

**BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION**

In The Matter of:)
REVIEW OF FEDERAL COMMUNICATIONS)
COMMISSION'S TRIENNIAL REVIEW ORDER) Case No. 2003-00379
REGARDING UNBUNDLING REQUIREMENTS)
FOR INDIVIDUAL NETWORK ELEMENTS)

SURREBUTTAL TESTIMONY OF DR. MARK T. BRYANT

On Behalf Of

MCIMETRO ACCESS TRANSMISSION SERVICES, LLC

And

MCI WORLDCOM COMMUNICATIONS, INC.

April 13, 2004

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

2 A. My name is Mark T. Bryant, and my business address is 4209 Park Hollow Court,
3 Austin, Texas.

4 **Q. ARE YOU THE SAME MARK T. BRYANT WHO PREVIOUSLY FILED**
5 **DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?**

6 A. Yes, I am.

7 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

8 A. The purpose of my rebuttal testimony is to respond to the rebuttal testimony of
9 BellSouth witnesses Aron, Pleatsikas, and Blake, and Alltel witness Reynolds.

10 *I. Response to Rebuttal Testimony of Dr. Aron.*

11 **Q. DR. ARON HAS CHARACTERIZED YOUR TESTIMONY REGARDING**
12 **THE SOCIAL COSTS OF AN ERRONEOUS FINDING OF NON-**
13 **IMPAIRMENT AS “UNSUPPORTED” AND “SERIOUSLY MISGUIDED.”**
14 **HOW DO YOU RESPOND TO DR. ARON’S CRITICISMS?**

15 A. Dr. Aron argues that the social costs of an erroneous finding of non-impairment
16 are in lost investment, innovation, and economic development whereas the social
17 cost of an erroneous finding of impairment is “merely” the foregone entry of
18 carriers that rely entirely on the network of the incumbent to provide service. Dr.
19 Aron’s arguments misstate the situation facing the Commission and are both
20 unsupported and misleading.

1 **Q. IN WHAT WAY IS DR. ARON’S TESTIMONY MISLEADING?**

2 A. In my direct testimony, I urged the Commission to be cautious in assessing the
3 degree to which CLECs are impaired without access to unbundled switching, and
4 to act to eliminate the availability of unbundled local switching only where a lack
5 of impairment is unambiguously proven. In her rebuttal testimony, Dr. Aron
6 appears to be suggesting that my recommendation was that impairment be found
7 for all markets, whether it exists or not. Dr. Aron, for example, comments that I
8 envisioned (in discussing the exit from the market of UNE-P based providers in
9 the case of an erroneous finding of non-impairment) “instances in which a CLEC
10 would rather exit the market than pursue the UNE-L opportunity.” Aron Rebuttal
11 at 7. She goes on to note that the exit of carriers that cannot survive in a UNE-L
12 based market would create opportunities for those that can survive. Contrary to
13 Dr. Aron’s suggestion, however, an erroneous finding of impairment means that
14 unbundled local switching would be eliminated where CLECs are, in fact,
15 impaired without access to unbundled switching. Thus, an erroneous finding of
16 non-impairment would eliminate *all* current competitors, even the most efficient
17 ones, from the local exchange market.

18 I do not recommend that the Commission find impairment where none
19 exists. What I do recommend is that the Commission be very certain that
20 impairment does not exist, in view of the irreversible consequences of an
21 erroneous finding of non-impairment.

1 **Q. DR. ARON MAINTAINS THAT AN ERRONEOUS FINDING OF**
2 **IMPAIRMENT WOULD DAMAGE THE INCENTIVES OF BOTH THE**
3 **CLECS AND THE ILECS TO INVEST IN NETWORK**
4 **INFRASTRUCTURE, AND THAT INNOVATION WOULD BE**
5 **SUPPRESSED. DO YOU AGREE?**

6 A. No, I do not. While I do agree that reliance upon the ILEC's switching facilities
7 limits, to some extent, the ability of CLECs to develop certain types of new
8 services, I do not agree that CLECs have failed to bring new services to market.
9 The innovation of bundled offerings of local service, long distance service, and
10 vertical features was one introduced to the market by CLECs, and the ILECs have
11 been quick to follow suit. UNE-P based CLECs such as MCI and Z-tel have
12 introduced sophisticated voice mail services that were not previously available
13 from the ILECs. It simply is not true, as Dr. Aron implies through her use of
14 terms such as "synthetic competition," that UNE-P based competition is without
15 value.

