Processing, per Mechanized LSR		
	LOCAL - KY - EC 5182		3.50

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BILL NO	502 Q59-1873 873	INVOICE NO	502Q591873-06149
		BILL DATE	MAY 29, 2006
		OCN 292D	PAGE 26

* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

BIP	AMOUNT
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+

CIRCUIT LOCATION 0002 (CONT'D)				
NET EFFECT OF SO N4B7DQ41		PON RL1055		
PER MONTH	FRACTIONAL	ONE-TIME		BILLED AMOUNT
TOTAL - KY - EC 5182				
0.00	13.89	83.83		97.72

MAY 01 06 SO N4B8W2V3 PON MA1079
 OCL LOCATION PDCHKYMADS0
 TELEPHONE NUMBER BTN502Q591873EARNING TN270M155223
 CIRCUIT NUMBER 50.TYNU.512721..SC
 CIRCUIT LOCATION 0001

CHARGE FOR NEW SERVICE
 FROM MAY 02 06 THRU MAY 28 06
 PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning
 LOCAL - KY - EC 5182 .03

CHARGE FOR NEW SERVICE
 FROM MAY 02 06 THRU MAY 28 06
 PE1PE 1 Physical Expanded Interconnection Services, 2-Wire Cross-Connect POT Bay, per Cross-Connect
 LOCAL - KY - EC 5182 .05

CIRCUIT LOCATION 0002
 CHARGE FOR NEW SERVICE
 FROM MAY 02 06 THRU MAY 28 06
 UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only
 LOCAL - KY - EC 5182 - ZONE 1 9.50

CIRCUIT LOCATION 0001
 INITIAL ONE TIME CHARGE
 PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning
 LOCAL - KY - EC 5182 33.67

CIRCUIT LOCATION 0002
 INITIAL ONE TIME CHARGE
 UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only
 LOCAL - KY - EC 5182 - ZONE 1 46.66

INITIAL ONE TIME CHARGE
 SOMECL 1 CLEC Service Request Processing, per Mechanized LSR
 LOCAL - KY - EC 5182 3.50

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BILL NO	502 Q59-1873 873	INVOICE NO	502Q591873-06149
		BILL DATE	MAY 29, 2006
		OCN 292D	PAGE 27

* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

	BIP	AMOUNT
CIRCUIT LOCATION 0002 (CONT'D)		
NET EFFECT OF SO N4B8W2V3	PON MA1079	
PER MONTH	FRACTIONAL	ONE-TIME
TOTAL - KY - EC 5182		BILLED AMOUNT
0.00	9.58	83.83
		93.41
MAY 01 06 SO N4CF3F13	PON RL1041	
OCL LOCATION PDCHKYRLDS1		
TELEPHONE NUMBER BTN502Q591873EARNING TN270M319511		
CIRCUIT NUMBER 50.TYNU.513213..SC		
CIRCUIT LOCATION 0001		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning		
LOCAL - KY - EC 5182		.03
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1PE 1 Physical Expanded Interconnection Services, 2-Wire Cross-Connect POT Bay, per Cross-Connect		
LOCAL - KY - EC 5182		.05
CIRCUIT LOCATION 0002		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 2		13.81
CIRCUIT LOCATION 0001		
INITIAL ONE TIME CHARGE		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning		
LOCAL - KY - EC 5182		33.67
CIRCUIT LOCATION 0002		
INITIAL ONE TIME CHARGE		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 2		46.66
INITIAL ONE TIME CHARGE		
SOMEK 1 CLEC Service Request Processing, per Mechanized LSR		
LOCAL - KY - EC 5182		3.50

CONTINUED

INVOICE NO 502Q591873-06149
 BILL DATE MAY 29, 2006
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* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

