BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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

REBUTTAL TESTIMONY

OF

GARY J. BALL

ON BEHALF OF

COMPETITIVE CARRIERS OF THE SOUTH

March 31, 2004

REDACTED – PUBLIC VERSION

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Q. PLEASE STATE YOUR FULL NAME, TITLE AND BUSINESS ADDRESS.

A. My name is Gary J. Ball. I am an independent consultant providing analysis of regulatory issues and testimony for telecommunications companies. My business address is 47 Peaceable Street, Ridgefield, Connecticut 06877.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the Competitive Carriers of the South ("CompSouth"). CompSouth is a coalition of competitive carriers operating in the Southeast, including in Kentucky, that are committed to the advancement of policies that encourage local and long distance competition in the state.

Q. ARE YOU THE SAME GARY J. BALL WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my rebuttal testimony is to analyze and rebut BellSouth's assertions regarding the self-provisioning and wholesale triggers for high

capacity loops and dedicated transport, and BellSouth's claims that numerous customer locations satisfy the FCC's rigorous potential deployment criteria.

In the *Triennial Review Order* ("*TRO*"),[1] the FCC determined that incumbent local exchange carriers ("ILECs") must continue to provide CLECs with access to unbundled loops and dedicated transport at the DS1, DS3, and dark fiber capacity levels ("high-capacity loops" and "dedicated transport"). The FCC conducted a comprehensive analysis that resulted in the determination that CLECs are impaired without access to high-capacity loops and dedicated transport at the national level. Recognizing that there may be individual customer locations or transport routes where competitively provisioned loops and transport have been deployed such that CLECs are not impaired, the FCC developed a procedure known as the trigger analysis ("triggers"). The triggers are designed to give ILECs an opportunity to demonstrate to their respective state commissions that CLECs are not impaired without access to unbundled high-capacity loops or transport at *specific* customer locations or on *specific* dedicated

[1] Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers (CC Docket No. 01-338); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 (CC Docket No. 96-98); Deployment of Wireline Services Offering Advanced Telecommunications Capability (CC Docket No. 98-147)*, FCC 03-36 (rel. Aug. 21, 2003).

transport routes for specific capacity levels. The two triggers the FCC adopted – self-provisioning and wholesale – must be evaluated independently and should not be blended in analysis.

In my testimony, I demonstrate that BellSouth, through its witness Shelley W. Padgett, has overstated the number of enterprise customer locations and transport routes that satisfy the self-provisioning and wholesale triggers. Additionally, I explain why BellSouth's potential deployment analysis for high capacity loops contained in Dr. Andy Banerjee's testimony fails to incorporate the FCC's location-specific analysis. As a result, Dr. Banerjee's identifies unjustifiable quantities of customer locations for which BellSouth erroneously contends that the Commission should make non-impairment findings and relieve BellSouth of its unbundling obligations.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is divided into six sections. In Section I, I explain how BellSouth is incorrectly interpreting the requirements of the *TRO*. In Section II, I critique BellSouth's self-provisioning trigger analysis, and I explain how BellSouth's has overstated the number of buildings and routes that meet the triggers due to its incorrect interpretations of the *TRO*. In Section III, I provide a similar critique of BellSouth's wholesale trigger

analysis. In Section IV, I describe the FCC's potential deployment criteria. In Section V, I critique BellSouth's potential deployment analysis relating to loops. In Section VI, I address Ms. Padgett's inadequate proposal for transitioning services that have been delisted.

I. BELLSOUTH'S INTERPRETATIONS OF THE *TRO* ARE INCORRECT

Q. MS. PADGETT MAKES SEVERAL ASSERTIONS IN HER TESTIMONY REGARDING PROPER INTERPRETATION OF THE *TRO*. CAN YOU SUMMARIZE THESE ASSERTIONS?

A. Yes. First, Ms. Padgett claims that it is appropriate to include OC(n) level loop and transport services in the self-provisioning trigger analyses for DS1, DS3, and dark fiber. Second, Ms. Padgett asserts that CLECs do not have to be offering dedicated transport service between the "A" and "Z" wire centers for a route to be included, and that switched transport can be counted as dedicated transport for the purposes of the triggers. Third, Ms. Padgett asserts that a CLEC is not required to offer wholesale service at a specific location or route for that location or route to be counted toward the trigger. Fourth, Ms. Padgett asserts that it is not necessary for a CLEC to have access to an entire building to meet the self-provisioning triggers. Finally, Ms. Padgett asserts that wholesale loops do not have to be offered

at wire center collocation arrangements. Each of these assertions is incorrect.

Q. DO THESE ASSERTIONS IMPACT BELLSOUTH'S PROPOSED TRIGGER ANALYSIS?

A. Yes. The result of applying BellSouth's interpretations to the triggers is a larger number of buildings and routes than would result from an accurate and realistic reading of the *TRO*.