16 That said, however, there is no question that CLECs would prefer to offer
17 service using their own switches where it is economically feasible to do so. Doing
18 so would give the CLEC greater control over its own service offerings and permit
19 the introduction of more new service offerings than is possible with the use of
20 UNE-P. A CLEC owning its own switch also would gain additional flexibility in
21 the pricing of its services, since its prices would not be governed by the rate
22 structure imposed by the ILEC for use of unbundled switching. These are
23 powerful incentives for the CLEC to invest in switching facilities – that more

1 CLECs have not begun to offer mass market local exchange service using their
2 own switches is thus equally powerful evidence that there are operational and
3 economic barriers to doing so that have not been overcome.

4 **Q. IS THERE ANY EVIDENCE TO SUPPORT DR. ARON'S CLAIM THAT**
5 **THE CONTINUED AVAILABILITY OF UNBUNDLED LOCAL**
6 **SWITCHING WILL SUPPRESS INVESTMENT BY THE INCUMBENT**
7 **CARRIERS?**

8 A. No. In fact, the available evidence is to the contrary. Prior to the passage of the
9 Telecommunications Act of 1996, with its requirement that the ILECs make
10 available unbundled network elements to CLECs, BellSouth's investment in its
11 facilities was essentially flat. Beginning in 1996, BellSouth's plant additions
12 increased dramatically, reaching a peak in 2001. In 2002, plant additions declined
13 somewhat from this peak, but remained substantially above pre-1996 levels.
14 Exhibit MTB-13 attached to this testimony is a chart illustrating the investment
15 additions that BellSouth has made in its plant during the period 1990-2002. If the
16 availability of unbundled network elements is a serious disincentive to ILEC
17 investment, the empirical evidence should show a decline since 1996. It only
18 makes sense that the increased competition resulting from the entry of new firms
19 into the local exchange market would stimulate investment by the incumbent, and
20 that is exactly what the evidence shows.

21 **Q. HAVE YOU SEEN OTHER EVIDENCE THAT THE INCREASED**
22 **COMPETITION RESULTING FROM THE AVAILABILITY OF**

1 **UNBUNDLED NETWORK ELEMENTS HAS STIMULATED ILEC**
2 **INVESTMENT?**

3 A. Yes, in a recent essay addressing this topic, Professor Robert D. Willig of
4 Princeton University has examined the available evidence and concluded that the
5 availability of unbundled network elements stimulates incumbent investment.
6 Robert D. Willig, “Investment is Appropriately Stimulated by TELRIC.” Prof.
7 Willig further found that decreases in rates for UNEs actually are correlated with
8 in an increase in ILEC investments. According to Prof. Willig, “...raising
9 TELRIC or restricting access to UNEs, as the ILECs advocate, would both reduce
10 the competitive alternatives available to consumers and reduce the ILEC’s capital
11 spending on their own networks.” *Id.* at 3.10. Exhibit MTB-14 attached to this
12 testimony is a copy of the essay by Prof. Willig.

13 **Q. DR. ARON ARGUES THAT A FINDING OF NO IMPAIRMENT**
14 **INTRODUCES CONSISTENCY FOR THE USE OF LOCAL AND LONG**
15 **DISTANCE NETWORKS. DO YOU AGREE?**

16 A. No. Dr. Aron attempts to form an analogy between the availability of long
17 distance network capacity and the market-based prices that obtain in that market
18 and the supposed availability of local switching at market-based prices if a ruling
19 of no impairment for local switching is made. The analogy fails because there
20 simply is no market for local switching in existence in Kentucky. To my
21 knowledge, no carrier has stated in this proceeding that it makes available local
22 switching on a wholesale basis. This being the case, and because BellSouth has

1 every incentive to raise its rivals' costs and the ability to do so in the absence of
2 competitive switching supply, one could not reasonably expect that CLECs would
3 pay anything like a cost-based rate for local switching if BellSouth were freed
4 from the obligation to charge TELRIC-based rates.

