

**BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION**

In the Matter of:)	
)	
REVIEW OF FEDERAL COMMUNICATIONS)	CASE NO.
COMMISSION'S TRIENNIAL REVIEW ORDER)	2003-00379
REGARDING UNBUNDLING REQUIREMENTS)	
FOR INDIVIDUAL NETWORK ELEMENTS)	
<hr/>		Filed: February 11, 2004

**DIRECT TESTIMONY AND EXHIBITS OF
JOSEPH GILLAN
ON BEHALF OF
COMPSOUTH**

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I. Introduction and Witness Qualification

1

2

3 **Q. Please state your name and address.**

4

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

8

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

10

11 A. I am a graduate of the University of Wyoming where I received B.A. and M.A.
12 degrees in economics. From 1980 to 1985, I was on the staff of the Illinois
13 Commerce Commission where I had responsibility for the policy analysis of
14 issues created by the emergence of competition in regulated markets, in particular
15 the telecommunications industry. While at the Commission, I served on the staff
16 subcommittee for the NARUC Communications Committee and was appointed to
17 the Research Advisory Council overseeing the National Regulatory Research
18 Institute.

19

20 In 1985, I left the Commission to join U.S. Switch, a venture firm organized to
21 develop interexchange access networks in partnership with independent local
22 telephone companies. At the end of 1986, I resigned my position of Vice
23 President-Marketing/Strategic Planning to begin a consulting practice. Over the

**Direct Testimony of Joseph Gillan Associates
On Behalf of CompSouth
Case No. 2003-00379**

1 past twenty years, I have provided testimony and/or sworn affidavits before more
2 than 35 state commissions, five state legislatures, the Commerce Committee of
3 the United States Senate, the Federal Communications Commission, and the
4 Federal/State Joint Board on Separations Reform. In addition, I have provided
5 expert reports to the Canadian Radio-television and Telecommunications
6 Commission, as well as the Finance Ministry of the Cayman Islands. I currently
7 serve on the Advisory Council to New Mexico State University's Center for
8 Regulation. A complete listing of my qualifications is provided in Exhibit JPG-1
9 (attached).

10
11 **Q. On whose behalf are you testifying?**

12
13 A. I am testifying on behalf of CompSouth. CompSouth is an industry trade group
14 committed to policies that would further the development of competitive markets
15 in the Southeast. CompSouth's member companies provide the tangible benefits
16 – in terms of choices, savings, innovations and jobs – that the U.S. Congress
17 hoped would as a result of its effort to open local telecommunications markets to
18 competition.

19
20 **Q. What is the purpose of your testimony?**

21
22 A. The purpose of my testimony is to address the FCC's Triennial Review Order
23 (TRO) as it applies to unbundled local switching, particularly as part of the

1 unbundled network element platform (UNE-P) used to serve “mass market”
2 customers. The TRO lays out a complex path to a simple conclusion, namely that
3 conditions in Kentucky do not warrant reversal of the FCC’s national finding that
4 CLECs are impaired without access to unbundled local switching to serve the
5 “mass market.”

6
7 This is not an abstract debate with intellectual appeal but little practical effect –
8 the decisions that the Commission reaches in this proceeding will have a real and
9 immediate impact on the choices available to Kentucky consumers, and on the
10 prices that they pay for their telecommunications services. The stark reality is
11 that before UNE-P became generally and operationally available to CLECs, there
12 was no meaningful mass-market competition. If UNE-P is eliminated
13 prematurely, competition for the average POTS customer would likely disappear,
14 with this important customer segment reverting back to the monopoly that the
15 U.S. Congress and this Commission have worked so hard to reform.

16
17 The principal focus of my testimony concerns the so-called “triggers” outlined in
18 the TRO that, in effect, rely on actual competition as a means to judge whether
19 impairment exists. In order to place the trigger (or actual competition) analysis in
20 context, my testimony provides a simplified “roadmap” to understanding the TRO
21 and the various tasks that the FCC has asked the states to perform. In addition, I
22 summarize for the Commission the status of local competition in Kentucky today,
23 emphasizing the important role played by unbundled local switching as a means

1 to access BellSouth's monopoly loop network in a commercially meaningful way.

2 As my testimony explains, UNE-P is responsible for mass market competition
3 throughout the state of Kentucky and the Commission should take care that it
4 does not limit its availability until it is confident that an alternative is capable of
5 producing comparable results.

6
7 **Q. In addition to addressing the trigger analysis required by the TRO, does**
8 **your testimony provide any insight to how the market is likely to develop if**
9 **access to unbundled local switching is retained?**

10
11 **A.** Yes. The final section of my testimony explains why unbundling is so important
12 to the continued evolution of the industry from its monopoly roots to its hoped-for
13 competitive future. Unbundling the legacy telephone network encourages
14 competition, and the more competition that exists for customers today, the more
15 investment that will occur to retain these customers in the future as their needs
16 and options change. UNE-P is a critical step in the market's evolution from
17 voice-centric (i.e., POTS-based) services to an integrated digital environment, but
18 not all customers are poised for (or interested in) moving away from POTS
19 anytime soon. Consequently, UNE-P is needed to facilitate a competitive
20 transition to advanced services, as well as to provide competitive options for those
21 customers that will remain with more traditional offerings.

1 At the same time, the Commission must appreciate that the process of establishing
2 a competitive local market requires a long-term commitment. There is no miracle
3 technology that offers an immediate solution to overcoming the incumbent's
4 entrenched advantages in the mass market. The incumbent's inherited network
5 represents the cumulative product of decades of monopoly protection. While I
6 would also disagree with BellSouth that unbundling discourages the deployment
7 of new facilities, the unbundling at issue here concerns access to legacy facilities
8 used to provide POTS service. There is nothing mystically beneficial about
9 encouraging the deployment of additional switching capacity in a state where
10 switching capacity is already in excess supply. Moreover, there is no question
11 that unbundled local switching is the most efficient, cost effective means to access
12 BellSouth's loop network used to serve mass market customers.

13
14 **Q. Does your testimony recommend any "follow-on" proceedings that the**
15 **Commission should schedule here?**

16
17 **A.** Yes, I recommend two follow-on proceedings. First, it is important to again
18 emphasize that because of the importance of local switching to local competition,
19 Congress specifically required that BellSouth offer access to this network element
20 in order to be able to offer long distance services in Kentucky. Under the terms of
21 Section 271's social contract, BellSouth has voluntarily accepted the obligation to
22 offer unbundled local switching at rates that are "just and reasonable and

1 nondiscriminatory” and which provide entrants “meaningful access.”¹ In order
2 for this commitment to have practical meaning, the Commission should expect it
3 will need to adjudicate (as the arbiter of interconnection disputes) rates that
4 comply with this pricing standard for any local switching rate (such as the rate for
5 DS-1 switch ports) that is no longer required under Section 251 of the Act.
6 Therefore, for administrative efficiency, I recommend that the Commission
7 initiate, at the conclusion of this docket, a generic proceeding in which BellSouth
8 may request the Commission establish the “just and reasonable” rate for any
9 switching arrangement no longer required to be unbundled under section 251 of
10 the federal Act, but which BellSouth has committed to offer as a result of its
11 choice to invoke the provisions of Section 271 to offer long distance service in the
12 State.² Finally, the FCC has requested that states develop procedures to conduct
13 periodic review of the incumbent’s unbundling obligations.³ Consequently, at the
14 conclusion of this proceeding, the Commission should establish the process it will
15 use to conduct future inquiries.
16

¹ TRO ¶ 603.

² By recommending that the Commission initiate such a proceeding, however, I do not want to suggest that the rate itself should necessarily change. TELRIC-based rates are “just and reasonable” under federal law, and it would be entirely appropriate for the Commission to continue existing rates. At most, any difference between a just and reasonable rate under section 271, and the just and reasonable TELRIC rate, can be no more than a just and reasonable difference.

³ TRO ¶ 424.

II. POTS Competition in Kentucky

Q. Please summarize how local competition is developing in Kentucky?

A. To begin, it is important to appreciate that mass market competition – that is, competition for the average POTS customer – depends upon competitive carriers being able to access BellSouth’s loop network in a commercially meaningful way. For all practical purposes, that access is obtained through the use of BellSouth’s unbundled local switching, which provides electronically controlled access to BellSouth’s analog loop plant through the combination known as UNE-P. The following summarizes the growth in local competition in Kentucky over the past several years using UNE-P and UNE-L, which are the two principal means to access BellSouth’s inherited loop network:

Table 1: UNE-P and UNE-L Activity in Kentucky⁴

	In-Service Lines		Growth	
	UNE-L	UNE-P	UNE-L	UNE-P
December-99	2,638	1,169		
June-00	3,925	2,079	1,287	910
December-00	4,849	9,755	924	7,676
June-01	4,930	17,814	81	8,059
December-01	4,453	23,962	-477	6,148
June-02	3,847	35,614	-606	11,652
December-02	3,621	66,634	-226	31,020
June-03	3,273	108,254	-348	41,620

⁴ Source: BellSouth Form 477 (Local Competition Reports) responses to the Federal Communications Commission.

1 As Table 1 illustrates, UNE-P is an inherently superior method of access to the
2 monopoly loop network needed to serve the mass market. Over 97% of *all* the
3 UNE-based local competition in Kentucky is dependent upon UNE-P.
4

5 **Q. Does UNE-P bear a special relationship to section 271 and the consequences**
6 **of BellSouth's offering of bundled local/long distance services?**
7

8 A. Yes. There are a number of important parallels and linkages between UNE-P and
9 BellSouth's offering of long distance services in this state. The first is quite direct
10 – UNE-P is nothing more than the *local*-wholesale equivalent to the wholesale
11 services that BellSouth uses to provide long distance service. Indeed, the concept
12 of unbundled local switching was first developed to provide the same type of
13 electronic access to local loop facilities⁵ – and to create a comparable local
14 generic switching and transmission “platform” – that was (and is) commonly
15 available in the long distance market, and which was (and is) readily available to
16 the RBOCs after the legal prohibitions on their offering long distance service
17 were lifted. This is not a coincidence. The expectation at the time the federal Act
18 was passed was that the RBOCs would rely on wholesale long distance
19 arrangements to quickly offer the mass market local and long distance services
20 from a single provider, and the only way to prevent the RBOCs from reasserting

⁵ One of the many problems (or impairments, if you will) solved by unbundled local switching is that it supports a customer-migration process that is similar to (in terms of cost and customer experience) to the PIC change process used by consumers when they change long distance carriers.

1 their dominance would be if other carriers had a comparable opportunity to
2 compete.

