

**In the Matter of a Commission Inquiry into the Possibility of Impairment without Unbundled Local Circuit Switching When Serving the Mass Market.** ) **Case No. TO-2004-0207**  
 ) **Filed: December 18, 2003**  
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**Q. Please state your name and address.**

A. My name is Joseph Gillan. My business address is P. O. Box 541038, Orlando, Florida 32854. I am an economist with a consulting practice specializing in telecommunications.

1       **Q.     Please briefly outline your educational background and related experience.**

2  
3       A.     I am a graduate of the University of Wyoming where I received B.A. and M.A.  
4             degrees in economics. From 1980 to 1985, I was on the staff of the Illinois  
5             Commerce Commission where I had responsibility for the policy analysis of  
6             issues created by the emergence of competition in regulated markets, in particular  
7             the telecommunications industry. While at the Commission, I served on the staff  
8             subcommittee for the NARUC Communications Committee and was appointed to  
9             the Research Advisory Council overseeing the National Regulatory Research  
10            Institute.

11  
12           In 1985, I left the Commission to join U.S. Switch, a venture firm organized to  
13           develop interexchange access networks in partnership with independent local  
14           telephone companies. At the end of 1986, I resigned my position of Vice  
15           President-Marketing/Strategic Planning to begin a consulting practice. Over the  
16           past twenty years, I have provided testimony and/or sworn affidavits before more  
17           than 35 state commissions, five state legislatures, the Commerce Committee of  
18           the United States Senate, the Federal Communications Commission, and the  
19           Federal/State Joint Board on Separations Reform. In addition, I have provided  
20           expert reports to the Canadian Radio-television and Telecommunications  
21           Commission, as well as the Finance Ministry of the Cayman Islands. I currently  
22           serve on the Advisory Council to New Mexico State University's Center for

1 Regulation. A complete listing of my qualifications, publications and expert  
2 testimony is attached in Exhibit JPG-1.

3  
4 **Q. On whose behalf are you testifying?**

5  
6 A. I am generally testifying on behalf of a Coalition of Competitive Local Exchange  
7 Carriers (“CLEC Coalition” or “Coalition”), an ad hoc coalition of carriers  
8 offering competitive services to residential and/or small business customers in the  
9 State of Missouri. Members of the Coalition are: AT&T Communications of the  
10 Southwest, Inc., AT&T Local Services on behalf of TCG St. Louis, Inc. and TCG  
11 Kansas City, Inc., (collectively, “AT&T”), Birch Telecom of Missouri, Inc., and  
12 Z-Tel Communications, Inc. AT&T is individually sponsoring a more  
13 sophisticated methodology to compute the DS0/DS1 crossover than the simplified  
14 approach that I present, however, and is therefore not sponsoring that portion of  
15 the testimony.

16  
17 **Q. What is the purpose of your testimony?**

18  
19 A. The purpose of my testimony is to address the two threshold issues identified by  
20 the Commission for this phase of the proceeding: (1) determining the “upper  
21 bound” of the analog mass market (i.e., the point at which the Commission will  
22 define a multiline voice customer as an enterprise customer for purposes of SBC’s

1 unbundling obligations),<sup>1</sup> and (2) to establish (at least on a tentative basis) the  
2 geographic area to be used in the impairment analyses scheduled for the second  
3 phase of this proceeding.

4  
5 **Q. Will your direct testimony recommend a specific crossover and geographic**  
6 **area for the Commission to use in Phase II of this proceeding?**

7  
8 A. No, not at this time. It is important to understand that this proceeding begins  
9 with a national finding that "... requesting carriers are impaired without access to  
10 unbundled local circuit switching when serving mass market customers."<sup>2</sup> Given  
11 the national finding by the FCC that entrants *do* require access to unbundled local  
12 switching to serve mass market customers, it should be SBC's obligation (at least,  
13 in the first instance) to explain *why* and *where* impairment does not exist, with  
14 that claim being tested by other parties in this proceeding. As a result, my  
15 testimony provides overall guidance as to how the Commission should approach