		BIP	AMOUNT
CIRCUIT LOCATION 0002 (CONT'D)			
NET EFFECT OF SO N4CF3F13	PON RL1041		
PER MONTH FRACTIONAL	ONE-TIME		BILLED AMOUNT
TOTAL - KY - EC 5182			
0.00	13.89	83.83	97.72
MAY 01 06 SO N4CF4HQ9	PON LO1080		
OCL LOCATION PDCHKYLODS0			
TELEPHONE NUMBER BTN502Q591873EARNING TN270M478036			
CIRCUIT NUMBER 50.TYNU.513156..SC			
CIRCUIT LOCATION 0001			
CHARGE FOR NEW SERVICE			
FROM MAY 02 06 THRU MAY 28 06			
PE1P2 1 Physical Expanded Interconnection Two-Wire Cr			
oss Connect, Provisioning			
LOCAL - KY - EC 5182			.03
CHARGE FOR NEW SERVICE			
FROM MAY 02 06 THRU MAY 28 06			
PE1PE 1 Physical Expanded Interconnection Services, 2			
-Wire Cross-Connect POT Bay, per Cross-Connec			
LOCAL - KY - EC 5182			.05
CIRCUIT LOCATION 0002			
CHARGE FOR NEW SERVICE			
FROM MAY 02 06 THRU MAY 28 06			
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground			
Start UVL-SL1 Only			
LOCAL - KY - EC 5182 - ZONE 2			13.81
CIRCUIT LOCATION 0001			
INITIAL ONE TIME CHARGE			
PE1P2 1 Physical Expanded Interconnection Two-Wire Cr			
oss Connect, Provisioning			
LOCAL - KY - EC 5182			33.67
CIRCUIT LOCATION 0002			
INITIAL ONE TIME CHARGE			
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground			
Start UVL-SL1 Only			
LOCAL - KY - EC 5182 - ZONE 2			46.66
INITIAL ONE TIME CHARGE			
SOMEC 1 CLEC Service Request Processing, per Mechaniz			
ed LSR			
LOCAL - KY - EC 5182			3.50

BILL NO 502 Q59-1873 873

INVOICE NO 502Q591873-06149
 BILL DATE MAY 29,2006
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* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

	BIP	AMOUNT
CIRCUIT LOCATION 0002 (CONT'D)		
NET EFFECT OF SO N4CF4HQ9	PON LO1080	
PER MONTH FRACTIONAL	ONE-TIME	BILLED AMOUNT
TOTAL - KY - EC 5182		
0.00	13.89	83.83
		97.72
MAY 01 06 SO N4CGRCP2	PON LO1074	
OCL LOCATION PDCHKYLODS0		
TELEPHONE NUMBER BTN502Q591873EARNING TN270M477833		
CIRCUIT NUMBER 50.TYNU.513151..SC		
CIRCUIT LOCATION 0001		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cr		
oss Connect, Provisioning		
LOCAL - KY - EC 5182		.03
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1PE 1 Physical Expanded Interconnection Services, 2		
-Wire Cross-Connect POT Bay, per Cross-Connec		
LOCAL - KY - EC 5182		.05
CIRCUIT LOCATION 0002		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground		
Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 2		13.81
CIRCUIT LOCATION 0001		
INITIAL ONE TIME CHARGE		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cr		
oss Connect, Provisioning		
LOCAL - KY - EC 5182		33.67
CIRCUIT LOCATION 0002		
INITIAL ONE TIME CHARGE		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground		
Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 2		46.66
INITIAL ONE TIME CHARGE		
SOMECL 1 CLEC Service Request Processing, per Mechaniz		
ed LSR		
LOCAL - KY - EC 5182		3.50

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BILL NO      502 Q59-1873 873
                                         INVOICE NO  502Q591873-06149
                                         BILL DATE   MAY 29,2006
                                         OCN 292D   PAGE    30
  
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* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

	BIP	AMOUNT
	-----	-----
+		
CIRCUIT LOCATION 0002 (CONT'D)		
NET EFFECT OF SO N4CGRCP2	PON LO1074	
PER MONTH	FRACTIONAL	ONE-TIME
TOTAL - KY - EC 5182		BILLED AMOUNT
0.00	13.89	83.83
		97.72
MAY 01 06 SO N4CGVKV4	PON RL1052	
OCL LOCATION PDCHKYRLDS1		
TELEPHONE NUMBER BTN502Q591873EARNING TN270M321546		
CIRCUIT NUMBER 50.TYNU.513221..SC		
CIRCUIT LOCATION 0001		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cr		
oss Connect, Provisioning		
LOCAL - KY - EC 5182		.03
CIRCUIT LOCATION 0002		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground		
Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 2		13.81
CIRCUIT LOCATION 0001		
INITIAL ONE TIME CHARGE		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cr		
oss Connect, Provisioning		
LOCAL - KY - EC 5182		33.67
CIRCUIT LOCATION 0002		
INITIAL ONE TIME CHARGE		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground		
Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 2		46.66
INITIAL ONE TIME CHARGE		
SOMEC 1 CLEC Service Request Processing, per Mechaniz		
ed LSR		
LOCAL - KY - EC 5182		3.50
NET EFFECT OF SO N4CGVKV4	PON RL1052	
PER MONTH	FRACTIONAL	ONE-TIME
TOTAL - KY - EC 5182		BILLED AMOUNT

0.00

13.84

83.83

97.67

CONTINUED

BILL NO 502 Q59-1873 873

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BILL DATE MAY 29,2006
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* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

Table with columns: Description, BIP, AMOUNT. Includes entries for MAY 01 06 SO N4CHCFM5, PE1P2, PE1PE, UEASL, and SOMEK with associated charges and amounts.

