COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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

SURREBUTTAL TESTIMONY OF STEVEN E. TURNER

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTH CENTRAL STATES, LLC

APRIL 13, 2004

I. INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

A. Yes. I filed Direct Testimony on February 11, 2004.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. WHY ARE YOU FILING SURREBUTTAL TESTIMONY?

A. I have been asked by AT&T Communications of the South Central States, LLC ("AT&T") to respond to the Rebuttal Testimony of Dr. Debra J. Aron, Mr. W. Keith Milner, and Ms. Kathy K. Blake on behalf of BellSouth Telecommunications Inc. ("BellSouth"). These three witnesses have filed limited rebuttal to my Direct Testimony regarding the AT&T DS0 Impairment Analysis Tools. In my Direct Testimony, I demonstrated that an efficient CLEC would expect to incur an absolute cost disadvantage to BellSouth for providing facilities-based switched service of between $18.31 and $35.10 per month depending on the LATA within BellSouth's territory. In short, my Direct Testimony supports the conclusion that hypothetical efficient CLECs face substantial, absolute cost disadvantages relative to the ILEC in each geographic market in which BellSouth has elected to challenge the FCC's national finding of impairment.

Q. HAVE BELLSOUTH'S WITNESSES OFFERED ANY EVIDENCE THAT YOUR EVALUATION OF THE COST DISADVANTAGE FACED BY CLECS IN KENTUCKY DOES NOT EXIST?

A. Absolutely not. Dr. Aron simply attempts to dismiss my analysis as being "useless."[1] It is not surprising that Dr. Aron would attempt to be so trivializing of my testimony in that it is not possible for her to legitimately rebut the clear cost disadvantage CLECs face in Kentucky. Nonetheless, in the testimony that follows, I address her claims that this Commission should ignore these cost disadvantages and I show that the cost of impairment is a vital consideration that this Commission should evaluate in its determination regarding access to unbundled cost-based switching for CLECs in Kentucky.

Mr. Milner provides five high level criticisms of my impairment cost development.[2] My testimony demonstrates that these criticisms do not in any way undermine the validity of the analysis that I have performed or the resulting impairment cost that I document. In fact, most of his criticisms have nothing to do with developing the cost of impairment at all.

Finally, Ms. Blake raises only one point related to the cost for hot cuts that completely misses the point of the cost calculation that I have performed.[3] In short, Ms. Blake has offered no rebuttal whatsoever to the conclusion that I reach

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[1] BellSouth Telecommunications, Inc., Rebuttal Testimony of Dr. Debra J. Aron, Before the Public Service Commission of the Commonwealth of Kentucky, Docket No. 2003-00379, March 31, 2004, p. 31. (Hereafter referred to as "Aron Rebuttal Testimony.")

[2] BellSouth Telecommunications, Inc., Rebuttal Testimony of W. Keith Milner, Before the Public Service Commission of the Commonwealth of Kentucky, Docket No. 2003-00379, March 31, 2004, pp. 11-15. (Hereafter referred to as "Milner Rebuttal Testimony.")

[3] BellSouth Telecommunications, Inc., Rebuttal Testimony of Kathy K. Blake, Before the Public Service Commission of the Commonwealth of Kentucky, Docket No. 2003-00379, March 31, 2004, pp. 27-28. (Hereafter referred to as "Blake Rebuttal Testimony.")

that CLECs face systematic cost disadvantages to BellSouth that range between $18.31 and $35.10 per month depending on the LATA within BellSouth territory. This cost disadvantage is real and is a critical concern that this Commission should consider in its evaluation of whether to maintain BellSouth's requirement to provide access to unbundled switching in Kentucky.

III. RESPONSE TO DR. DEBRA J. ARON

Q. DR. ARON'S SOLE REBUTTAL TO YOUR TESTIMONY IS THAT YOUR ANALYSIS IS "USELESS" BECAUSE YOUR APPROACH TO IMPAIRMENT WAS "CONSIDERED AND EXPLICITLY REJECTED BY THE FCC." COULD YOU PLEASE RESPOND TO HER ASSERTION?