Q. PLEASE EXPLAIN MS. PADGETT'S ASSERTION REGARDING INCLUDING OC(N) LEVEL SERVICES IN THE SELF-PROVISIONING TRIGGERS.

A. On pages 8 and 27 of her direct testimony, Ms. Padgett states that OC(n) facilities should count toward the DS3 and DS1 triggers based upon her understanding that DS3 and DS1 services can be derived from an OC(n) system. For example, if a carrier has deployed an OC(3) system, that system potentially could be configured with the appropriate electronics to derive 3 DS3s, each of which can be multiplexed further to derive 28 DS1s. Ms. Padgett asserts that the FCC intended for this "potential capability" of the CLEC networks to be included in the triggers.

Q. IS MS. PADGETT'S ASSERTION REGARDING OC(N) LEVEL SERVICES CONSISTENT WITH THE *TRO'S* IMPAIRMENT ANALYSIS AND CONCLUSIONS?

A. No. In fact, it is the opposite of the FCC's approach. The FCC concluded that locations and routes served by OC(n) and multiple (3 and above) DS3 facilities have significantly different economic characteristics from those served by stand alone dark fiber, DS1, and individual DS3 services. The FCC concluded that CLECs generally can receive enough revenue for OC(n) and multiple DS3 service locations and routes to offset their costs of network construction and installation, and made a national finding of non-impairment for those services. For locations and routes that only support standalone DS1 or DS3 services, the FCC concluded that CLECs cannot receive enough revenue to recover their costs of construction, and made a national finding of impairment that can be overcome on a location- or route-specific basis by the triggers. If the FCC had intended for any OC(n) level service to count toward the DS1, DS3, and dark fiber triggers, as Ms. Padgett suggests, then it would not have made such a distinction, and simply would have declared no impairment wherever any type of OC(n) service is provided instead of developing the capacity-specific triggers. The fact that the FCC concluded that enough customer demand exists to support OC(n) or 3 DS3 levels of loop or transport is not

indicative of a CLEC's ability to provide DS1, DS3 or dark fiber on those routes or at those locations.

Q. MS. PADGETT ASSERTS THAT, TO THE EXTENT A CLEC CAN DERIVE OR IS DERIVING A DS1 OR DS3 SERVICE FROM AN EXISTING OC(N) SYSTEM AT A GIVEN LOCATION, THEN THAT LOCATION SATISFIES THE TRIGGER. DID THE FCC EXPLICITLY REJECT SUCH AN APPROACH?

A. Yes. In its discussion of impairment for DS1 loops in paragraph 325, the FCC rejected such an arrangement as evidence of self-deployment. In footnote 957, the FCC stated "[w]e note that at least two competitive LECs have provided evidence that they self-provide some DS1 capacity loops to certain customer locations. *See supra* note 859. It is important to note, however, that this evidence of self-provisioning has been possible where that same carrier is already self-provisioning OC(n) or a 3 DS3 level of loop capacity to that same customer location. Thus, this evidence does not support the ability to self-deploy stand-alone DS1 capacity loops nor does it impact our DS1 impairment finding."

Q. BASED UPON THE FCC'S OWN INTERPRETATION IN FOOTNOTE 957, IS IT REASONABLE TO CONCLUDE THAT

THE FCC INTENDED TO EXCLUDE FROM THE TRIGGERS ANY LOCATION OR ROUTE WHERE AN OC(N) OR 3 DS3 LEVEL OF CAPACITY HAS BEEN DEPLOYED BY A CLEC, EVEN IF INDIVIDUAL DS1S OR DS3S HAVE BEEN OR CAN BE DERIVED FROM THAT SYSTEM?

A. Yes. The FCC's impairment analysis is based upon distinguishing locations with high demand for network capacity from those with low demand. The FCC already has assumed that CLECs can self-provision facilities to the "high demand" locations, which was the basis of its impairment analysis. In the FCC's view, a CLEC that has deployed an OC(n) or 3 DS3 level of capacity to a location or a route is merely evidence that the location is a "high demand" location, for which the FCC already has concluded that no impairment exists. The narrower circumstance the FCC is seeking in the triggers are those "low demand" locations for which DS1, DS3, or dark fiber services are being deployed without the benefit of existing OC(n) or 3 DS3 facilities.

Q. ON PAGES 24-25 OF HER TESTIMONY MS. PADGETT ASSERTS THAT THE *TRO* DOES NOT REQUIRE EVIDENCE THAT CLECS ARE OFFERING DEDICATED TRANSPORT SERVICE BETWEEN ILEC WIRE CENTERS IN ORDER FOR THE TWO

WIRE CENTERS TO BE CONSIDERED ENDPOINTS OF A DEDICATED TRANSPORT ROUTE. IS MS. PADGETT CORRECT?