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<sup>1</sup> Throughout this testimony I use the phrase "unbundling obligation" as a shorthand description for situations where SBC is required to offer a network element in accordance with Section 251 of the federal Act. It is useful to remember, however, that SBC has voluntarily accepted, under the terms of Section 271's social contract, the obligation to offer unbundled local switching (at least as long as it desires to offer long distance services in Missouri) at rates that are "just and reasonable and nondiscriminatory" and which provide entrants "meaningful access." (TRO ¶ 603). As a result, even in the unlikely event that the Commission determines that SBC is no longer required to offer unbundled local switching in Missouri in accordance with Section 251 of the Act, the Commission would still need to determine (as the arbiter of interconnection disputes) rates that comply with the just and reasonable pricing standard that applies to all elements listed in Section 271 of the Act.

<sup>2</sup> TRO ¶ 419.

1           these questions, while specific recommendations will be provided after I have  
2           reviewed the SBC's direct testimony.

3  
4       **Q.     Before you turn to these specific issues, do you have any preliminary**  
5       **comment?**

6  
7       A.     Yes. As the Commission approaches the issues in this docket, it is important that  
8           it fully appreciate the direct impact that its decisions will have on the residential  
9           and small businesses customers in this state. This is not an abstract debate with  
10          intellectual appeal but little practical effect – the decisions that the Commission  
11          reaches in this proceeding will have a real and immediate impact on the choices  
12          available to Missouri consumers and on the prices that they pay for their  
13          telecommunications services.

14  
15          The stark reality is that before UNE-P became generally and operationally  
16          available to CLECs, there was no meaningful mass-market competition. As the  
17          table demonstrates, only UNE-P provides entrants access to SBC's legacy loop  
18          network at volume:

**Table 1: Loop Access Methods in Missouri<sup>3</sup>**

| <b>Access Method</b> | <b>June 2002</b> | <b>December 2002</b> | <b>Growth</b> |
|----------------------|------------------|----------------------|---------------|
| <b>UNE-L</b>         | 29,981           | 33,345               | 3,364         |
| <b>UNE-P</b>         | 115,406          | 167,970              | 52,564        |

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<sup>3</sup>           Source: SBC Responses to the FCC's Form 477 Local Competition Survey.

These state-specific statistics are consistent with national data filed at the FCC during the Triennial Review proceeding (and summarized below). As the following table shows, UNE-P is critical to POTS competition for residential customers *and* small businesses that desire analog-based telephone service.

**Table 2: UNE-P Penetration in Mass Market<sup>4</sup>**

| Holding Company         | Penetration Rate |             |
|-------------------------|------------------|-------------|
|                         | Business         | Residential |
| BellSouth               | 12.2%            | 4.6%        |
| Qwest                   | 7.4%             | 2.1%        |
| Verizon (Bell Atlantic) | 7.6%             | 7.7%        |
| SBC                     | 6.2%             | 8.5%        |
| Total                   | 7.6%             | 6.7%        |

If UNE-P is eliminated prematurely, there will be no viable alternative for the mass market in Missouri and the market will revert to a monopoly once again. The bottom line is that UNE-P brought needed competition to the POTS market to a degree that nothing else has (or can). The Commission must not eliminate the one entry strategy that is bringing competition and choice to the mass market throughout the state, until and unless it is confident that something else stands ready to take its place.<sup>5</sup>

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<sup>4</sup> Source: UNE-P lines are from RBOC *Ex Parte* Filings in CC Docket 01-338, or as reported by Commerce Capital Markets, December 20, 2002. Vintage of data varies, but is generally from August or September, 2002. Relative penetration rate calculated as UNE-P lines (business or residential) as a percentage of residential and business analog lines. Source: ARMIS 43-08.