5 **Q. DR. ARON CRITICIZES YOUR IMPAIRMENT ANALYSIS TOOL FOR**
6 **ADOPTING AN IMPROPER FRAMEWORK FOR THE ANALYSIS OF**
7 **THE CLEC PROFITABILITY IN THE ABSENCE OF UNBUNDLED**
8 **LOCAL SWITCHING. DO YOU HAVE A RESPONSE?**

9 A. Yes. Dr. Aron's criticism is that the model fails to recognize that certain costs are
10 incurred in the early periods of a company's operation, when revenues are low
11 and net revenues therefore are likely to be negative. This is not the case. The
12 impairment analysis tool that I presented with my direct testimony performs an
13 annualization of capital costs over the depreciation life of each category of
14 investment. This calculation involves a calculation of the net present value of
15 future capital costs in order to levelize these costs over the life of the investment.
16 Thus, with regard to capital costs, the model does not, as Dr. Aron claims, ignore
17 the effect of high startup costs on CLEC profitability. The approach taken in the
18 impairment analysis tool is similar to that that has been used in setting rates for
19 unbundled network elements, an approach designed to determine the forward-
20 looking cost of an efficient network operator.

21 Dr. Aron goes on to criticize the impairment analysis tool for failing to
22 consider growth in revenue or market share over time. While it is true that the

1 model considers a “steady state” single period in time, the input assumptions can
2 be varied to consider any level of market share or price that is of interest.

3 *II. Response to Rebuttal Testimony of Dr. Pleatsikas*

4 **Q. DR. PLEATSIKAS CLAIMS THAT YOU PROVIDE NO UNAMBIGUOUS**
5 **INDICATION OF WHICH MARKET DEFINITION TO USE FOR**
6 **PURPOSES OF THIS PROCEEDING. IS THAT THE CASE?**

7 A. No. I believe I unambiguously stated that the appropriate market definition is the
8 wire center. My discussion of a possible market definition that would comprise
9 individual customer locations was intended to illustrate the different
10 characteristics of customers that contribute to differences in wire center costs.

11 **Q. DR. PLEATSIKAS CLAIMS THAT AGGREGATIONS OF WIRE**
12 **CENTERS THAT SHARE SIMILAR COST AND REVENUE**
13 **CHARACTERISTICS MAY CONSTITUTE AN APPROPRIATE**
14 **MARKET DEFINITION. DO YOU AGREE?**

15 A. No, I do not. One certainly can aggregate markets for administrative convenience,
16 perhaps, but such an aggregation is not a market definition. In order to determine,
17 as Dr. Pleatsikas suggests at page 9 of his Rebuttal Testimony, that “wire centers
18 in a geographic area share certain cost and other economic characteristics,” it is
19 necessary first to examine the costs and economic characteristics *for each wire*
20 *center*. Dr. Pleatsikas seems to assume that because UNE rates are applicable to
21 all wire centers in a particular UNE rate zone, those wire centers must share

1 similar cost characteristics. The rate for unbundled network elements, however, is
2 only one factor that affects the costs and revenues that in turn affect a CLEC's
3 entry decision. Wire centers also vary along other dimensions. The number of
4 customers served from each wire center, the mix of business and residential
5 customers in each wire center, the proportion of customers served via digital loop
6 carrier equipment, the demographic characteristics of the customers in the wire
7 center, and the distance of the wire center from the CLEC's switch all have an
8 impact on the potential profitability of providing service in the wire center.

9 **Q. DR. PLEATSIKAS STATES THAT "COLLOCATION COSTS CAN**
10 **INFLUENCE WHERE A CLEC MAY SEEK TO OFFER SERVICES IN A**
11 **MARKET, BUT THEY DO NOT, BY THEMSELVES, DETERMINE THE**
12 **GEOGRAPHIC SCOPE OF THE MARKET." (PLEATSIKAS REBUTTAL**
13 **AT 8). DOES THE FCC OFFER ANY GUIDANCE ON THE**
14 **GEOGRAPHIC SCOPE OF A MARKET, WHERE A CLEC CANNOT**
15 **SERVE THE ENTIRE MARKET?**

16 A. Yes. As I noted in my direct testimony, at paragraph 499 of the TRO, note 1552,
17 the FCC states that "...where switch providers (or the resellers that rely on them)
18 are identified as serving, or capable of serving, only part of the market, the state
19 commission may choose to consider defining that portion of the market as a
20 separate market for that portion of its analysis."