3
4 The social contract embodied in section 271 fully recognized the importance of
5 local switching to achieving the balance of reforms contained in the federal Act.
6 Section 271 specifically requires BellSouth to offer local switching if they want to
7 offer long distance services in the states where they are the incumbent. It is
8 remarkable that BellSouth (as well as the other RBOCs) continuously denigrate a
9 local entry method that parallels their own strategy for offering long distance
10 service (i.e., leasing the requisite switching and transmission functionality through
11 a wholesale arrangement), as though one (their interLATA offerings) provides
12 public benefits, while the other (competitive local services), does not.

13
14 **Q. Was it wise for BellSouth to accept the terms of section 271 and offer UNE-P**
15 **in exchange for the opportunity to provide long distance services?**

16
17 A. Yes. Even with the availability of the UNE-P wholesale offering, BellSouth is
18 dominating its competitors in the race to provide customers with bundled local
19 and long distance service obtained from a single carrier. In the fourth quarter of
20 2003 (the most recent quarter for which the information is available), BellSouth
21 gained more than 2.7 long distance lines (to add with its local service) for every

1 local line gained by all of its competitors (using UNE-P) combined.⁶ BellSouth
2 now provides long distance service to 30% of the mass market, while complaining
3 that it should not be required to offer (even though it was an explicit part of its
4 271 commitments) a similar local arrangement that is enabling competitors using
5 UNE-P to serve less than 10% of the local market regionwide (and 9% here in
6 Kentucky).⁷

7
8 **Q. Are the local competition statistics for Kentucky consistent with data in other**
9 **states?**

10
11 A. Yes. The Kentucky statistics are also consistent with national data filed at the
12 FCC during the Triennial Review proceeding (and summarized below). As the
13 following table shows, UNE-P is critical to POTS competition for residential
14 customers *and* small businesses that desire analog-based telephone service.

⁶ Source: BellSouth Quarterly Earnings Statements, 3rd Q 2003 and 4th Q 2003.

⁷ Source: BellSouth 4th Quarter 2003 Earnings Statement, January 22, 2004 and BellSouth Form 477 filing with the FCC (data as of June 2003).

Table 2: UNE-P Penetration in Mass Market⁸

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%

Q. What type of carrier is using UNE-P to compete in the POTS market?

A. Not surprisingly, the largest competitors using UNE-P to compete in the mass market are the traditional long distance carriers, AT&T and MCI. More recently, Sprint has announced its intention to compete in the local exchange POTS market using UNE-P. The fact that Sprint, the nation's largest incumbent local exchange carrier not affiliated with an RBOC, has concluded that UNE-P is needed to compete for mass market customers provides further validation that UNE-P is the efficient, economic choice (and, conversely, that other approaches simply will not produce comparable results).

Because each of the traditional long distance carriers had a relatively large preexisting base of voice customers (and the need to offer local/long distance bundles referenced earlier), these carriers have become the largest *individual*

⁸ 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.

1 competitors using UNE-P. The largest *collective* purchaser of UNE-P, however,
2 is the new wave of competitive entrants that rely on UNE-P to bring fresh energy
3 and innovative ideas and services to this market segment. It is estimated that
4 more than 40% of the UNE-P lines are purchased by non-IXC CLECs (nearly 1/3
5 more than AT&T or MCI), demonstrating the importance of UNE-P to reducing
6 entry barriers in the POTS market.⁹

8 **III. A Roadmap to the Triennial Review Order**

9
10 **Q. Did the FCC conduct a *comprehensive* evaluation of the impairment that**
11 **limits mass market local competition?**

12
13 A. No. It is important to remember that the FCC focused its analysis – and rested its
14 conclusion -- on only one source of impairment, the manual hot cut process used
15 to provision analog loops to CLEC switches. Based on this single factor, the FCC
16 concluded that impairment exists on a national scale.¹⁰ Significantly, the FCC did
17 not determine that the hot-cut process was the only source of impairment – rather,
18 having *already* found impairment nationally, it left it to the states to identify other
19 sources of impairment that would remain (even if it were possible to correct the
20 problems created by the manual hot-cut process).

⁹ Source: *UNE-P Fact Report*, published by the PACE Coalition, July 2003.

¹⁰ TRO ¶ 423.

1

2 **Q. What tasks did the FCC outline for the states in the Triennial Review Order**
3 **(TRO) as it relates to mass market local switching?**

4

5 A. The basic structure of the TRO is essentially a three-pronged analysis:

6

7 * An “actual competition” analysis (i.e., triggers) to determine if there are
8 markets where the level of actual competition is so vigorous, that the
9 national finding of impairment must be wrong.

10

11 * A “potential competition” analysis to determine whether, despite the
12 absence of “actual” competition and the finding of national impairment,
13 there are factors that would make competition possible nonetheless.

14

15 * A “can impairment be fixed” analysis that looks at possible changes to
16 provisioning systems – specifically, a batch hot-cut process combined with
17 “rolling access” to unbundled switching – to determine whether the hot-
18 cut impairment can be corrected.

19

20 It is important that the Commission not become distracted by the “scavenger
21 hunt” feel of the various analyses that the FCC asked it to undertake in the TRO.
22 Certainly the TRO instructs state commissions to evaluate a number of issues (at
23 least to the extent that the ILEC demands that the state commission undertake

1 such a comprehensive task). However, it is useful for the Commission to
2 remember that this proceeding *starts* with a national finding that CLECs are
3 impaired in serving mass market customers without access to ILEC unbundled
4 local switching; the FCC simply asks the Commission to confirm there are no
5 exceptions to this national finding.

6
7 **Q. Which of these basic analyses specified in the TRO – i.e., actual deployment**
8 **(triggers), potential deployment (the business case analysis), and operational**
9 **improvements – does your direct testimony address in most detail?**

10
11 A. The principal focus of my testimony is the role and application of the FCC’s
12 “actual competition” or “trigger” analysis set forth in the TRO. The FCC
13 believed that the “principal mechanism” to judge impairment should be actual
14 marketplace activity.¹¹ Such an approach does make sense, but only so long as
15 the analysis is conducted in a fashion structured to determine whether potential
16 trigger candidates do, in fact, provide evidence of non-impairment.
17
18 One cannot overstate the potential importance of the actual competition (or
19 trigger) test. If the triggers are satisfied, the test *overrides* the FCC’s national
20 finding that CLECs are impaired without access to unbundled local switching to
21 serve the mass market and *short circuits* further state review regarding the extent

¹¹ TRO ¶ 498.

1 of economic and operational barriers (at least under the federal Act). Given the
2 critical role the trigger analysis plays, it is essential that the Commission apply the
3 trigger analysis with a care that is scaled to the important consequences that could
4 *potentially* follow if the trigger test is satisfied.¹² Given this role, a discussion of
5 the requirements for the FCC’s “triggers” analysis forms the most detailed area of
6 my testimony.

7
8 **Q. Does your testimony also address the “potential deployment” analysis**
9 **required by the TRO?**

10
11 A. Yes, but not to the same extent as my discussion of “actual competition.” I
12 believe that the FCC’s “potential deployment analysis” is mostly useful as a
13 forensic examination designed to understand the *causes* underlying the CLECs’
14 post-Act experience. This is not a case where CLECs *have not* tried to enter
15 local markets with their own facilities and the Commission must rely on
16 *predictions* about profitability and competition. The widespread failure of CLECs
17 over the past several years is a “fact” of actual market experience that cannot be
18 ignored. The FCC’s requirement that the states conduct a potential deployment
19 analysis (at least where the incumbent insists) is useful mostly to determine *why*
20 the CLECs’ competitive results have been what they are, and as a means to help

¹² As I indicated earlier (and will explain in more detail in the final section of this testimony), BellSouth is still obligated to offer unbundled local switching under Section 271 of the Act at rates that must be just and reasonable and, therefore, should differ (little if at all) from those currently in effect.

1 illustrate the additional impairments (beyond the manual hot-cut process) that the
2 FCC did not consider.

3
4 **Q. Would it be reasonable for the Commission to remove a network element**
5 **based on a potential deployment analysis?**

6
7 A. I realize that the BellSouth has the opportunity (under the TRO) to attempt to
8 “explain away” the absence of local competition in the mass market by
9 sponsoring a “model” that shows such competition *should* occur, even if it has
10 not yet done so. But is it really reasonable to conclude that local competition for
11 mass market POTS customers in the absence of UNE-P is possible, in direct
12 contradiction of the past seven years of experience, and with the most relevant
13 measure of existing competition (i.e., the actual competition test) showing that
14 alternative approaches to serving the mass market have yet to work? No, I do not
15 believe so.

16
17 The “potential deployment” analysis should not be about placing the Commission
18 in the role of an omniscient “super investor,” able to design through a regulatory
19 contested case the ultimate business case that has eluded real investors over the
20 past seven years. If the ILECs were really interested in demonstrating that
21 providing POTS services to mass market customers by deploying competitive
22 switches to connect analog loops is feasible and profitable, they have had the
23 same seven years to demonstrate this point by actually competing using this entry

1 strategy in each other's regions. That they have not done so speaks volumes about
2 the credibility of any potential deployment business model that the ILECs may
3 present in this proceeding. Rather than enter and compete for mass market
4 customers in other ILEC regions, the chosen "entry" strategy of the RBOCs has
5 been to buy other RBOCs in an ever increasing spiral of consolidation.¹³ As
6 previously discussed, the largest non-RBOC ILEC (Sprint) has concluded that in
7 order to serve mass market customers outside of its ILEC territory, it must utilize
8 unbundled local switching and UNE-P. Conclusions supported by the ILECs'
9 actual behavior should be given more weight than any model they present.

10
11 The point here is that a "potential deployment" model may be useful to explain
12 why entry has *not* occurred, but only a flawed model with unrealistic revenue
13 and/or cost assumptions would show that entry is possible after so much CLEC
14 time, effort and capital has already been expended to actually test that claim in the
15 real world.

16
17 **Q. Should the Commission expect that a batch hot-cut process would eliminate**
18 **impairment?**
19

¹³ I recognize that Qwest has recently announced its intention to purchase the assets of Allegiance Telecom through the bankruptcy auction process. Its public statements, however, indicate that its purpose has more to do with reducing the access costs of the Qwest interLATA network than any strategic entry to the mass market.

1 A. No, it should not. Although the operational impairment issues are discussed more
2 fully in the testimony of other witnesses, the point that I would like to make here
3 is that the manual batch hot-cut and rolling access “solution” that the FCC has
4 suggested would be meaningful only if the manual hot-cut process were the only
5 impairment preventing CLECs from serving mass market customers with their
6 own switches. Although the FCC requires the states to consider such a
7 “solution,” in the end, the process would still require the manual provisioning and
8 movement of mass market customers' analog loops from the ILEC switch to the
9 CLEC switch. There is no reason to believe that such an approach would be
10 satisfactory to serve the mass market POTS customers who “have come to expect
11 the ability to move freely from carrier to carrier in a seamless and rapid
12 manner,”¹⁴ similar to the consumers' change of long distance carrier with an
13 automated PIC change.