<sup>5</sup> As I explain further in the section of my testimony addressing the geographic area that the Commission should use to evaluate impairment, UNE-P is bringing competition to consumers

1                                   **Establishing the Upper Bound of the Analog Mass Market**

2  
3       **Q.     What is meant by the term “mass market”?**

4  
5       A.     The term “mass market” (as used by the FCC) is generally synonymous with the  
6               traditional term “POTS market” – that is, the market of customers purchasing  
7               analog voice service. The POTS marketplace (i.e., *the mass market*) has long  
8               been the focus of traditional regulation, with users principally interested in basic  
9               voice services – dial tone, vertical features, local and long distance calling.  
10              Demonstrating the importance of this customer segment is the fact that a  
11              centerpiece of federal and state public policy has been the goal of “universal  
12              service” – i.e., assuring the widespread availability of these services at affordable  
13              prices. It would make little sense to adopt a commitment to the availability of  
14              POTS (i.e., universal service), without being equally committed to assuring that  
15              this same customer segment enjoys competitive choice. In essence, that is the  
16              basic issue in this proceeding – defining the mass market, and then determining  
17              whether it will enjoy competitive choice.

18  

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and small businesses throughout the State of Missouri, without regard to the size of the exchange. SBC would have this Commission eliminate this broad competition, however, by eliminating UNE-P in those wire centers that serve the most customers. Although UNE-P is being used to provide competitive choice to customers throughout the state, most of the mass market lives and works within the three MSAs that SBC is claiming there is no impairment. In fact, approximately 85% of the UNE-P lines in the state – both for residential and small business customers – are located in wire centers where SBC is seeking a finding of non-impairment.

1       **Q.     How does the FCC define the mass market customer?**

2

3       **A.     The TRO provides a basic definition of the “mass market customer” and contrasts**  
4       it with the “enterprise customer.” The mass market customer is:

5

6                   (a) primarily interested in basic voice POTS service;

7                   (b) widely geographically dispersed; and

8                   (c) unaccustomed to complex or disruptive provisioning schemes.

9

10               As the FCC explains, “mass market customers are analog voice customers that  
11               purchase only a limited number of POTS lines, and can only be economically  
12               served via DS0 lines.”<sup>6</sup> Mass market customers are not located just in  
13               concentrated geographic locations, such as central business districts; rather  
14               residential and small business customers are located across all urban, suburban,  
15               and rural locations. These customers expect that using their telephone services, as  
16               well as changing service providers, will not be a complicated transaction.<sup>7</sup>

17

18       **Q.     Does the mass market include both residential and business customers?**

19

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<sup>6</sup>       TRO ¶ 497.

<sup>7</sup>       As TRO explained, “...mass market customers demand reliable, easy-to-operate service and trouble-free installation,” TRO ¶ 467.



1       A.     Yes. Perhaps because we are all residential customers, we intuitively appreciate  
2             the fact that the residential marketplace is part of the mass market. The forgotten  
3             customer of telecommunications policy, however, is the average (which is to say  
4             in this context, voice-centric) small business customer. There are many business  
5             customers that still rely on traditional POTS service for their telecommunications  
6             needs (for example, restaurants, garages, plumbers, florists and others for whom  
7             higher-speed enterprise services are simply unnecessary).

8

9       **Q.     How does an “enterprise” customer differ from a “mass market” customer?**

10

11      A.     Enterprise customers demand a level of service and capacity – particularly for  
12             data services – that is quite different from that demanded by the mass market  
13             customer. As the FCC explained: “DS1 enterprise customers are characterized by  
14             relatively intense, often data centric, demand for telecommunications services  
15             sufficient to justify service via high-capacity loops at the DS1 capacity and  
16             above.”<sup>8</sup>

17

18      **Q.     Does the TRO recognize this distinction in the DS0/DS1 cutover analysis to**  
19             **be performed by the Commission?**

20

---

<sup>8</sup> TRO ¶ 451.