A. Dr. Aron's testimony is simply wrong, because my analysis is directly responsive to the FCC's express directions in the TRO.

The TRO provides that a state commission "*must* consider *all factors affecting the costs* faced by a competitor providing local exchange service to the mass market."[4] And critically in this regard, the TRO found that:

> (T)hese costs would likely include (among others) the recurring and non-recurring charges paid to the incumbent LEC for . . . collocations, transport, hot cuts and other services and equipment necessary to access the [mass market customer's] loop, the cost of collocation and equipment necessary to serve local exchange customers in a wire center, taking into consideration an entrant's likely market share, the scale economies inherent to serving a wire center, and the line density of the wire center; the cost of backhauling the local traffic to the competitor's switch; other costs associated with transferring the customer's service over to the competitor; the impact of churn on the cost of customer acquisitions; the cost of maintenance, operations, and other administrative activities; and the competitors' capital costs.[5]

[4] TRO at ¶ 520. (Emphasis added.)

[5] *Id*.

Moreover, the FCC specifically held that "State commissions should pay particular attention to the impact of migration and backhaul costs on competitors' ability to serve the market."[6] That is exactly what my analysis does; it specifically focuses on the unique migration and backhaul costs that CLECs incur when they attempt to serve mass market customers without access to ILEC switching. Accordingly, my analysis is not at all "useless;" rather, it is directly responsive to the FCC's requirements.

My analysis also provides critical background data for the Commission's review of the ILECs' trigger claims, because it demonstrates that CLECs face a very sizable economic impairment (from $18.31 and $35.10 per line per month) when they attempt to serve the mass market. This is especially true when the average impairment cost is compared to the reasonably anticipated "typical" revenues that can be earned from serving "average" mass market customers.[7] Accordingly, in order to obtain economically rational results from the "short form" trigger review, the Commission should establish criteria for identifying proposed trigger firms that assure those firms' actual performance in the market is persuasive evidence that they have overcome the significant economic impairment CLECs face when attempting to serve average mass market customers.

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[6] *Id*.

[7] TRO at ¶ 472.

IV. RESPONSE TO W. KEITH MILNER

Q. MR. MILNER BELIEVES THAT YOUR IMPAIRMENT COST ANALYSIS IS "FATALLY FLAWED" BECAUSE OF HIS ASSERTION THAT "THE ASSUMPTION UNDERLYING MR. TURNER'S ANALYSIS ABOUT COSTS THAT HE ATTRIBUTES TO CLECS BUT NOT TO ILECS IS SIMPLY INCORRECT."[8] PLEASE RESPOND TO HIS ASSERTION.

A. This assertion covers two of the four criticisms that he makes of the cost analysis that I perform. If I understand Mr. Milner correctly, he believes that I should have somehow included BellSouth's customer migration costs back from the CLEC to BellSouth in developing the cost of impairment that is faced by CLECs. This is illogical. The question that my testimony and the AT&T DS0 Impairment Analysis Tools answers, in response to the TRO's requirements, is the cost disadvantage that the CLEC has in "backhauling" loops that appear in BellSouth's disparate central offices to the CLEC's own switch as compared to the cost that BellSouth incurs in connecting the same loops to its switch that is located normally on the same floor of the central office where the loops terminate. The criticisms that Mr. Milner raise regarding my failure to include BellSouth's costs for switching a customer back to its network do not make sense in light of the analysis that I perform.

Q. COULD YOU PROVIDE MORE DETAIL REGARDING HIS CONCERNS THAT YOU DID NOT INCLUDE BELLSOUTH'S "HOT CUT" COSTS?

A. Mr. Milner's notes the following:

> While Mr. Turner is correct that the CLEC will incur costs associated with the hot cut to disconnect the loop serving the customer from BellSouth's switch and then re-connect the loop to the CLEC's switch, he ignores the fact that in cases where a

[8] Milner Rebuttal Testimony, p. 12.