14
15 Moreover, as indicated above, the “solution” would only materially reduce
16 impairment if the manual hot-cut process were the *only* impairment – that is, if the
17 only reason entrants relied on unbundled local switching to serve the mass market
18 was to avoid the operational and economic impairments created by the manual
19 hot-cut process, then the batch-cut system (with significantly lower loop
20 migration costs) might alleviate those impairments. There are, however, other
21 impairments and cost disadvantages that the approval of a batch hot-cut approach

¹⁴ TRO ¶ 474.

1 does nothing to lessen, including impairments and cost disadvantages associated
2 with the requirement to digitize and backhaul traffic from the ILEC switch where
3 all mass market analog loops terminate to a distant CLEC switch, as well as other
4 cost consequences of the economies of scale and scope that the ILEC inherited,
5 but that the new entrant must overcome.

6
7 Finally, there is no reason to believe that a batch hot-cut “solution” would be as
8 reliable, cost-efficient and, perhaps most importantly, transparent to the customer
9 as the “electronic hot-cut” implemented when a CLEC customer is provisioned on
10 UNE-P. In effect, the batch hot-cut approach presupposes that competitors can
11 build a relatively stable customer base, with virtually all of the customers won
12 from the incumbent (and few from each other). The FCC never explains in the
13 TRO *why* a competitive local market would exhibit these characteristics –
14 certainly these are not the lessons learned in the years after the long distance
15 market became competitive, with customers frequently moving between carriers,
16 including moving *among* competitive carriers and not just from AT&T (the long
17 distance incumbent).

18
19 As a practical matter, in order for a new hot-cut system to materially change
20 competitive conditions in the “mass market,” it would have to facilitate rapid and
21 inexpensive customer changes between competing providers on a scale
22 comparable to the electronic process that currently exists for provisioning of a
23 CLEC customer via UNE-P. Thus, while it is important that the Commission

1 work to improve the “hot-cut” process, it should not begin that work under the
2 assumption that a batch-system is what will be needed to have a meaningful effect
3 in the marketplace.

IV. Defining the Mass Market

4
5
6
7 **Q. What threshold questions must the Commission address in order to apply**
8 **the “actual competition test” to the “mass market”?**

9
10 **A.** The first layer of the actual competition test is the definition of the “mass
11 market.” As noted earlier, the mass market is generally defined by the FCC as
12 the POTS market – that is, the market of customers obtaining analog voice
13 service. There are two parameters, however, that the FCC has asked the state
14 commissions to establish in order to define the “mass market” in its state. The
15 first is to determine the “cross-over” that will define the upper boundary of the
16 mass market in terms of the number of voice lines a customer may have before
17 the customer should be viewed as an “enterprise customer.” The second
18 parameter is that the FCC has asked the states to determine the appropriate
19 “geographic boundary” of the mass market in which it will conduct its
20 impairment analysis.

1 **Q. As a threshold question, does your direct testimony recommend a specific**
2 **crossover and geographic area for the Commission to use in evaluating**
3 **impairment?**

4
5 A. No, not at this time. As I have noted before, this proceeding begins with a
6 national finding of impairment that justifies the unbundling of local switching to
7 serve analog customers. I believe it is BellSouth's obligation in the first instance
8 to explain *why* and *where* impairment does not exist, so that the claim can then
9 tested by other parties in this proceeding. As a result, my testimony provides
10 overall guidance as to how the Commission should approach these questions.
11 Specific recommendations will be provided after I have reviewed BellSouth's
12 claims in its direct testimony.

13
14 **A) Establishing the Upper Bound of the Analog Mass Market**

15
16 **Q. How does the TRO define the mass market customer?**
17

18 A. The TRO provides a basic definition of the "mass market customer" and contrasts
19 it with the "enterprise customer." The mass market customer is (a) primarily
20 interested in basic voice-grade POTS service; (b) widely geographically
21 dispersed; and (c) unaccustomed to complex or disruptive provisioning schemes.
22 As the FCC explains, "mass market customers are analog voice customers that
23 purchase only a limited number of POTS lines, and can only be economically

1 served via DS0 lines.”¹⁵ Unlike enterprise customers, mass market customers are
2 not predominantly located in concentrated geographic locations, such as central
3 business districts; rather residential and small business customers are spread
4 across all urban, suburban, and rural locations. These customers expect that using
5 their telephone services, as well as changing service providers, will not be a
6 complicated transaction.¹⁶

7
8 **Q. Does the mass market include both residential and business customers?**

9
10 **A.** Yes. Perhaps because we are all residential customers, we intuitively appreciate
11 the fact that the residential marketplace is part of the mass market. The forgotten
12 customer of telecommunications policy, however, is the average (which is to say
13 in this context, voice-centric) small business customer. There are many business
14 customers that still rely on traditional POTS service for the telecommunications
15 needs (for example, restaurants, garages, plumbers, florists and others for whom
16 higher speed enterprise services are simply unnecessary).

17
18 One of the important roles for local competition is to eliminate discrimination by
19 driving prices towards their costs. Traditionally, an artificial price difference has
20 been used to separate the residential POTS customer from the business POTS

¹⁵ TRO ¶ 497.

¹⁶ TRO ¶ 467: “Most importantly, mass market customers demand reliable, easy-to-operate service and trouble-free installation.”

1 customer. One benefit of local competition will be that this price differential will
2 decline, as competitors offer more cost-based products to *both* the residential and
3 small business market. Small businesses will benefit from lower prices, while
4 residential customers will see more value-laden offerings, such as MCI's
5 Neighborhood offering. These competitive offerings are already at work erasing
6 the *artificial* boundary in the POTS marketplace between the residential and small
7 business customer, as a *technological* boundary separating the analog (POTS) and
8 digital (i.e., enterprise) market emerges in its place.

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

11
12 A. Enterprise customers demand a level of service and capacity – particularly for
13 data services – that is quite different from that demanded by the mass market
14 customer. As the FCC explained: “DS1 enterprise customers are characterized by
15 relatively intense, often data centric, demand for telecommunications services
16 sufficient to justify service via high-capacity loops at the DS1 capacity and
17 above.”¹⁷

18
19 **Q. Does the TRO recognize this distinction in the DS0/DS1 cutover analysis to**
20 **be performed by the Commission?**
21

¹⁷ 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.”¹⁸ The
6 cutoff is defined as “the point where it makes economic sense for a multi-line
7 customer to be served via a DS1 loop.”¹⁹

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

¹⁸ TRO ¶421, n.1296.

¹⁹ 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 should be used:

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

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

15
16 **Q. Are there other considerations that the Commission should keep in mind**
17 **when it adopts the “DS0/DS1” crossover?**

18
19 A. Yes. The role of the crossover is to establish a governmentally drawn upper
20 boundary to the mass market – in effect, substituting the Commission’s judgment
21 of how a customer *should be* served (via a DS-1) for the customer’s judgment of
22 how it *has chosen* to be served (multiple analog loops). While the above formula

**Direct Testimony of Joseph Gillan Associates
On Behalf of CompSouth
Case No. 2003-00379**

1 complies with the direction of the TRO, the Commission should be aware that this
2 simple calculation does not take into account a number of factors that, in the real
3 world, would explain why a customer with multiple voice loops might not want to
4 move its POTS service to a higher-capacity facility. . As a practical matter, in
5 the real world, customers are not likely to purchase a DS-1 service unless they are
6 using a PBX that supports a digital interface. In such real-world situations, it is
7 the customer that chooses to become an enterprise customer by the customer
8 premise equipment it selects. This is quite different than the “theoretical
9 customer” suggested by the TRO that is assumed to be “servable” by a DS-1,
10 even though it has no PBX on its premise.

11
12 There are a number of issues that would deter a customer that has not already
13 installed the necessary CPE from purchasing a DS-1 based service to meet its
14 analog voice needs. For instance, the customer would need to make space
15 available for channel bank equipment on its premises. Customers may not want
16 to give up the space for such equipment, or may resist the telecommunications
17 provider’s need to have access to the premises to maintain or repair the
18 equipment. Alternatively, because of provisioning problems or the customer’s
19 individual traffic patterns, the CLEC might need to use higher priced special
20 access rather than UNE DS1 facilities (which would significantly increase the
21 crossover). In these circumstances, the customer would have good reasons to
22 preserve its analog POTS service, even if it were at or above the theoretical
23 cutover point described above. In addition, a customer served by multiple analog

1 lines is less vulnerable to network failure than a customer whose entire service is
2 being provisioned over a single DS-1. And finally, as noted above, the
3 calculation does not consider any of the additional costs associated with using a
4 UNE loop (such as collocation and backhaul) that are not incurred when service is
5 provided using UNE-P.

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

14
15 **B) The Appropriate Geographic Area for the Evaluation of Impairment**

16
17 **Q. What general approach should the Commission use in selecting the**
18 **geographic area for its impairment analysis?**

19
20 **A.** The basic approach should be to look at areas being served by a particular
21 network element and determine whether an alternative could reasonably produce
22 the same result. The basic approach described in the TRO is obviously (and

1 correctly) customer-centric, with the states being directed to consider, among
2 other things:

- 3 * The locations of customers actually being served (if any) by
4 competitors;
5
- 6 * The variation in factors affecting competitors' ability to
7 serve each group of customers; and,
8
- 9 * The competitors' ability to target and serve specific markets
10 economically and efficiently using currently available
11 technologies.²⁰
12

13 The only bounds that the FCC placed on the state's discretion in determining the
14 geographic contours of a "market" (or, more properly stated, an impairment
15 evaluation zone) is that the area must be smaller than an entire state. At the same
16 time, it must not be so small that "...a competitor serving that market alone would
17 not be able to take advantage of available scale and scope economies from serving
18 a wider market."

19
20 **Q. Have you reviewed data that identifies "the locations of customers actually**
21 **being served (if any) by competitors?"**

22
23 A. Yes. My review of Kentucky specific data demonstrates that UNE-P exhibits a
24 very distinct – and very important -- competitive profile: that is, UNE-P brings
25 competitive choice throughout the serving territory of BellSouth. As the

²⁰ TRO ¶ 495.

1 Commission approaches its impairment analysis, it is important that it define
2 “geographic areas” in a manner that permits it to recognize the unique competitive
3 signature of UNE-P, so that it may test other entry strategies to see whether they
4 could produce the same level of competitive choice.

5
6 **Q. Have you quantified the competitive profile of UNE-P in Kentucky?**

7
8 A. Yes. Exhibit JPG-2 analyzes the competitive profile of UNE-P in the exchanges
9 served by BellSouth.²¹ The bar chart in Exhibit JPG2 plots the competitive share
10 achieved by UNE-P in each of BellSouth’s wire centers in Kentucky, ranked by
11 the size (measured in POTS access lines) of the exchange. BellSouth’s largest
12 exchange is farthest on the left, while BellSouth’s smallest exchange is on the
13 right. BellSouth’s remaining exchanges are arranged in-between according to
14 size.