1       A.     Yes. The TRO provides that a customer should be considered part of the DS1  
2             enterprise market when “it is economically feasible for a competitive carrier to  
3             provide voice service with its own switch using a DS1 or above loop. We  
4             determine that this includes all customers that are served by the competing carrier  
5             using a DS1 or above loop and all customers meeting the DS0 cutoff,”<sup>9</sup> with the  
6             cutoff defined as “the point where it makes economic sense for a multi-line  
7             customer to be served via a DS1 loop.”<sup>10</sup>

8

9       **Q.     How should the DS0/DS1 cutover point be established?**

10

11      A     A very simple approach would be to establish the cutover through a  
12             straightforward calculation that determines when the cost of a UNE DS1  
13             (including non-recurring activities and the installation of customer premises  
14             equipment necessary to utilize DS1 level service) is less than continued use of  
15             multiple UNE analog loops for voice service. This point would form the “upper  
16             bound” of the analog mass-market, i.e., the point at which a mass market  
17             customer should be considered an enterprise customer based on the number of  
18             analog lines used to obtain voice service.

19

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<sup>9</sup>       TRO ¶ 421, n.1296.

<sup>10</sup>      TRO ¶497.

1           Generally, to estimate the line-count of mass-market lines at which a DS-1 is the  
2           more efficient choice, the following formula would be used:

$$\text{Crossover} = \frac{(\text{CPE} + \text{UNE DS-1})}{\text{UNE Loop}}$$

3  
4  
5           Where “CPE” includes all the costs associated with the equipment and inside-wire  
6           changes needed to make the customer’s analog service compatible with a DS-1  
7           loop, and where the values for “UNE DS-1” and “UNE Loop” include all  
8           relevant costs of leasing these facilities from the incumbent (including non-  
9           recurring charges to establish service). There are other factors not included in the  
10          simple formula above that would more accurately capture real-world constraints  
11          that would (as I explain below) increase the crossover.<sup>11</sup> Moreover, a more  
12          realistic calculation would include additional costs to use UNE-L (such as  
13          collocation and backhaul) that are not incurred to use UNE-P. Although  
14          additional complication could be added to the formula, at a minimum the  
15          crossover should comply with this simplified approach.

16  
17       **Q.    Are there other considerations that the Commission should keep in mind**  
18       **when it adopts the “DS0/DS1” crossover?**

---

<sup>11</sup>       For instance, the approach presented in the testimony of AT&T witness John Finnegan would more closely approximate the “real world” point at which it might make economic sense to move a multiline voice customer to a DS-1 based UNE-L arrangement.

1       A.     Yes. The role of the crossover is to establish a governmentally drawn upper  
2             boundary to the mass market – in effect, substituting the Commission’s judgment  
3             of how a customer *should be* served (via a DS-1) for the customer’s judgment of  
4             how it *has chosen* to be served (multiple analog loops). While the simplified  
5             formula above complies with the direction of the TRO, the Commission should be  
6             aware that this simple calculation does not take into account a number of factors  
7             that, in the real world, would explain why a customer with multiple voice loops  
8             might not want to move its POTS service to a higher-capacity facility.

9  
10            For example, a customer may not desire a DS1-based service because of the  
11            requirement that it make space available for channel bank equipment on its  
12            premises. Customers may not want to give up the space for such equipment, or  
13            may resist the telecommunications provider’s need to have access to the premises  
14            to maintain or repair the equipment. Alternatively, because of provisioning  
15            problems or the customer’s individual traffic patterns, the CLEC might need to  
16            use higher priced special access rather than UNE DS1 facilities (which would  
17            significantly increase the crossover). In these circumstances, the customer would  
18            have good reasons to preserve its analog POTS service, even if it were at or above  
19            the theoretical cutover point described above. In addition, a customer served by  
20            multiple analog lines is less vulnerable to network failure than a customer whose  
21            entire service is being provisioned over a single DS-1. And finally, as noted  
22            above, the calculation does not consider any of the additional costs associated

1 with using a UNE loop (such as collocation and backhaul) that are not incurred  
2 when service is provided using UNE-P.

3  
4 By failing to consider these factors, the minimalist DS0/DS1 cutover as calculated  
5 above will strand some customers from competitive choice because they will not  
6 *really* be in a position to take advantage of a DS-1 connection, they will only be  
7 *presumed* able to do so. Consequently, the Commission should be aware that a  
8 crossover calculated under the above formula would represent the *lowest*  
9 reasonable crossover and, while simple, would still be likely to adversely affect  
10 some customers.