21 **Q. DR. PLEATSIKAS CITES A RESPONSE BY FCCA TO A BELLSOUTH**
22 **INTERROGATORY IN FLORIDA TO THE EFFECT THAT ONLY TWO**

1 **OF THE MEMBER COMPANIES DECIDE TO ENTER A MARKET ON A**
2 **WIRE CENTER BASIS AS SUPPORT FOR THE PROPOSITION THAT**
3 **CLECS DO NOT, IN FACT, DECIDE TO ENTER MARKETS WIRE**
4 **CENTER BY WIRE CENTER. DO YOU HAVE A RESPONSE TO THIS**
5 **TESTIMONY?**

6 A. Yes. The interrogatory question cited by Dr. Pleatsikas was not specific enough to
7 yield useful information on the situation that would be faced by CLECs in a post
8 UNE-P environment. The question asked is as follows:

9 Identify each individual carrier that comprises the FCCA and state whether
10 each such carrier decides to enter a market at the wire-center level.

11 The question does not state the market to be served, nor does it state the
12 circumstances to be assumed in answering the question. A carrier providing mass
13 market service today using UNE-P might interpret the question to refer to its
14 current situation. Such a carrier naturally would not consider the market in terms
15 of individual wire centers, but would be focused on the cost of UNE rates as they
16 vary among rate zones, and perhaps on the entire state of Florida as a potential
17 market. If the same carrier were asked whether it would consider wire center
18 specific costs in making entry decisions under the assumption that unbundled
19 local switching is no longer available, and that, in order to provide local exchange
20 service, it would have to establish collocations in each wire center, almost
21 certainly would consider the question in a different light. I do not know how the
22 CLECs answering the question interpreted it, but the question is so vague that no
23 confidence should be placed in the quality of the answers received.

1 In addition to the two CLECs in the FCCA interrogatory response that
2 replied that they do make entry decisions at the wire center level, at least one
3 other CLEC has responded to discovery indicating that it does, in fact, make entry
4 decisions by considering the characteristics of individual wire centers. In response
5 to BellSouth's Interrogatory number 95 in Florida, Allegiance responded as
6 follows;

7 Question:

8 95. Describe the criteria you consider to enter a specific market
9 offering qualified services. In your response please detail how, and the
10 extent to which, you rely on both business customers and residential
11 customers to meet the financial criteria. Also identify the criteria used to
12 select the customer that are marketed to or contacted in your marketing
13 campaigns.

14 Answer:

15 Allegiance deployed a switch in Miami as part of its strategy to become a
16 national local service provider. The geographic location of the switch was
17 based on several factors including minimizing backhaul costs from
18 collocation sites, space availability and where Allegiance could get access
19 to CAPs.

20 The single most important criterion for Allegiance in determining where to
21 build a collocation is the number of lines served by the individual wire
22 center. Given the costs of collocation construction, equipment, power, and
23 the like, a CLEC must be reasonably confident it can acquire enough
24 customers in a wire center to cover those costs and earn a profit in order to
25 proceed with construction of the collocation. Allegiance generally has not
26 built collocations in wire centers with fewer than 9,000 - 10,000 business
27 lines.

28 The factors cited by Allegiance in its response are some of the same factors that I
29 have noted in defining the relevant market as the ILEC wire center.

1 **Q. DR. PLEATSIKAS STATES THAT A PROPER MARKET DEFINITION**
2 **MUST CONSIDER BOTH DEMAND-SIDE AND SUPPLY-SIDE**
3 **SUBSTITUTABILITY. DO YOU AGREE?**

4 A. Yes, I agree that supply-side substitutability should be considered in defining a
5 market. I also agree that the cost of a CLEC switch and some of the costs incurred
6 by a CLEC in marketing services apply to a geographic area larger than the wire
7 center. The real question, however, is whether the economies of scale achievable
8 through recovery of these costs over a larger customer base are sufficient to
9 overcome the cost differences that exist among wire centers. As I demonstrated in
10 my rebuttal testimony, the greater proportion of the economies of scale that are
11 present in switch costs are achieved very rapidly, and, once the CLEC has gained
12 a relatively small share of the market, acquisition of additional customers does not
13 result in significant additional cost savings. This being the case, a CLEC
14 contemplating adding a collocation to a wire center where profitability is marginal
15 or negative must balance the losses that it will incur by collocating in that wire
16 center against the cost savings that it will achieve in its switch costs. A wire
17 center that is losing two or three dollars per line per month will not be made to
18 look profitable if the cost savings in switch costs are a few pennies per line per
19 month. In effect, Dr. Pleatsikas is ignoring the 800-pound gorilla of collocation
20 and backhaul costs in his exclusive attention on the gnat that is economies of scale
21 in switching and marketing costs.