15
16 As the Exhibit JPG-2 clearly shows, CLECs utilizing UNE-P to serve mass
17 market customers have brought competition to nearly *every* BellSouth exchange
18 in Kentucky, irrespective of the size of the exchange. The significance of this
19 competitive profile cannot be overstated – the competitive signature of the UNE-P
20 entry strategy is its ability to serve the mass market across the *entire* mass market

²¹ Source: BellSouth Response to AT&T 1st Interrogatory, No. 55.

1 without geographic limitation. No other competitive entry strategy can provide
2 this result.

3
4 **Q. What conclusion should the Commission draw from the competitive profile**
5 **illustrated in Exhibit JPG-2?**

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

15
16 **Q. Have you also analyzed the competitive profile of UNE-P more recently?**

17
18 A. Yes. To better understand how the market is operating *today*, I also looked at
19 competitive UNE-P lines added in the past six months.²² This information is
20 presented in Exhibit JPG-3. As Exhibit JPG-3 shows, UNE-P providers continue
21 to actively provide service throughout the state, adding lines in nearly every wire

²² Source: BellSouth Response to CompSouth 1st Interrogatories, No. 3.

1 center in Kentucky over the past 6 months, without demonstrating any preference
2 for urban over rural areas.

3
4 **Q. What do Exhibits JPG-2 and JPG-3 mean for the geographic areas selected**
5 **by the Commission to evaluate impairment?**

6
7 A. As I indicated earlier, I intend to first wait to evaluate the area suggested by
8 BellSouth before making a final recommendation. Based on the “profile of
9 customers actually being served,” however, it is important that the Commission
10 not select an area for the evaluation of impairment that is so small that it fails to
11 appreciate the unique competitive signature of UNE-P. This factor would suggest
12 relatively large areas for impairment evaluation (such as the LATA), so that the
13 Commission not mistake some limited entry, over a smaller area, as evidence of
14 non-impairment.²³

15
16 **Q. Do you believe that statewide competition was intended by the federal Act?**

17
18 A. Yes. It is clear that one of the goals of the federal Act is to encourage broad
19 competition throughout an entire state. For instance, the Act fundamentally
20 judges whether local markets are open (in Section 271) on a state-by-state basis:

²³ 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 critical that the Commission retain this understanding as it evaluates potential candidates to be included as “triggers.” Specifically, as I explain below, the Commission should only include switch trigger candidates that exhibit a competitive profile similar to that achieved by UNE-P.

1
2 The requirement of an operational competitor is crucial because ...
3 whatever agreement the competitor is operating under must be
4 made generally available throughout the State. Any carrier in
5 another part of the State could immediately take advantage of the
6 "agreement" and be operational fairly quickly. By creating this
7 potential for competitive alternatives to flourish rapidly throughout
8 a State, with an absolute minimum of lengthy and contentious
9 negotiations once an initial agreement is entered into, the
10 Committee is satisfied that the "openness and accessibility"
11 requirement is met.²⁴
12

13 The bottom line is that the Commission is observing in the market exactly the
14 type of statewide competitive activity that it and the U.S. Congress hoped to see
15 when they opened these markets to competition. Consequently, the Commission
16 should take great care that it not take any action to curtail UNE-P based
17 competition, unless it is confident that an alternative would produce the same
18 result.
19

20 **Q. Should the Commission *expect* UNE-L to produce the same result?**
21

22 A. No. There are material differences between UNE-L and UNE-P that make UNE-
23 L ill-suited to the type of broad entry that necessary to address the mass market.
24 To begin, as noted by the FCC, the manual provisioning (i.e., the "hot cut")
25 processes used with UNE-L do not have the scale, reliability or cost structure
26 necessary to support mass market services. Equally important, however, are the

²⁴ *Ameritech Georgia Order*, Federal Communications Commission, CC Docket 97-298, Footnote 169, *citing* House Report, emphasis added.

1 *additional* costs that the FCC did not expressly evaluate and which add
2 significantly to CLECs' economic impairment. These include a CLEC's costs to
3 extend an analog loop from the wire center where it is currently located to the
4 CLEC's switch location. These additional collocation, "signal preparation" and
5 transport costs are significant and compounded by the fact that BellSouth has a
6 large number of relatively small wire centers in Kentucky.

7
8 The UNE-L business strategy fundamentally requires that CLECs can efficiently
9 access loops at the wire center and transport those loops back to their switch
10 without incurring a cost penalty so large that they may not reasonably compete
11 with the ILEC (that incurs none of these costs). However, even if all of these
12 costs could be wiped away, CLECs would still have to deal with the fact that the
13 ILEC network was never designed to provide a few locations where all the loops
14 may be accessed. Rather, the ILEC network is relatively dispersed – that is, the
15 loops are spread among hundreds of wire centers, some of which aggregate very
16 few loops. The bottom line is that the Commission should not expect that UNE-L
17 would be able to produce competitive results on a scale comparable to UNE-P in
18 the analog POTS market that is the subject of this proceeding trigger inquiry.

V. Applying the Actual Competition Test: Triggers

Q. How should the Commission approach the trigger analysis?

A. When the FCC asked the states to look at actual competitive activity, it did so with the expectation that the states would apply the “trigger test” with judgment as well as actual data. As the FCC indicated, “We find that giving the state this role [as fact-finder on triggers and other impairment issues] is most appropriate where, in our judgment, the record before us does not contain sufficiently granular information and the states are better positioned than we are to gather and assess the necessary information.”²⁵

The FCC is relying on the states to examine local markets based on the State commissions’ knowledge and familiarity with local conditions. The Commission’s role in this context obviously is not to merely review the data that was already provided to the FCC regarding the deployment of CLEC switches, but rather to conduct a full inquiry into whether the trigger criteria set forth in the TRO are satisfied.

The application of the triggers requires an in-depth approach that gets at the central question of whether actual, non-UNE-P based competition for mass

²⁵ TRO ¶ 188.

1 market customers exists in a given market, sufficient to show that CLECs have
2 been able to overcome impairment. The FCC creates triggers that are “keyed to
3 objective criteria,”²⁶ (which are described in more detail below) and provided
4 insight into the judgment that the Commission should apply.

5
6 For example, the FCC determined that CMRS providers should not be considered
7 by a State commission in its analysis the triggers,²⁷ and the FCC reiterated the
8 importance of distinguishing between “enterprise switches” and “mass market
9 switches” in the trigger analysis.²⁸

10
11 **Q. What criteria are included in the FCC’s framework for the “Self-
12 Provisioning Trigger”?**

13
14 A. In the TRO, the FCC provides guidance and criteria as to the basic qualities a
15 competitive LEC must exhibit in order to be considered a legitimate candidate for
16 the “self-provisioning” trigger. At each step, these criteria are designed to
17 conform to the touchstone purpose of the trigger evaluation – to determine
18 whether there is sufficient actual mass market competition being offered by
19 switch-based CLECs to justify a “no impairment” finding in a market in *spite* of
20 the national finding of mass market switching impairment.

²⁶ TRO ¶ 498.

²⁷ TRO ¶ 499, n.1549.

²⁸ TRO ¶441 and n. 1354, ¶ 508.

1

2

The self-provisioning trigger criteria can generally be organized into six categories. Before a “trigger candidate” can be found to qualify as satisfying the self-provisioning trigger, the criteria contained in the TRO for each of these categories must be satisfied. The six categories are as follows:²⁹

3

4

5

6

7

* The self-provisioning trigger candidate’s switches must be “mass market,” not “enterprise” switches.

8

9

10

* The self-provisioning trigger candidate must be actively providing voice service to mass market customers in the designated market, including residential customers, and is likely to continue to do so.

11

12

13

14

* The self-provisioning trigger candidate should provide services exhibiting a ubiquity comparable to UNE-P within the area chosen for the analysis.

15

16

17

18

* The self-provisioning trigger candidate should be relying on ILEC analog loops to connect the customer to its switch or, if a claimed

19

²⁹ As the Commission is well aware, the page-length of the TRO is matched only by its potential importance to local competition. While I believe that these 6 categories are the core requirements needed to qualify as a Self-Providing Trigger candidate, additional issues may arise after I review the testimony of BellSouth and the other parties in this proceeding that would require additions to this preliminary list.

1 “intermodal” alternative, its service must be comparable to the
2 ILEC service in cost, quality, and maturity.

3
4 * The self-provisioning trigger candidate may not be affiliated with
5 the ILEC or other self-provisioning trigger candidates.

6
7 * The existence of the self-provisioning trigger candidate should be
8 evidence of sustainable and broad-scale mass market competitive
9 alternatives in the designated market.

10
11 Only if each of these trigger criteria is met does a candidate qualify as one of the
12 three self-provisioning providers necessary to satisfy the FCC’s self-provisioning
13 trigger.

14
15 **Criterion 1: Enterprise Switches Do Not Qualify as Triggers**

16
17 **Q. You identify the first criterion as requiring that the self-provisioning trigger**
18 **candidate’s switches must be “mass market” switches rather than**
19 **“enterprise” switches. Please describe the FCC’s discussion of this criterion**
20 **in the TRO.**

21
22 A. The analytical importance of the distinction between the “mass market” and
23 “enterprise market” pervades the TRO. The FCC found that, even based on the

1 limited record before it, there was a clear distinction between the mass market and
2 the enterprise market, both in terms of typical customer profile and the state of
3 CLEC switch deployment.

4
5 I have already explained the difference between mass market and enterprise
6 customers. Similarly, the FCC found that CLEC switch deployment is
7 significantly different in the mass market and the enterprise market: “[W]e find
8 that the record demonstrates significant nationwide deployment of switches by
9 competitive providers to serve the enterprise market, but extremely limited
10 deployment of competitive LEC circuit switches to serve the mass market.”³⁰

11
12 Based on the demonstrated differences between mass market and enterprise
13 switches deployed in the marketplace, the FCC specifically rejected ILEC
14 arguments that mass market switches and enterprise switches should be reviewed
15 together in the mass market triggers analysis.³¹ While the FCC allows deployment
16 of an enterprise switch to be considered as a factor in the mass market “potential
17 deployment analysis,”³² the FCC recognized that the existence of an enterprise
18 switch has no weight in determining whether a mass market switching trigger has
19 been satisfied: “[S]witches serving the enterprise market,” the FCC held, “do not

³⁰ TRO ¶ 435.

³¹ TRO ¶ 441.

³² TRO ¶ 508.

1 qualify for the triggers” applicable to mass market switching.³³ The TRO thus
2 directs the Commission to consider only mass market switches in the mass market
3 switching trigger analysis.