11  
12 **The Appropriate Geographic Area for the Evaluation of Impairment**

13  
14 **Q. What general approach should the Commission use in selecting the**  
15 **geographic area for its impairment analysis?**

16  
17 A. To begin, I think it is useful for the Commission to view its task as establishing  
18 “impairment evaluation zones,” recognizing at the outset that this is the singular  
19 purpose to which they will be put.<sup>12</sup> This is not the same exercise as defining a

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<sup>12</sup> See, for instance, ¶ 495: “State commissions must first define the markets in which they will evaluate impairment by determining the relevant geographic area to include in each market.” Defining the geographic area from the perspective of impairment is exactly how the FCC drew the relevant geographic markets for loops and transport (footnote 1536, emphasis added):

Although the incumbent LECs argue that we [the FCC] should apply a zone

1 market as an economic abstraction; its sole purpose is to facilitate a state  
2 commission's evaluation of the extent of competition made possible with access  
3 to a network element, and to *contrast* that competition to the competition that  
4 would result if access were denied.<sup>13</sup> By comparing the competitive profiles of  
5 alternative entry strategies (for instance, by contrasting the competitive profiles of  
6 UNE-P to UNE-L), the Commission can evaluate whether *measures* of actual  
7 competition (i.e., triggers) demonstrate that the national finding of impairment is  
8 not appropriate in Missouri.

9  
10 The basic structure of the TRO is to look at the areas being served by a particular  
11 network element and determine whether an alternative could reasonably produce  
12 the same result. Such an approach is appropriately customer-centric, with the  
13 states being directed to consider, among other things:

- 14 \* The locations of customers actually being served (if any) by  
15 competitors;  
16
- 17 \* The variation in factors affecting competitors' ability to  
18 serve each group of customers; and,  
19

---

approach to transport and loops, we define the relevant geographic market for transport as route-by-route, and the relevant geographic market for enterprise loops as customer-by-customer, *because of the economic and operational issues associated with alternative transport and loops deployment.*

<sup>13</sup> Of course, if competitive activity would significantly decline as a result, then a significant impairment must be present that is being corrected through the entrant's access to the network element in question.

1                   \*       The competitors' ability to target and serve specific markets  
2                               economically and efficiently using currently available  
3                               technologies.<sup>14</sup>  
4

5                   The only bounds that the FCC placed on the state's discretion in determining the  
6                   geographic contours of a "market" (or, more properly stated, an impairment  
7                   evaluation zone) is that the area must be smaller than an entire state. At the same  
8                   time, it must not be so small that "...a competitor serving that market alone would  
9                   not be able to take advantage of available scale and scope economies from serving  
10                  a wider market."<sup>15</sup>  
11

12       **Q.     Have you reviewed data that identifies "the locations of customers actually**  
13       **being served (if any) by competitors?"**  
14

15       A.     Yes. My review demonstrates that UNE-P exhibits a very distinct competitive  
16              profile – that is, UNE-P brings competitive choice throughout the serving territory  
17              of SBC. As the Commission approaches its impairment analysis, it is important  
18              that it define "geographic areas" in a manner that permits it to recognize the  
19              unique competitive signature of UNE-P, so that it may test other entry strategies  
20              to see whether they could produce the same level of competitive choice.  
21

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<sup>14</sup>       TRO ¶ 495.

<sup>15</sup>       *Ibid.*

1 Exhibit JPG-2 analyzes the competitive profile of UNE-P in the exchanges served  
2 by SBC.<sup>16</sup> The bar chart in Exhibit JPG-2 plots the competitive penetration  
3 achieved by UNE-P in each of SBC's wire centers in Missouri, ranked by the size  
4 (measured in total access lines) of the exchange. SBC's largest exchange  
5 (McGee, 120,000 lines) is farthest on the left, while SBC's smallest exchange  
6 (Paynesville, 160 lines) is on the right. SBC's remaining exchanges are arranged  
7 in-between according to size.