> customer chooses to return to the ILEC, those same work steps and the related costs (disconnection of the serving loop from the CLEC's switch and re-connecting the loop to the ILEC's switch) and associated costs will likewise be incurred by the ILEC.[9]

Here is the problem with Mr. Milner's logic. *When the customer is migrated from BellSouth's network to the CLEC, the CLEC pays BellSouth for all of the cost that BellSouth incurs to make this migration plus the CLEC pays for its own costs as well.* However, BellSouth only incurs *some* of these costs for some of their customers – those won back from a CLEC. Yet CLECs must incur these costs for *every single customer* they acquire.

Q. WHAT IS THE OTHER COST THAT FALLS INTO THIS SAME CATEGORY?

A. Mr. Milner believes that Local Number Portability cost falls into this same category. This is not the case. Mr. Milner's notes the following:

> Mr. Turner attributes costs to perform Local Number Porting ("LNP") activities to the CLEC but does not likewise attribute those same costs to ILECs in cases where the customer chooses to return to the ILEC. In other words, the work steps required to "port" the telephone number from BellSouth's network to the CLEC's network are required to "port" the telephone number from the CLEC's network to BellSouth's network.[10]

First of all, Mr. Milner is mistaken regarding the inclusion of Local Number Porting activities or costs in the specific run made for Kentucky. The DS0 Impairment Analysis that was run for Kentucky did not include *any* costs for Local Number Portability making the fundamental premise of Mr. Milner's criticism inaccurate.

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[9] *Id*.

[10] *Id*.

Q. MR. MILNER TAKES ISSUE WITH THE COLLOCATION COSTS THAT ARE INCLUDED IN THE DS0 IMPAIRMENT ANALYSIS TOOLS. COULD YOU PLEASE RESPOND?

A. Yes. First of all, Mr. Milner asserts that the DS0 Impairment Analysis Tools has overstated the cost for collocation by "Mr. Turner's suggestion that ILECs may assess a minimum square footage charge for collocation."[11] Mr. Milner does not even identify the type of collocation that the DS0 Impairment Analysis Tool uses (Physical Caged Collocation). Moreover, he has provided absolutely no evidence that this choice leads to higher costs for collocation. There are numerous elements associated with collocation such as space preparation, security, land and building space, power, and interconnection arrangements. All of these elements come into play in one manner or another regardless of the form of collocation that is selected. From a modeling standpoint, Physical Caged Collocation was used because it is straightforward to model and representative of what CLECs routinely use for collocation within BellSouth central offices.

Mr. Milner indicates that he believes that Cageless Collocation would be a superior alternative because of allowing CLECs to purchase space in single equipment bay increments. It turns out that in the core office (or Network Nodes) that the DS0 Impairment Analysis Tool actually computes collocation costs on a per frame basis just as Mr. Milner would suggest is reasonable even though the collocation arrangement assumed is Caged Collocation. This is done because the model assumes that the other space in the collocation arrangement may be used for other applications such as enterprise traffic. In Satellite Offices, this is not the

[11] Milner Rebuttal Testimony, p. 15.

case in the default assumption loaded into the model. However, if BellSouth believes that the floor space included in the cost development in the Satellite Offices should be treated more in the manner of Cageless Collocation (for example), the breakage assumption can be changed in the model so that only the space needed just for backhaul will be included in the satellite offices. This would give an approximation of the cost for Cageless Collocation, but it is minimally different that what has already been evaluated within my filing of the DS0 Impairment Analysis Tools for Kentucky.

Q. DO YOU BELIEVE THAT VOICE GRADE EELS PRESENT A VIABLE ALTERNATIVE FOR CLECS TO PROVIDE SERVICE TO CUSTOMERS IN KENTUCKY?