4
5 **Q. How does the FCC distinguish between “mass market” and “enterprise”**
6 **switches?**

7
8 A. To begin, the FCC recognized that enterprise switches may serve some non-
9 enterprise customer lines.³⁴ This recognition is based on the simple fact that there
10 are a variety of reasons a CLEC serving the enterprise market with its own switch
11 may provide some analog service and, therefore, obtain some analog loops as an
12 ancillary extension of its operations. For instance, this could occur if a CLEC’s
13 enterprise customer requests fax lines (which require use of an analog line to
14 provide a data need, but do not provide evidence that a mass market POTS service
15 is provided). Similarly, a large, multi-location enterprise customer may require a
16 package of services from a CLEC that includes some analog lines for a particular
17 branch office. It would be contrary to common sense, as well as to the FCC’s
18 trigger criteria, to declare that a switch serves the mass market when the number
19 of analog loops provisioned to that enterprise switch is minimal compared to the
20 number of digital loops serving enterprise customers. Consequently, the

³³ TRO ¶ 508.

³⁴ TRO ¶ 441.

1 Commission must examine the type of customer loops (analog versus DS1 and
2 above) being provisioned to a CLEC switch to determine whether the switch is
3 reasonably categorized as a “mass market switch” that potentially satisfies the
4 requirements for the self-provisioning trigger.

5
6 **Criterion 2: Self-Providers Must Be Actively Providing Mass Market Service**

7
8 **Q. The second trigger criterion you describe requires that the self-provisioning**
9 **trigger candidate must be actively providing voice service to mass market**
10 **customers in the designated market, including residential customers, and is**
11 **likely to continue to do so. Please identify the provisions of the TRO that**
12 **discuss this criterion.**

13
14 **A.** This measure summarizes several criteria that the FCC requires before a CLEC
15 may satisfy the self-provisioning trigger. To break this category into its
16 component parts, the TRO requires that a self-provisioning trigger candidate: (a)
17 provide voice service to mass market customers;³⁵ (b) that it is “actively”
18 providing such service;³⁶ and (c) that the self-provisioning trigger candidate is

³⁵ TRO ¶ 499.

³⁶ TRO ¶ 499.

1 likely to continue actively providing voice service to mass market customers in
2 the future.³⁷

3
4 **Q. How should the Commission determine whether a CLEC is providing “voice**
5 **service to mass market customers”?**

6
7 A. In determining whether this criterion is met, the Commission must first *exclude*
8 potential trigger candidates who do not provide stand-alone *voice service* and who
9 do not serve *mass market customers*, including those that do not serve residential
10 customers. For example, as noted above, some analog loops that have been
11 provisioned to a CLEC switch are used for purely data purposes (e.g., DSL or fax
12 lines), and thus do not provide voice service. Such lines should not be included in
13 determining whether the self-provisioning trigger candidate provides voice
14 services to the mass market.

15
16 Perhaps more significantly, the Commission must ensure that the voice services
17 provided by self-provisioning trigger candidates are being provided to mass
18 market customers rather than to enterprise customers. A customer purchasing
19 voice and data services provisioned by a DS1 loop is by definition an enterprise
20 customer³⁸ and not a mass market customer (even if a few voice lines are being

³⁷ TRO ¶ 500.

³⁸ TRO ¶ 451.

1 served along with the data pipe). The Commission's trigger analysis must focus
2 on the appropriate customer market, and exclude self-provisioning trigger
3 candidates that are not serving customers who are the focus of the mass market
4 switching impairment analysis.

5
6 Moreover, to qualify as a mass market trigger, a potential trigger candidate should
7 be serving the core of the mass market, the residential customer. Region wide,
8 more than 70% of the switched voice access lines are purchased by residential
9 customers.³⁹ It makes no sense to qualify a potential self-providing trigger
10 candidate as providing "mass market" service if it does not even offer service to
11 the largest portion of the mass market, i.e., residential customers.

12
13 **Q. How should the Commission determine whether a self-provisioning trigger**
14 **candidate is *actively* providing voice service to mass market customers?**

15
16 A. The FCC recognized the importance of evidence that a CLEC is actually in the
17 marketplace and actively marketing POTS services to mass market customers.
18 Without evidence that a self-provisioning trigger candidate is actively providing
19 POTS services, a CLEC that no longer serves mass market customers could
20 satisfy a trigger that is intended to assess actual competition in the present rather
21 than the past. In the real world (the world the triggers seek to analyze), this is a
22 significant concern. There are CLECs who attempted to serve mass market

³⁹ Source: BellSouth 3rd Quarter 2003 Earnings Release, Access Line Counts.

1 customers using their own switches, but found the operational and economic
2 impairments too formidable to overcome. As a result, these CLECs essentially
3 abandoned the mass market. Those CLEC switches may still serve some “legacy”
4 analog loops connected to customers who took advantage of an early CLEC
5 offering and may still be served even though the CLEC is no longer adding mass
6 market customers generally. It would be nonsensical for such legacy analog lines
7 (which are remnants of business plans scrapped precisely because of impairment)
8 to serve as evidence that the CLEC’s switch today is being used to “actively”
9 serve the mass market. The FCC captures this concern by requiring that self-
10 provisioning in the mass market must be occurring in an active manner today, that
11 the providers “are currently offering and able to provide service.”
12

13 One way to assess whether a self-provisioning trigger candidate is “actively”
14 serving mass market customers is to review the types of unbundled loops recently
15 provisioned to the CLEC’s switch (for instance, in the last 6 month period). If the
16 loops provisioned to the switch in the last 6 months are predominantly DS1 and
17 above, that is strong evidence that the self-provisioning trigger candidate is not
18 actively providing POTS services to mass market customers. Moreover, as
19 previously discussed, even where there are analog loops being provisioned to the
20 CLEC’s switch, the Commission should evaluate whether the carrier is actively
21 marketing to mass market customers, or whether the analog lines that it is adding
22 are the by-product of sales to enterprise customers, pre-existing UNE-L
23 customers, or some other anomaly.

1

2 **Q. How should the Commission determine that the self-provisioning trigger**
3 **candidate is likely to continue actively providing POTS services to mass**
4 **market customers in the future?**

5

6 A. The TRO asks the Commission to determine whether the self-provisioning trigger
7 candidate is “likely to continue” offering and able to provide voice POTS services
8 to mass market customers in the future. This determination requires that the
9 Commission make an informed assessment of the viability of the self-
10 provisioning trigger candidate's mass market offerings in the future. This
11 assessment, if it is to be meaningful, should include evidence regarding the
12 CLEC’s future business prospects. If a CLEC is on the verge of exiting the market
13 for providing mass market services (or has already left it), then it is demonstrably
14 not “likely to continue” providing POTS services to mass market customers in the
15 future. Moreover, if a CLEC is competing using a mix of its own facilities and
16 UNE-P, then the Commission cannot determine that it would “likely continue” if
17 UNE-P were no longer available.

18

19 Admittedly, the FCC complicated the Commission’s work in this regard with its
20 comment that “states shall not evaluate any other factors, such as the financial
21 stability or well-being of the competitive switching providers.”⁴⁰ State
22 Commissions are directed to carry out the FCC’s mandate to consider whether

⁴⁰

TRO ¶ 500.

CLECs are likely to continue providing competitive switching alternatives, while simultaneously indicating that they not review what might be the most salient evidence on the topic – i.e., whether the CLEC’s business plan has been successful to date. Nevertheless, the Commission must conduct the necessary review of financial information to determine whether a self-provisioning trigger candidate is “likely to continue” to provide POTS services to mass market customers after the close of the record in this proceeding. Otherwise, the competitive choices that supposedly would be available to consumers if UNE-P were eliminated due to the trigger analysis would likely be illusory. Consequently, the Commission should evaluate CLEC financial information to judge the CLEC’s *future* performance, even if it may not use that information to judge *past* actions.

Criterion 3: Self-Providers Should Exhibit a Ubiquity Comparable to UNE-P

Q. Why is it important that a self-provisioning trigger candidate exhibit a geographic reach (i.e., ubiquity) comparable to UNE-P?

A. The purpose of a qualifying a trigger candidate is to demonstrate, through actual marketplace behavior, that other carriers are not impaired without access to unbundled local switching because the qualifying candidate has demonstrated an ability to serve the same market without the element. In order for the comparison

1 to be valid, it is important that the trigger candidate *actually* cover a comparable
2 geographic area with its services.

3
4 **Q. Does the TRO draw conclusions about impairment by evaluating whether**
5 **alternatives exhibit a ubiquity comparable to that of the element under**
6 **consideration?**

7
8 A. Yes. In a number of instances, the FCC applied this same reasoning in
9 determining why an alternative claimed by the ILECs to demonstrate non-
10 impairment should be rejected. For example, the ILECs argued that wherever the
11 ILEC qualified for special access pricing flexibility, that the FCC should also find
12 non-impairment for transport. The FCC rejected this reason because its special
13 access pricing flexibility scheme did not assure the availability of a *ubiquitous*
14 alternative:

15
16 Additionally, the pricing flexibility trigger based on alternative
17 transport-based collocation requires no consideration of the
18 ubiquity of the competitive transport facilities throughout an
19 MSA.⁴¹
20

21 In addition, the FCC determined that CMRS is not an intermodal alternative to
22 unbundled local switching, in part based on its view that CMRS is not sufficiently
23 ubiquitous:

⁴¹ TRO ¶ 397 (emphasis added).

For example, we note that CMRS does not yet equal traditional incumbent LEC services in its quality, its ability to handle data traffic, its ubiquity, and its ability to provide broadband services to the mass market.⁴²

Ubiquity is clearly a critical dimension in the mass market, as the FCC already recognized with respect to unbundled local switching. A State clearly would be incorrect to count as a mass market trigger any provider with a ubiquity materially less than UNE-P as demonstrating non-impairment, when the FCC already rejected CMRS as qualifying as a trigger, in part because of the limited ubiquity of that technology.

**Criterion 4: Self-Providers Must Be Relying on ILEC Loops or
Offering Service of Comparable Cost, Quality and Maturity**

Q. The fourth criterion you reference is that self-provisioning trigger candidates should be relying on ILEC loops. What is the reference point in the TRO for this trigger criterion?

A. Although the FCC stated that the Commission should “consider” intermodal alternatives in the switching trigger analysis, it also indicated the states should review them carefully before determining whether (and how) they may

⁴² TRO footnote 1549 (emphasis added).