1 *III. Response to the Rebuttal Testimony of Ms. Blake*

2 **Q. MS. BLAKE CLAIMS THAT YOUR WIRE CENTER MARKET**
3 **DEFINITION IS INCONSISTENT WITH TESTIMONY PREVIOUSLY**
4 **FILED BY A WITNESS ON BEHALF OF MCI STATING THAT MCI**
5 **SWITCHES SERVE A LARGER GEOGRAPHIC AREA THAN ILEC**
6 **SWITCHES. IS THIS INDEED AN INCONSISTENCY?**

7 A. No, it is not. I have never stated that CLEC switches are not potentially capable of
8 serving a large geographic area. The consistent thrust of my testimony has been
9 that the cost of placing a switch is not the most significant factor affecting a
10 CLEC's decision to enter a particular market. Rather, it is the cost of establishing
11 collocations and the potential revenues available in each wire center that will
12 determine CLEC profitability.

13 In the testimony cited by Ms. Blake, the witness was describing MCI's
14 provision of service to enterprise customers that are located in buildings served by
15 MCI's metropolitan fiber networks. These networks have been designed to reach
16 buildings and campus environments that have a sufficiently large concentration of
17 customers with a high enough demand for telecommunications services that the
18 construction of fiber optic networks to serve those concentrations is economically
19 justified.

20 This is an entirely different proposition than attempting to provide service
21 to the mass market, where customers are widely dispersed, and where the cost of
22 establishing collocation and transport facilities to aggregate customer traffic at the

1 CLEC switch may render the provision of service unprofitable. There is no
2 contradiction at all in the testimony cited by Ms. Blake and my own testimony.

3 *IV. Response to the Reply Testimony of Mr. Reynolds*

4 **Q. MR. REYNOLDS, TESTIFYING ON BEHALF OF ALLTEL, HAS TAKEN**
5 **ISSUE WITH YOUR WIRE CENTER MARKET DEFINITION. DO YOU**
6 **HAVE A RESPONSE TO MR. REYNOLDS' TESTIMONY ON THIS**
7 **ISSUE?**

8 A. Yes. Mr. Reynolds states that CLEC switches can serve more multiple wire
9 centers, and, like Dr. Pleatsikas, focuses exclusively on this fact in justifying a
10 market definition that obscures important cost and revenue differences that will
11 determine the ability of CLECs to serve individual wire centers.

12 As I noted earlier in response to Dr. Pleatsikas' testimony, there certainly
13 are some costs incurred by a CLEC for which economies of scale are achieved
14 over a geographic area larger than a wire center. This fact does not obviate the
15 cost and revenue differences that exist among wire centers. While Mr. Reynolds
16 appears to acknowledge that such cost and revenue differences exist (see
17 Reynolds reply testimony at p. 5, lines 21-22, and p. 6, lines 1-4), he attempts to
18 minimize these differences, stating that the ILEC wholesale prices are "averaged"
19 across wire centers, and that the cost differences are therefore "buffered" and the
20 revenue opportunities across wire centers are "similar enough" that CLECs can
21 take advantage of economies of scale (presumably in switching) "inherent in that
22 [CLEC's?] network." Mr. Reynolds does not attempt to quantify the extent of cost

1 averaging across wire centers or the similarity of revenue opportunities among
2 wire centers. A CLEC, however, must quantify these cost and revenue differences
3 in justifying investment in wire center collocations and switching and transport
4 facilities. It is precisely these cost and revenue differences that I have quantified
5 in the impairment analysis tool that I presented in my direct testimony. This
6 analysis shows that, under some sets of assumptions, some wire centers may
7 profitably be served while others cannot, while under alternative sets of
8 assumptions, no wire center can profitably be served. Mr. Reynolds' proposed
9 market definition, like Dr. Pleatsikas' definition, fails to consider, as the FCC
10 directed, the "variation in factors affecting competitors' ability to serve each
11 group of customers."

12 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

13 A. Yes, it does.

14