A. Once again, Mr. Milner has made assertions in his testimony without any support whatsoever. I have performed evaluations regarding the use of EELs for Voice Grade applications and I have never seen, from a cost standpoint, any EEL arrangement for voice grade service that is economically viable. The DS0 Impairment Analysis Tool gives a hypothetical large efficient CLEC every opportunity to achieve some scale economies through the use of leased backhaul and digital loop carrier equipment to make the assigned costs as low as possible. Mr. Milner appears to believe that assuming much lower volumes and using EELs instead of concentrated transport would produce a lower cost.[12] In my experience, this is simply not the case. Further, Mr. Milner has offered no evidence on his own part to provide that EELs would lower the cost of impairment below that which I have calculated using the DS0 Impairment Analysis Tools.

[12] Milner Rebuttal Testimony, p. 13.

As referenced above, there is a significant increase in cost for an EEL loop that the CLEC must bear that would make its backhaul impairment greater than that already contained in the DS0 Impairment Analysis Tools. Specifically, with an EEL the CLEC is required to pay more for the recurring cost of the loop. The Service Level 1 2-Wire Analog Voice Grade Loop, which would be used with a UNE-P combination, has a recurring cost of $31.11 in Zone 3.[13] The recurring cost for the loop when used as part of an EEL is $33.22. This difference increases the CLEC's cost (and impairment) by $2.11 per month just to start. On top of this the CLEC must pay for the DS1 Dedicated Interoffice Transport and 1/0 Channelization System that is used for the EEL. This has a cost of $196.15 per DS1 assuming an average mileage of 20 miles between the central office where the loop terminates to the central office where the EEL is transported.[14] If I assume that all 24 channels in the DS1 are used for EELs (the most conservative assumption possible to lead to the lowest cost of impairment), this still leads to a cost per loop of $8.17 per month. Finally, the Voice Grade COCI per Month of $0.62 applies. In total the recurring incremental cost per loop is $10.90. This is the monthly cost Mr. Milner would want a CLEC to pay in addition to the self-

[13] I have selected Zone 3 for this comparison throughout as it is in this area that I would anticipate that Mr. Milner must be assuming that an EEL would be a possible alternative to collocation and leased backhaul, which is included in the DS0 Impairment Analysis Tool.

[14] If the Commission reviews the price list from the BellSouth-Kentucky SGAT, the Commission will note that the cost for the elements are as follows: (1) Interoffice Transport – Dedicated – DS1 Combination – Per Mile per Month ($0.19); (2) Interoffice Transport – Dedicated – DS1 Combination – Facility Termination per Month ($79.02); and (3) 1/0 Channelization System in Combination per Month ($113.33). For 20 miles at a mileage rate of $0.27 per mile, the total mileage cost would be $3.80. Adding in the facility termination and channelization cost leads to a total DS1 cost of $196.15. This amount is then spread across the 24 2-Wire Analog Voice Grade Loops that could be terminated into this DS1 Dedicated Interoffice Transport.

provided or leased cost to transport the EEL on to the CLEC switch – a cost that is not avoided with the use of an EEL.

Of course this only represents the incremental recurring cost that the CLEC would have to pay. There are also significant nonrecurring charges that would be required. For example, the DS1 Interoffice Facility and 1/0 Channelization have a nonrecurring charge of $238.50 which when divided across 24 DS0s has an incremental nonrecurring cost per loop of $9.94. Other incremental nonrecurring charges above what the CLEC would pay for UNE-P apply as well. The bottom line is that when all of these costs are included, EELs for voice grade mass market applications simply do not make sense from an economic standpoint.