1 legitimately qualify under the triggers. The TRO recognizes that for most
2 entrants in a world without unbundled local switching, access to the ILEC's loops
3 will be critical. It would make little sense, therefore, to eliminate unbundled local
4 switching and UNE-P switching if the only alternative in a market was, for
5 example, used by an entity that utilizes its own loops. That atypical situation
6 would provide no meaningful evidence of whether new entrants could compete on
7 a UNE-L basis. The FCC made this point several times in the TRO. For
8 example:

9
10 Specifically, many of the [CLEC residential] lines cited by the
11 incumbents are served by carriers that, for one reason or another,
12 are able to use their own loops. We have made detailed findings
13 that competitors are impaired without access to incumbents' voice-
14 grade local loops. Indeed, no party seriously contends that
15 competitors should be required to self-deploy voice-grade loops.
16 *Thus, for the typical entrant, entry into the mass market will likely*
17 *require access to the incumbents' loops, using the UNE-L strategy.*
18 *... Indeed, as discussed above, a crucial function of the*
19 *incumbent's local circuit switch is to provide a means of accessing*
20 *the local loop.*"⁴³

21
22 ***

23
24 *"We note that an important function of the local circuit switch is as*
25 *a means of accessing the local loop. Competitive LECs can use*
26 *their own switches to provide services only by gaining access to*
27 *customers' loop facilities, which predominantly, if not exclusively,*
28 *are provided by the incumbent LEC. Although the record indicates*
29 *that competitors can deploy duplicate switches capable of serving*
30 *all customer classes, without the ability to combine those switches'*
31 *with customers' loops in an economic manner, competitors remain*
32 *impaired in their ability to provide service. Accordingly, it is*
33 *critical to consider competing carriers' ability to have customers'*

⁴³

TRO ¶ 439, emphasis supplied

1 *loops connected to their switches in a reasonable and timely*
2 *manner.*⁴⁴

3
4 ***

5
6 “*We are unaware of any evidence that either [cable or CMRS]*
7 *technology can be used as a means of accessing the incumbents’*
8 *wireline voice-grade local loops. Accordingly, neither technology*
9 *provides probative evidence of an entrant’s ability to access the*
10 *incumbent LEC’s wireline voice-grade local loop and thereby self-*
11 *deploy local circuit switches.*”⁴⁵
12

13 **Q. What does the TRO direct the Commission to do when considering evidence**
14 **regarding switch-based CLECs that do not rely on ILEC unbundled loops?**

15
16 A. The TRO notes that State commissions may give such evidence less weight in the
17 trigger analysis than evidence regarding a self-provisioning trigger candidate that
18 relies on ILEC unbundled analog loops (i.e., a UNE-L based provider). In
19 describing the self-provisioning trigger, the TRO states: “We recognize that when
20 one or more of the three competitive providers is also self-deploying its own local
21 loops, this evidence may bear less heavily on the ability to use a self-deployed
22 switch as a means of accessing the incumbents’ local loops.”⁴⁶ Notably, a self-
23 provisioning switch trigger candidate that does not rely on the ILEC’s loops
24 provides no evidence that problems with the hot-cut process (which formed the
25 basis of the FCC’s national finding of impairment) have been addressed.

⁴⁴ TRO ¶ 429, emphasis supplied.

⁴⁵ TRO ¶ 446, emphasis supplied.

⁴⁶ TRO ¶ 501, n.1560.

1

2 **Q. If the Commission does evaluate whether to include a provider using its own**
3 **loop facilities, what factors must it consider?**

4

5 A. The TRO does permit states to consider intermodal alternatives, but it advises
6 that: “In deciding *whether to include* intermodal alternatives for purposes of these
7 triggers, states should consider to what extent services provided over these
8 intermodal alternatives are comparable in cost, quality, and maturity to ILEC
9 services.”⁴⁷ Thus, any time an intermodal trigger candidate is considered, the
10 Commission must first examine the nature of the mass market voice services it
11 offers before declaring the company has satisfied the self-provisioning trigger.

12

13 As noted above, the FCC already conducted such an analysis in the TRO with
14 respect to CMRS (wireless services) as an intermodal alternative. The FCC found
15 that CMRS services do not meet the trigger criteria standard. Accordingly, the
16 FCC held, “just as CMRS deployment does not persuade us to reject our
17 nationwide finding of impairment ... at this time, we do not expect state
18 commissions to consider CMRS providers in their application of the triggers.”⁴⁸

19

⁴⁷ TRO ¶ 499, n.1549, emphasis supplied.

⁴⁸ *Ibid.*

1 The FCC’s analysis of CMRS providers and services under the “cost, quality, and
2 maturity” standards in the TRO is instructive and demonstrates that the states
3 should carefully consider all other intermodal trigger candidates under this same
4 standard.⁴⁹ An intermodal provider that may be proffered as an self-provisioning
5 trigger candidate and may appear to be a mass market competitive alternative on
6 the surface – either due to industry hype or ILEC wishful thinking – may not hold
7 up to the trigger criteria when the facts are carefully analyzed by the Commission.

Criterion 5: ILEC Affiliates Do Not Qualify as Triggers

11 **Q. The fifth trigger criterion you identify is that the self-provisioning trigger**
12 **candidate not affiliated with the ILEC or other self-provisioning trigger**
13 **candidates. Please explain the TRO basis for this criterion.**

15 A. The FCC held that the “competitive switch providers that the state commission
16 relies upon in finding either trigger to be satisfied must be unaffiliated with the
17 incumbent LEC and with each other.”⁵⁰ The FCC added that affiliated companies
18 will be counted together as a single entity in the trigger analysis. The FCC held
19 that this restriction is necessary to prevent the ILECs from “gaming” of the trigger
20 criteria. It is also important that “CLEC affiliates” of nearby ILECs also be

⁴⁹ As noted earlier, the FCC also rejected CMRS on the basis that its ubiquity was too limited to qualify it as an alternative to unbundled local switching.

⁵⁰ TRO ¶ 499.

1 carefully reviewed, to assure that the CLEC affiliate is not merely benefiting from
2 its affiliation with an incumbent in a manner that no unaffiliated CLEC could
3 match.

4
5 **Criterion 6: De Minimis Competitive Activity Does Not Qualify as a Trigger**

6
7 **Q. Please explain the final trigger criterion you recommend the Commission**
8 **apply: “The self-provisioning trigger candidate should be sufficiently large to**
9 **offer sustainable broad-scale mass market competitive alternatives in the**
10 **designated market.”**

11
12 **A.** The TRO establishes trigger analysis as something of a “sudden death” round of
13 analysis, in which the outcome of the analysis could potentially eliminate
14 unbundled local switching and UNE-P in a market without further analysis of
15 economic and operational impairment, at least under section 251 of the Act.
16 When it established the trigger analysis, the FCC pointed out that it believed the
17 application of the trigger-based analysis would identify where competition for
18 mass market customers by CLECs using their own switches and ILEC analog
19 loops was actually occurring, and thus it would achieve the policy goal of
20 ensuring the continued existence of mass market competition.⁵¹ Therefore, it is

⁵¹ See, e.g., TRO ¶ 501.

1 critical that the Commission not undertake its “trigger analysis” untethered from
2 the reality of the marketplace in Kentucky.

3
4 In addition, the FCC rejected ILEC attempts to have it conclude that impairment
5 had been overcome where there is only a relatively low level of competitive
6 penetration. Specifically, the FCC rejected BOC arguments that CLECs were not
7 impaired in the mass market by noting the low relative number of residential lines
8 served by CLEC-deployed switches.⁵² The FCC expressly dismissed the BOCs’
9 argument finding that, at best, “less than three percent of the ... residential voice
10 lines” were being served by CLEC switches. The FCC thus understood – and
11 applied – the common sense notion that a *de minimus* level of competition is
12 simply not a rational basis upon which to find that impairment has been
13 overcome.

14
15 The need to recognize market reality in the trigger analysis is particularly acute
16 here. Today, UNE-P (the bedrock of which is unbundled local switching) is
17 responsible for the vast majority of the bundled services (local and long distance)
18 competition that is reshaping the voice services marketplace. As shown above,
19 only UNE-P has enabled competition to reach broadly and deeply into both urban
20 and rural markets throughout the state. Before determining that UNE-P
21 availability should be diminished or eliminated based on evidence of “triggers,”

⁵²

TRO ¶ 438.

1 the Commission must have reasonable assurance from the record evidence that, in
2 the real world, a UNE-L-only strategy would offer a comparable alternative (in
3 terms of size and scale) to the statewide competitive choices that CLECs already
4 offer to the mass market today using UNE-P.

5
6 The FCC could find no such assurances in its record when it rejected the BOC
7 arguments that there is “no impairment” with respect to mass market switching
8 based on the presence of existing CLEC switches. In that context, the FCC made
9 clear that it would not eliminate access to local switching as a section 251 UNE
10 when the record showed only *de minimus* levels of mass market competition were
11 being provided by alternative approaches.

12
13 **Q. Must each of the trigger criteria be met before a State Commission declares**
14 **that the “Self-Provisioning Trigger” is satisfied in a market?**

15
16 A. Yes. Each of the trigger criteria for self-provisioning are rooted in the TRO.
17 Each of them is tied to one of the specific rationales or findings the FCC made in
18 establishing the trigger analysis as the “sudden death” payoff of the impairment
19 analysis. It is up to the Commission to apply the trigger framework through an
20 informed analysis of the trigger criteria established by the FCC. Only by applying
21 judgment, experience and knowledge of local competitive conditions can the
22 Commission implement the switching triggers as they are formulated in the TRO.

1 **VI. The False Tension Between Unbundling and Facilities Deployment**

2
3 **Q. If the Commission retains the incumbents' obligation to unbundle local**
4 **switching as you recommend, would this discourage facilities investment?**

5
6 A. No. The “unbundling discourages investment” argument is a bogeyman used by
7 the ILEC to wrap their narrow self-interest in the public interest. There is no
8 evidence that unbundling local switching discourages the deployment of new
9 facilities or the introduction of advanced services. For its part, the FCC *rejected*
10 the incumbent’s claims that unbundling discourages investment, finding that the
11 evidence was inconclusive.⁵³ To the contrary, unbundling the legacy network
12 encourages competition, and the more competition that exists for *today’s*
13 customers, the more investment will occur to retain these customers in the *future*
14 as their needs and options change.

15
16 Although I would *also* disagree with the incumbents that unbundling discourages
17 them from investing in new technologies, it is important to leave that debate for a
18 future date. The issue here concerns access to the legacy switched network to
19 offer the most basic of telecommunications services, POTS. As I explain in this
20 section of the testimony:

21

53 TRO ¶ 447.

**Direct Testimony of Joseph Gillan Associates
On Behalf of CompSouth
Case No. 2003-00379**

1 * The incumbent would be financially harmed by a shift of UNE-P
2 lines to UNE-L. The only reason for an incumbent to dismantle
3 UNE-P is if it expects a return of UNE-P lines to its retail services,
4 thereby strengthening its local monopoly. If the lines were to shift
5 to UNE-L, the incumbent would see a significant reduction in its
6 wholesale revenues, without any decrease in its costs.