8  
9 As the Exhibit JPG-2 clearly shows, CLECs utilizing UNE-P to serve mass  
10 market customers have brought competition to essentially *every* SBC exchange in  
11 Missouri, irrespective of the size of the exchange.<sup>17</sup> The significance of this  
12 competitive profile cannot be overstated – the competitive signature of the UNE-P  
13 entry strategy is its ability to serve the mass market across the *entire* mass market  
14 without geographic limitation. No other competitive entry strategy can provide  
15 this result.

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<sup>16</sup> Exhibit JPG-2 estimates the competitive market share achieved by UNE-P by comparing the UNE-P volumes provided by SBC in response to CLEC Coalition DR 1-2 to the total number of retail lines at each wire center used by the FCC in the Hybrid Cost Proxy Model (used to determine High Cost Support). In comparing these two data sources, however, there were a total of four wire centers (out of more than 200) that could not be matched and have not been included in the analysis.

<sup>17</sup> According to SBC's response to CLEC Coalition DR 1-2, there are only two wire centers in the State of Missouri without UNE-P based competition.



1     **Q.     What conclusion should the Commission draw from the competitive profile**  
2     **illustrated in Exhibit JPG-2?**

3  
4     A.     The competitive profile of UNE-P clearly demonstrates that “the locations of  
5     customers actually being served (if any) by competitors” is, in fact, the entire  
6     territory of the incumbent. This is not to say that *every* carrier offers service  
7     across the entire profile, but rather the *strategy* itself supports competition in each  
8     wire center. As the Commission judges alternatives to UNE-P, it should do so  
9     fully aware that UNE-P produces statewide competition – and it should not  
10    restrict the availability of unbundled local switching and UNE-P unless it can  
11    conclude that an alternative will produce a similar competitive profile.

12  
13    **Q.     Have you also reviewed data that identifies “the locations of customers**  
14    **actually being served (if any) by competitors using UNE-L?**

15  
16    A.     Yes. Accepting SBC’s quantification of “mass market”<sup>18</sup> UNE-L customers as  
17    accurate,<sup>19</sup> Exhibit JPG-3 contrasts the competitive profile of these two entry

---

<sup>18</sup> As indicated earlier, the term “mass market” is limited to analog voice customers up to the DS0/DS1 crossover that has not yet been established in this proceeding. SBC has provided data based on a “default” crossover of 3 lines that it has not -- and I believe cannot -- justify as reasonable. Because the data supplied by SBC is the only data on the potential number of “mass market” UNE loops available, however, my analysis relies on the information at this point in the proceeding (although I do not endorse its accuracy).

<sup>19</sup> I note that SBC’s data may include legacy loops from failed or abandoned business plans that may be potentially misleading. A more reasonable approach to determine how different network elements are being used to serve different customers would be to focus exclusively on

1 strategies. As Exhibit JPG-3 demonstrates, UNE-L is far more geographically  
2 limited – and far less effective in the mass market – than UNE-P. Mass market  
3 UNE-L penetration in Missouri (as measured by SBC) is trivial where it exists at  
4 all (never more than 2%), and is absent entirely from more than 80% of the wire  
5 centers in the state.

6  
7 **Q. What does this mean for the geographic areas selected by the Commission to**  
8 **evaluate impairment?**

9  
10 A. As I indicated earlier, I intend to first wait to evaluate the testimony of SBC  
11 before making a recommendation. In addition, I believe that it is important that  
12 the Commission only adopt a tentative market definition in this phase of the  
13 proceeding, given the potential importance of other information (such as, for  
14 instance, “the variation in factors affecting competitors’ ability to serve each  
15 group of customers; and the competitors’ ability to target and serve specific  
16 markets economically and efficiently using currently available technologies”)<sup>20</sup>  
17 that is not easily developed within the accelerated time frame of this phase.

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current data (for instance, the change in UNE-P and UNE-L lines by wire center over the past year), and excluding UNE-L lines (such as fax lines) going to CLEC enterprise customer locations. However, even using SBC’s estimates of UNE-L penetration, it is clear that the geographic profile of UNE-L is quite different than the profile achieved by UNE-P.

<sup>20</sup> TRO ¶ 495.