Q. MR. MILNER CLAIMS THAT THE FACILITY RING PROCESSOR TOOL USED IN YOUR ANALYSIS "DOES NOT REDUCE THE TOTAL FACILITY COSTS BY THE AMOUNT OF THE CAPACITY REQUIRED TO HANDLE THAT PORTION OF THE CAPACITY USED THAT IS NOT FOR 'BACKHAULING' LOOPS AND THAT IS NOT USED FOR 'ENTERPRISE' CUSTOMER TRAFFIC."[15] COULD YOU PLEASE RESPOND TO HIS CRITICISM?

A. Yes. Mr. Milner seems to have picked up on an explanation provided in my testimony and the documentation of the DS0 Impairment Analysis Tools without really evaluating what is happening within the cost model. First of all, to simply get the facts about the DS0 Impairment Analysis Tools straight, Mr. Milner is incorrect regarding this alleged error in the Facility Ring Processor ("FRP"). The FRP establishes the least cost ring architecture among the wire centers that make up the CLEC's self-provided network. It does not address any of the cost

[15] Milner Rebuttal Testimony, p. 13.

calculations regarding the allocation of transport cost to backhaul, enterprise traffic, or other uses such as interconnection. Instead, these calculations are contained within the Transport Impairment Analysis Tool.

In fact, if Mr. Milner had reviewed the calculations in the latter tool, he would have found that the cost per DS3 is developed by assuming an 80 percent fill factor on the transport. My testimony and the supporting documentation references the use of the transport network for circuits such as for enterprise traffic as an example of why we assumed such a *high* fill factor. However, other reasons justify why the fill level would be this high, including its use for interconnection facilities. Nonetheless, from a modeling standpoint, the DS3 cost per circuit that is applied to backhaul is developed using an 80 percent fill factor, regardless of whether the other circuits that contribute to that high level of fill are related to, whether they be enterprise traffic, interconnection, or any other application. Mr. Milner has simply picked an issue with the documentation. However, the model calculates the cost for backhaul in an extremely conservative and appropriate manner – the details of which contradict Mr. Milner's criticism and the details of which Mr. Milner has found no issue with. One of the conservative assumptions in the model is that the CLEC will use self-provided transport rather than purchase special access from the incumbent. This assumption lowers the cost for transport. In short, Mr. Milner's criticism is unfounded and does not change the cost of impairment developed in the DS0 Impairment Analysis Tool.

V. RESPONSE TO KATHY K. BLAKE

Q. MS. BLAKE'S ONLY REBUTTAL IS THAT IF AT&T BELIEVES THE COST FOR A HOT CUT IS TOO HIGH, AT&T SHOULD HAVE RAISED THIS IN A COST PROCEEDING – NOT NOW IN THE TRO PROCEEDING.[16] WHAT IS YOUR RESPONSE?

A. Ms. Blake has missed the point of my testimony. While I do not believe the cost for the hot cut is appropriate, my testimony is not criticizing BellSouth for the absolute level of the cost of the hot cut – that should be taken up in a cost proceeding. Instead, my testimony simply notes that the cost of the hot cut is a critical driver in the overall cost of impairment that CLECs face in Kentucky that cannot be ignored – a cost that contributes significantly to the overall cost of impairment for CLECs in Kentucky. Ms. Blake's rebuttal testimony that AT&T should have complained about the level of this cost in another proceeding does not change what the cost is now. The hot cut cost that exists in Kentucky is what CLECs will be faced with and this cost leads to a large portion of the overall cost of impairment faced by CLECs in Kentucky. It is simply a fact that Ms. Blake's testimony does nothing to change.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

[16] Blake Rebuttal Testimony, pp. 27-28.

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 Steven E. Turner, who, being by me first duly sworn deposed and said that:

He/She 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/her testimony would be set forth in his/her Surrebuttal Testimony consisting of 12 pages and 6 exhibit(s).

Steven E. Turner

Steven E. Turner

[Witness Name]

SWORN TO AND SUBSCRIBED BEFORE ME THIS 13th DAY OF April, 2004

Notary Public

Notary Public, Fulton County, Georgia
My Commission Expires June 19, 2006