7
8 * The incumbent's network would be disrupted by a shift of UNE-P
9 lines to UNE-L. The incumbent's interoffice network is designed
10 to handle the traffic from UNE-P lines through a network of first-
11 route and final trunk groups starting at the originating end-office,
12 with the filter of the initiating end-office directly terminating all
13 traffic to nearby subscribers without ever relying on interoffice
14 facilities. If the base of UNE-P lines were shifted to UNE-L, this
15 traffic would re-enter the ILEC network at a different point in the
16 interoffice network, increased by the minutes that must be returned
17 to their initial end-office for termination. The result to the ILEC: a
18 redesigned network and higher costs.

19
20 * The deployment of competitive advanced services to the
21 consumer/small business market would be reduced substantially
22 without access to unbundled local switching, in direct conflict with
23 the *only* facilities-goal in the Act (i.e., to encourage the deployment

1 of *advanced* technologies). With the elimination of line-*sharing* by
2 the FCC, the only meaningful vehicle to market competitive DSL
3 services to smaller users is through line-*splitting*. The effect has
4 been to reduce the addressable market for a competitive xDSL
5 provider (such as Covad) from the 1.1 million lines served by
6 BellSouth, to the 110,000 lines served by UNE-P providers.⁵⁴ If
7 UNE-P is eliminated, the mass market closes entirely.

8
9 **Q. Before you address each of these points in more detail, does it make sense for**
10 **an incumbent to want its competitors to develop duplicative networks?**

11
12 A. No. The Commission should be highly suspicious of ILEC claims that they
13 support the elimination of unbundling so as to “encourage” CLEC investment.
14 Why would an ILEC desire the replication of its network, when the effect of such
15 a strategy (if successful) would be lower revenues, higher costs, and the very real
16 possibility of excess capacity that produces a permanent reduction in the value of
17 its network?

18
19 The issue here is whether the incumbent should make available local switching at
20 cost-based, wholesale rates to competitors so that they may offer competitive
21 POTS. There is *already* sufficient local switching capacity across the state.

⁵⁴ Source: FCC Local Telephone Competition as of June 30, 2003.

1 There is no inherent gain to the economy or society – much less the incumbent –
2 by encouraging/forcing additional investment in a commodity (analog switch
3 ports) that is already in over-supply.

4
5 **Q. Are you saying that a CLEC would never choose to install a competitive**
6 **switch?**

7
8 A. No. There are a number of reasons why a CLEC would decide to install and use a
9 local switch if it were otherwise economically and operationally viable; my point
10 is that there is no reason for the ILEC to encourage that result unless it stood to
11 gain financially by forcing its rival into such an investment.

12
13 One reason that a CLEC would install its own switch is to realize the same cost-
14 structure as the incumbent. Because the ILEC leases switching at its forward
15 looking average total cost (i.e., TELRIC), the additional cost to the CLEC is the
16 *same* for each and every switch port that it orders. As a result, a CLEC that leases
17 unbundled local switching pays the average cost for every switch port. In
18 economics terms, this means that the CLEC's variable and marginal cost of
19 switching is the same as its average cost (a fixed cost per port), and, unlike the
20 ILEC, under TELRIC it never gets the benefit of pricing down to its marginal cost.

21
22 The point is that a CLEC leasing switching would still face the appropriate
23 economic incentive to invest, even with the option of unbundled local switching

1 (assuming that the cost to move a loop to a new switch were rendered
2 inconsequential through an automated hot-cut system that does not exist).

3
4 **Q. Are entrants precluded from offering new services when they lease switching**
5 **capacity from the incumbent?**

6
7 A. No. First, it is important to emphasize again that this proceeding is fundamentally
8 about competition – more precisely, the impairments that would otherwise
9 prevent competition – in the POTS market. The reason that the market is known
10 as “plain old telephone service” is because it is provided over technically
11 standardized facilities, including the circuit switches that have been deployed in
12 the ILEC network. These are *generic* facilities, deliberately engineered to provide
13 a uniform, reliable and predictable customer experience. Whether a carrier leases
14 capacity in a Lucent 5E – or purchases and installs an essentially identical Lucent
15 5E – does not fundamentally change the services that can be offered.

16
17 It is important to understand that most new services in the POTS marketplace
18 have generally been the product of pricing and service innovations unrelated to
19 the underlying legacy network. Network-related innovations generally remove
20 the customer from the POTS market, which is defined as basic voice service.
21 There are major consumer benefits that result from pricing and service-related
22 innovations – bundling, the elimination of distance from landline pricing, and
23 more personalized customer service, not to mention lower prices, are useful and

1 highly valued by customers. Moreover, competition is showing that there are
2 ways to derive additional value from the existing network, by integrating other
3 services with basic POTS.
4

5 **Q. Why would an ILEC want to force its competitors to install their own**
6 **switches, thereby increasing the excess supply of switch ports in the market?**
7

8 A. Obviously, an ILEC would not want to force its competitor to make any
9 investment that *improved* its rival's competitive position. The only reason an
10 ILEC would want to encourage "facilities-based" competition would be if it
11 believed that the result would be *less* competition, not more. Indeed, that is the
12 great irony of the ILECs' arguments that additional CLEC investment, especially
13 in current technology, is appropriate or required by the federal Act.
14

15 Nowhere are the ILECs' incentives clearer than with respect to arguments
16 suggesting that competitors make additional investment in local switching
17 capacity. The financial performance of CLECs that installed circuit switching
18 capacity has been abysmal, with most CLECs declaring bankruptcy to
19 reduce/eliminate the debt they incurred to obtain their installed switching
20 capacity. The investment community is well aware of this track record, and is
21 unlikely to provide more capital to pursue a business strategy that has a
22 documented pattern of failure.
23

1 Thus, the only rational reason that the incumbents are so interested in forcing their
2 rivals into a switch-based entry strategy is because they expect that the new
3 entrants will fail, and that most UNE-P lines will return to it as retail lines if
4 UNE-P were eliminated.

5
6 **Q. Are there other effects on the ILEC from a forced UNE-P to UNE-L**
7 **migration?**

8
9 A. Yes. In Kentucky today, there are over 110,000 UNE-P lines, spread over nearly
10 190 wire centers. If each of those lines were actually forced to move to a UNE-L
11 arrangement (assuming *arguendo* the ILECs' claims that it could actually be done
12 successfully from the CLEC's – which is to say the customer's – perspective),
13 there would be a significant impact on the incumbent's local network.

14
15 The ILECs' networks have been engineered with the expectation that all of the
16 traffic from these 110,000 UNE-P lines will originate at the end-office currently
17 serving the line today. The incumbents have engineered their interoffice
18 networks recognizing that much of this traffic will terminate on lines served by
19 that same end-office (and, therefore, requiring the use of no interoffice facilities).
20 For minutes that do require interoffice transport to other end-offices, the ILEC
21 has engineered the shared transport network to efficiently use “first-route”
22 dedicated facilities where justified, with “overflow” traffic relying on more costly
23 tandem-routes during peak periods (or for all traffic from very small end-offices).

1
2 If these minutes are forced into a UNE-L arrangement, however, they will no
3 longer “originate” at the existing ILEC end-office, but instead would “reappear”
4 on interconnection trunks that are located elsewhere in the ILEC’s network.
5 Suddenly, the minutes that had terminated directly on lines connected to the same
6 end-office as the customer had been served by, and which had required no
7 interoffice transport, would now need to be transported back to the original end-
8 office. Moreover, the remaining minutes would need new interoffice facilities to
9 reach destination end-offices, and would frequently rely on tandem-switched
10 transport facilities due to the relatively (compared to the ILEC) small traffic
11 volumes of the CLEC.

12
13 Once again, the bottom line is clear: BellSouth would only want to eliminate
14 UNE-P if it was confident that significant impairments actually exist and that the
15 primary consequence of a forced migration to UNE-L would be the return of
16 (former) UNE-P lines to the incumbent’s retail monopoly.

17
18 **Q. In your view, does UNE-P availability encourage investment?**

19
20 A. Yes. As I have explained above, this proceeding is about whether CLECs should
21 be allowed to use the legacy LEC network to offer conventional POTS services.
22 Although I disagree generally with the claim that unbundling discourages

1 investment, there should be no debate that sharing the inherited legacy network to
2 offer conventional POTS does not have that effect.

3
4 First, a UNE-P entry strategy (like any business) requires investment –
5 investment in billing systems, computer systems, offices and, perhaps most
6 importantly, human capital (or, more colloquially, jobs). There is nothing
7 magical about Class 5 circuit switching equipment that makes having more such
8 investment socially desirable. These switches perform a commodity switching
9 function that is necessary to offer basic POTS, but it is not a facility investment
10 endowed with any particular opportunity for creativity. Indeed, the most useful
11 new function offered by the circuit switch is its important role “... as a means of
12 accessing the local loop”⁵⁵ – i.e., the access to customers that makes POTS
13 competition possible through UNE-P.

14
15 Second, where new investment does hold the opportunity of dramatically
16 changing the types of services that a customer receives (such as broadband
17 capability), UNE-P is now the primary voice-option for carriers (such as Covad)
18 that are making just such an investment. With the elimination of line-sharing,
19 providers of advanced services can no longer provide their data service over the
20 same loop as the incumbent provides its voice service. Consequently, in order to
21 approach the mass market, these providers require a different “voice partner” so

⁵⁵

TRO ¶ 429.

1 that they may offer data in combination with voice over the same facility (as so
2 many mass market customers desire). Only UNE-P provides that capability in a
3 commercially reasonable manner for the mass market.

4
5 Third, the mere fact that that a carrier does not invest in Class 5 circuit switching
6 does not mean that it is not investing in other facilities. As noted earlier, AT&T
7 and MCI are two of the largest UNE-P purchasers in the nation, and each have
8 invested billions of dollars in (what are commonly called) long distance
9 networks. Ironically, the RBOCs compete in long distance in *exactly* the same
10 manner that AT&T and MCI (and now Sprint) compete in local markets: leasing
11 wholesale services that provide the generic capability of switching and
12 transmitting voice calls.

13
14 UNE-P is central to mass market competition for basic POTS in the same way
15 that wholesale long distance is central to mass market competition for long
16 distance services. The POTS market is shrinking as customers choose (for
17 themselves, and not under regulatory direction) to move to more advanced
18 services. There is no valid policy reason to encourage additional investment in
19 the generic local exchange facilities that underlie UNE-P. POTS competition is
20 essential, however, to the development of competition for more advanced
21 services where investment is likely. Thus, the relevant question is “will there be
22 more advanced services investment if the POTS market is competitive, or less?”

1 **Q. Should the Commission expect more investment in advanced services if the**
2 **POTS market is competitive?**

3
4 A. Yes. First, the initial focus of mass market competition is bundling – offering
5 consumers “packages” that combine local and long distance services into a
6 seamless offering. Over time, however, this form of differentiation will reach a
7 competitive balance, and companies will need to find other ways to differentiate
8 themselves and their services. Moreover, as noted earlier, the POTS market is
9 shrinking, with a natural evolution towards more advanced digital services.
10 Consequently, with the market moving away from POTS, and the principal
11 source of POTS differentiation (bundling) losing its advantage, companies will
12 have to respond with different strategies. But it is critical to recognize that the
13 more companies there are in the POTS market today, the more companies there
14 will be who need to differentiate their services in the future, and the more
15 investment (in new technologies, not duplicative facilities) that will result.