1           Based on the “profile of customers actually being served,” however, it is  
2           important that the Commission not select an area for the evaluation of impairment  
3           that is so small that it fails to appreciate the unique competitive signature  
4           exhibited by UNE-P. This factor would suggest relatively large areas for  
5           impairment evaluation (such as the LATA), so that the Commission not mistake  
6           some limited entry in a relatively small area as evidence of non-impairment.<sup>21</sup>

7  
8       **Q.    Do you believe that broad statewide competition was intended by the federal**  
9       **Act?**

10  
11      A.    Yes. It is clear that one of the goals of the federal Act is to encourage broad  
12           competition throughout an entire state. For instance, the Act fundamentally  
13           judges whether local markets are open (in Section 271) on a state-by-state basis:

14  
15                   The requirement of an operational competitor is crucial because ...  
16                   whatever agreement the competitor is operating under must be  
17                   made generally available throughout the State. Any carrier in  
18                   another part of the State could immediately take advantage of the  
19                   "agreement" and be operational fairly quickly. By creating this  
20                   potential for competitive alternatives to flourish rapidly throughout  
21                   a State, with an absolute minimum of lengthy and contentious  
22                   negotiations once an initial agreement is entered into, the

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<sup>21</sup>       Of course, if the Commission adopts relatively large areas in order to *avoid* the mistake of interpreting some geographically limited entry as evidence that impairment does not exist, it is important that the Commission retain this same understanding as it evaluates potential candidates to be included as “triggers.” Although not relevant for this phase of the proceeding, this means that the Commission should only include switch trigger candidates that exhibit a competitive profile similar to that achieved by UNE-P.

Committee is satisfied that the "openness and accessibility" requirement is met.<sup>22</sup>

The bottom line is that the Commission is observing in the market exactly the type of statewide competitive activity that the U.S. Congress hoped to see when they opened these markets to competition. Consequently, the Commission should take great care that it not take any action to curtail UNE-P based competition, unless it is confident that an alternative would produce the same result.

## Summary

**Q. Please summarize your testimony.**

A. The Commission has decided to bifurcate its impairment analysis into two phases. In this phase, the Commission will set the regulatory “upper bound” of the mass market by determining the point at which (at least in theory) a customer with multiple analog voice lines would be more efficiently served with a DS-1. In addition, the Commission will establish (at least tentatively), the “geographic market” in which it will evaluate impairment in the next phase of this proceeding.

In the testimony above, I outline the basic approach the Commission should use to evaluate SBC's specific proposals. As to determining the DS0/DS1 "crossover,"

<sup>22</sup> *Ameritech Michigan Order*, Federal Communications Commission, CC Docket 97-298,

1           the analysis is fundamentally algebraic – i.e., the testimony presents an objective  
2           *mathematical* point at which a DS-1 is less costly than multiple analog loops,  
3           recognizing that a crossover calculated in the simplified manner suggested would  
4           be a minimum given its simplifying assumptions and the fact that it does not  
5           consider a number of subjective factors that might prevent a customer from  
6           making this choice in the real world.

7  
8           Selecting the appropriate “geographic market” for purposes of an impairment  
9           analysis requires that the Commission understand the geographic profile of the  
10          competition made possible by unbundled local switching. As shown above,  
11          unbundled local switching produces *statewide* competition. The core purpose of  
12          the geographic area selected for an impairment analysis is that it reasonably  
13          capture the breadth of competition made possible by unbundled local switching so  
14          that it may be contrasted with the breadth of competition from alternative  
15          strategies. My analysis suggests, therefore, that the area chosen should be  
16          reasonably broad so that the Commission can reject, as a substitute to unbundled  
17          local switching, entry strategies that are unable to produce a competitive outcome  
18          of similar breadth. While I make no specific recommendation in this round of  
19          testimony, I would generally encourage the Commission to make its decision  
20          tentative until it may consider the full evidence of Phase II.

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Footnote 169, citing House Report, emphasis added.

1       **Q.     Does this conclude your direct testimony?**

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3       **A.     Yes.**