NET EFFECT OF SO N4CHCFM5	PON LO1047	
PER MONTH FRACTIONAL	ONE-TIME	BILLED AMOUNT
TOTAL - KY - EC 5182		
0.00	13.89	83.83
		97.72

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BILL NO          502 Q59-1873 873
                                     INVOICE NO    502Q591873-06149
                                     BILL DATE     MAY 29,2006
                                     OCN 292D     PAGE      32
  
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* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

	BIP	AMOUNT
	_____	_____
+		
MAY 01 06 SO N4CLB191	PON MA1076	
OCL LOCATION PDCHKYMADS0		
TELEPHONE NUMBER BTN502Q591873EARNING TN270M155121		
CIRCUIT NUMBER 50.TYNU.512716..SC		
CIRCUIT LOCATION 0001		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning		
LOCAL - KY - EC 5182		.03
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
PE1PE 1 Physical Expanded Interconnection Services, 2-Wire Cross-Connect POT Bay, per Cross-Connect		
LOCAL - KY - EC 5182		.05
CIRCUIT LOCATION 0002		
CHARGE FOR NEW SERVICE		
FROM MAY 02 06 THRU MAY 28 06		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 1		9.50
CIRCUIT LOCATION 0001		
INITIAL ONE TIME CHARGE		
PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning		
LOCAL - KY - EC 5182		33.67
CIRCUIT LOCATION 0002		
INITIAL ONE TIME CHARGE		
UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only		
LOCAL - KY - EC 5182 - ZONE 1		46.66

INITIAL ONE TIME CHARGE				
SOMEC	1 CLEC Service Request Processing, per Mechaniz			
	ed LSR			
	LOCAL - KY - EC 5182			3.50
NET EFFECT OF SO N4CLB191		PON MA1076		
PER MONTH	FRACTIONAL	ONE-TIME		BILLED AMOUNT
TOTAL - KY - EC 5182				
0.00	9.58	83.83		93.41

Case No. 2006-00099
Testimony of Steven E. Turner
July 26, 2006

EXHIBIT SET - 3

JUN 01 06 SO N4G1JKW8 PON MA2155
 OCL LOCATION PDCHKYMADSO
 TELEPHONE NUMBER BTN502Q591873EARNING TN270M323316
 CIRCUIT NUMBER 50.TYNU.516065..SC
 CIRCUIT LOCATION 0001

CHARGE FOR NEW SERVICE
 FROM JUN 02 06 THRU JUN 28 06
 PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning LOCAL - KY - EC 5182 .03
 CHARGE FOR NEW SERVICE
 FROM JUN 02 06 THRU JUN 28 06
 PE1PE 1 Physical Expanded Interconnection Services, 2-Wire Cross-Connect POT Bay, per Cross-Connect LOCAL - KY - EC 5182 .05
 CIRCUIT LOCATION 0002
 CHARGE FOR NEW SERVICE
 FROM JUN 02 06 THRU JUN 28 06
 UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only LOCAL - KY - EC 5182 - ZONE 1 9.20
 CIRCUIT LOCATION 0001
 INITIAL ONE TIME CHARGE
 PE1P2 1 Physical Expanded Interconnection Two-Wire Cross Connect, Provisioning LOCAL - KY - EC 5182 33.67
 CIRCUIT LOCATION 0002
 INITIAL ONE TIME CHARGE
 UEASL 1 Unbundled Voice Loop, 2-Wire, Loop and Ground Start UVL-SL1 Only LOCAL - KY - EC 5182 - ZONE 1 46.66
 INITIAL ONE TIME CHARGE
 SOMEK 1 CLEC Service Request Processing, per Mechanized LSR LOCAL - KY - EC 5182 3.50

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* * * DETAIL OF OTHER CHARGES AND CREDITS * * *

	BIP	AMOUNT
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CIRCUIT LOCATION 0002 (CONT'D)		
NET EFFECT OF SO N4G1JKW8	PON MA2155	
PER MONTH FRACTIONAL	ONE-TIME	BILLED AMOUNT
TOTAL - KY - EC 5182		
0.00	9.28	83.83
		93.11