16
17 **Q. Assuming that UNE-P remains available, how would you expect to see the**
18 **market evolve in the future?**

19
20 A. As I indicated earlier, UNE-P is part of a natural market transition whose duration
21 is unknown because it is in the hands of customers themselves. The POTS
22 market is shrinking, as customers increasingly desire services with higher

1 bandwidth (for data) or different features. As the market changes, carriers that
2 rely on UNE-P (to one degree or another) will have to evolve in response.

3
4 There are two directions where the evolution appears most likely. The first will
5 be a greater integration of voice/data customers onto shared platforms using soft-
6 switch technology. In lay terms, soft-switches (i.e., software-defined switches)
7 essentially treat voice conversations as a special type of “data” session that is
8 governed by unique instructions. Second, there would be greater innovation in
9 the use of the “advanced intelligent network” (AIN) architecture that BellSouth
10 has deployed, but which has not yet been fully exploited.

11
12 **Q. Is the “integrated voice/data” evolution you refer to (i.e., VOIP), a part of**
13 **that trend?**

14
15 **A.** Yes. Voice over Internet Protocol (VOIP) refers generally to the provision of
16 voice services in a packet format. While this innovation is clearly exciting, it is
17 still unclear how quickly (and how deeply) the service will fundamentally change
18 customer options. In the near term, for those customers with high-speed data
19 connections, VOIP will likely provide inexpensive alternatives. But it is still
20 unclear how VOIP will really change local market conditions. Critically, to use
21 VOIP requires a high speed data connection – a threshold requirement that today
22 is the province of the enterprise market, not the mass market. At this point, VOIP
23 does not reduce the impairments that justify continued access to unbundled local

1 switching to serve mass market customers. Thus, soft-switches and VOIP will
2 become increasingly prevalent in the enterprise market because they (in the first
3 instance) enable the digital pipe to the customer to be used more efficiently. One
4 consequence of this will be that more customers that are mass market today will
5 choose to become enterprise-like customers in the future.

6
7 **Q. Please explain the second evolutionary path you have identified – the use of**
8 **AIN by UNE-P based CLECs.**

9
10 A. AIN will make possible a different evolutionary path to serve the market of
11 voice-oriented customers. Over the past several years, a silent transformation has
12 been underway in the circuit switch network through the deployment of the
13 “advanced intelligent network” (AIN) architecture. In lay terms, the AIN
14 architecture is a system that moves the software that defines a particular service
15 from the switch itself to a remote database. Various “triggers” (unrelated to those
16 in the TRO) are incorporated into the traditional local switch that, when activated,
17 suspend call processing and signal a remote database (a “Service Creation Point”
18 or SCP) to request an instruction as to how it should proceed. In an AIN
19 environment, service definition is no longer controlled by the switch
20 manufacturer when it releases a generic upgrade to its switch, but rather can be
21 developed by the incumbent or CLEC.

1 **Q. Why do you characterize the AIN architecture as effecting a “silent”**
2 **transformation of the network?**

3
4 A. The reason I characterize this as a “silent” evolution is because the architecture is
5 generally underutilized, with few new services being introduced despite the fact
6 that the architecture is now widely deployed. The reason, however, is that the
7 AIN architecture is not yet open to *competitive* innovation and the incentive to
8 deploy new services is different for an incumbent than an entrant. To the
9 incumbent, a new service should produce incremental revenues, largely from
10 existing customers; for a new entrant, however, a service can be justified by its
11 ability to attract new subscribers, even if no discrete revenues are the result.

12
13 For instance, AIN could be used to replace the familiar dial-tone with an
14 announcement (of the time, the weather or even the number of voice mails
15 awaiting action). It is unlikely that an incumbent could charge its customers a
16 higher price based on a different dial-tone, but a unique dial tone could be a way
17 for an entrant to differentiate its services from the incumbent.

18
19 I offer these observations not as criticism of the incumbent, but rather to again
20 emphasize that competitive differentiation (and consumer benefit) can arise from
21 a variety of strategies, almost none of which requires duplication of the Class 5
22 switching hierarchy of the ILEC. It would be far more useful for regulators to
23 assure that the AIN architecture is open. This would allow non-ILEC service-

1 defining databases to be accessed by switch triggers activated on switch ports
2 leased from the incumbent, without creating uneconomic incentives for wasteful
3 duplication of circuit switching investment.

4
5 **Q. So far you have explained the benefits of a competitive POTS market. What**
6 **would be the consequence of the ILEC maintaining a POTS monopoly?**

7
8 A. If the ILEC retains its POTS monopoly, it will enjoy a base of captive customers
9 and revenues that it will be able to leverage against rivals in those narrow
10 submarkets where other entry strategies are beginning to take hold. The nation
11 cannot afford to permit the ILECs to leverage their inherited monopoly through
12 narrowly targeted rate reductions or other strategies that foreclose competition in
13 other areas. The only way that competition can thrive and endure is if the core of
14 the incumbent's monopoly – the POTS market – is the beneficiary of aggressive
15 competition.

16
17 **VII. Next Steps**

18
19 **Q. Are there other issues that the Commission should prepare to address?**

20
21 A. Yes, there are two follow-up proceedings that the Commission should prepare to
22 conduct at the conclusion of this case. The first concerns how the “post-251” price
23 of unbundled local switching is determined, should there be any circumstance

1 where a finding of non-impairment applies (such as switching used to serve
2 enterprise customers). The second concerns the procedures that should be used to
3 develop prescribed filing windows and other requirements to govern future
4 challenges to impairment (for switching or other network elements).

5
6 As to the first point, it is important to recall that BellSouth is required to provide
7 meaningful access to switching at just and reasonable rates, irrespective of
8 whether it is also required to be offered under section 251 of the Act.⁵⁶ This is
9 because the social contract in section 271 establishes a separate obligation to offer
10 items listed in the checklist, which includes the requirement to offer switching.

11 Although the FCC has determined that such rates need not necessarily be
12 TELRIC, they must still be “just and reasonable”:

13
14 Thus, the pricing of checklist network elements that do not satisfy
15 the unbundling standards in section 251(d)(2) are reviewed
16 utilizing the basic just, reasonable, and nondiscriminatory rate
17 standard of sections 201 and 202 that is fundamental to common
18 carrier regulation that has historically been applied under most
19 federal and state statutes, including (for interstate services) the
20 Communications Act.⁵⁷
21

22 Even if one accepts the FCC’s apparent view that there may be a difference
23 between a just and reasonable TELRIC rate and a just and reasonable non-

⁵⁶ As I noted earlier, BellSouth is also required to offer unbundled local switching in Alabama under the terms of the Commission’s Price Cap Order.

⁵⁷ TRO ¶ 663.

1 TELRIC rate, the difference surely cannot be more than a just and reasonable
2 difference. For instance, the section 271 rate could be established to produce a
3 higher profit (i.e., return on equity), so long as it remained within just and
4 reasonable levels.

5
6 For purposes of administrative efficiency, I recommend that the Commission
7 initiate a new proceeding to establish the “replacement rate” for any network
8 element that is no longer required under section 251 so as to avoid having to
9 address this same issue in multiple, parallel arbitrations. Moreover, because the
10 existing cost-based rate has already been found to be just and reasonable, that rate
11 should remain in effect until the Commission establishes a new rate.

12
13 **Q. How should the Commission approach developing procedures for subsequent**
14 **hearings following this “9-month” case?**

15
16 A. In addition to issues that the Commission must address within the 9-month
17 proceeding, the FCC has also requested that states develop procedures to conduct
18 periodic review of the incumbents' unbundling obligations.⁵⁸ Given the
19 substantial requirements already outlined for the current proceeding, I recommend
20 that the Commission take two actions here, to set the stage for any subsequent
21 investigation.

⁵⁸ TRO ¶ 424.

1
2 First, I recommend that the Commission initiate a rulemaking to determine the
3 “pre-filing” requirements that an incumbent must satisfy before requesting a
4 reduction in its unbundling obligation. Because the FCC generally requires that a
5 state must complete its review of any such request within six months, it will foster
6 administrative efficiency to have agreement in advance as to the information
7 needed to conduct such a review.

8
9 Second, I recommend that the Commission adopt “prescribed filing windows”
10 that specify when an incumbent LEC may first request a further reduction in its
11 unbundling obligations. The FCC specifically invites states to establish
12 “prescribed filing windows,”⁵⁹ and I recommend that the Commission do so here.
13 By establishing specific windows for additional review, the Commission can
14 provide needed certainty to the industry. Following the FCC’s lead, I recommend
15 a 2-year quiet period during which the incumbent LEC may not seek further
16 reduction of its obligations at the conclusion of the 9-month proceeding:
17

18 We [the FCC] conclude that reopening every issue on a biennial
19 basis is not in the public interest because it would increase
20 regulatory uncertainty unnecessarily in this area. We also note that
21 in the period between biennial reviews, it will be the policy of this
22 Commission not to entertain *ad hoc* motions or petitions to remove
23 or add UNEs, and we will summarily dismiss such petitions to
24 ensure certainty in the marketplace.⁶⁰

⁵⁹ See, for instance, footnote 1291.

⁶⁰ TRO ¶ 710.

1
2 By establishing a prescribed filing window for the “next round” of impairment
3 analysis, the Commission and the industry can better anticipate their workload
4 over the next two years.

5
6 **VIII. Summary**

7
8 **Q. Please summarize your testimony.**

9
10 **A.** Kentucky is one of the nation’s leaders in establishing a competitive local
11 exchange market for mass market customers. Even so, competitors are only now
12 beginning to make inroads into the local market, while BellSouth has responded
13 aggressively. A very simple truth is captured by the following quotation from
14 John Gaule:

15
16 A complex system that works is invariably found to have evolved
17 from a simple system that works.
18

19 The reason that UNE-P is under pressure from the incumbents is because it
20 works. Given time, local competition will transform industry pricing (through,
21 for instance, the elimination of distance from telephone rates), and it will set the
22 foundation for a competitive future using the legacy POTS network as its
23 baseline.

1

2 In my testimony, I have explained that UNE-P is critical to POTS competition,
3 and why POTS competition is critical to competition overall. No other strategy is
4 going to produce the competitive benefits in this market that have come from
5 UNE-P.

6

7 The Commission should stay the course. There is no reason – and no basis – to
8 overturn the FCC’s national impairment finding in Kentucky.

9

10 **Q. Does this conclude your initial testimony?**

11

12 A. Yes.