A. No. In paragraph 401 of the *TRO,* in defining a transport route, the FCC states: "[w]e define a route, for purposes of these tests, as a connection between wire center or switch 'A' and wire center or switch 'Z.' Even if, on the incumbent LEC's network, a transport circuit from 'A' to 'Z' passes through an intermediate wire center 'X,' *the competitive providers must offer service connecting wire centers 'A' and 'Z,'* but do not have to mirror the network path of the incumbent LEC through wire center 'X.'" (emphasis added). This definition is consistent with the FCC's requirement that market-based evidence be used as the primary means of identifying routes where there may be no impairment.

Q. DOES THE *TRO* REQUIRE EVIDENCE THAT A CLEC PROVIDES OR OFFERS SERVICE AT EACH OF THE SPECIFIC CAPACITY LEVELS?

A. Yes. Each of the triggers set forth in the *TRO* requires evidence that the CLEC is providing service at that specific capacity level. For example, in describing the self-provisioning trigger in paragraph 329, the FCC states that the ILEC's unbundling obligation can be eliminated "where a specific

customer location is identified as being *currently served* by two or more unaffiliated competitive LECs with their own loop transmission facilities *at the relevant loop capacity level*." (emphasis added). For wholesale triggers, the ILEC's unbundling obligations can be eliminated "where two or more unaffiliated competitive providers have deployed transmission facilities to the location and *are offering* alternative loop facilities to competitive LECs on a wholesale basis *at the same capacity level*." For transport, the wholesale trigger definition in paragraph 400 states "[s]pecifically, we find that competing carriers are not impaired where competing carriers have available two or more alternative transport providers, not affiliate with each other or the incumbent LEC, *immediately capable and willing to provide transport at a specific capacity* along a given route between incumbent LEC switches or wire centers." (emphasis added). For the self-provisioning transport trigger, the FCC requires that the trigger analysis be conducted for each specific capacity level. In the *TRO*, the FCC states "we note that where, through the application of this trigger, impairment for unbundled transport *at a particular capacity* is no longer found, substantial competitive transport facilities, and perhaps other capacities of UNE transport will be available. Therefore, if this trigger removes unbundled transport *at a particular capacity level*, carriers will remain capable of serving end-user customers in all areas." *TRO* ¶ 407.

Q. ON PAGE 20 OF HER TESTIMONY, MS. PADGETT ASSERTS THAT TRAFFIC ROUTED THROUGH A CLEC SWITCH SHOULD BE COUNTED AS DEDICATED TRANSPORT. DO YOU AGREE?

A. No. This type of arrangement is switched transport. Switched transport cannot meet the FCC's definition of dedicated transport, because the route can not be dedicated to a particular customer or carrier. A dedicated transport route has two endpoints, and traffic only can flow between one endpoint to another endpoint. Switched transport, on the other hand, has at least three endpoints, as the function of the switch is to provide temporary connections between pairs of the numerous endpoints connected to the switch. The "route" in this instance is shared among all carriers and customers that are connected to the switch. This is why switched transport also is generally referred to as "shared transport."

Q. DOES THE FCC DISTINGUISH SHARED TRANSPORT FROM DEDICATED TRANSPORT IN THE *TRO*?

A. Yes. In footnote 1100 of the *TRO*, the FCC states "[w]e refer generically to "transport" in this Part as meaning dedicated transport. We address shared transport in Part VI.E. of this Order."

Q. MS. PADGETT RELIES PRIMARILY UPON THE FCC'S USE OF THE TERM "SWITCH" IN THE RULES DEFINING A TRANSPORT ROUTE. IN WHAT CONTEXT IS THE FCC USING THAT TERM?

A. The FCC is using the term switch as an alternative term for wire center and shorthand for "switching center" or "switch location." This is consistent with the use of the term in paragraph 401, in which the FCC defines a route as a connection between wire center or switch "A" and wire center or switch "Z." The industry uses numerous names to describe the ILEC building that houses the ILEC's switches and serves as an aggregation point for loop facilities, including "central offices", "end offices", "wire centers", "switching centers", and "switching offices," and it is common to shorten the term switching center to switch to describe such a building.

Q. ON PAGE 14 OF HER TESTIMONY, MS. PADGETT ASSERTS THAT IT IS NOT NECESSARY TO DEMONSTRATE THAT A CLEC IS OFFERING WHOLESALE SERVICE AT A PARTICULAR LOCATION OR ON A GIVEN ROUTE TO MEET

THE WHOLESALE TRIGGERS. IS THIS CONSISTENT WITH THE FCC'S DEFINITION OF THE WHOLESALE TRIGGERS?

A. No. The FCC specifically provided that the wholesale triggers require location- or route-specific evidence of an offering of service. In paragraph 337 of the *TRO*, in which the FCC defines the wholesale trigger for loops, the FCC states, "[w]here competitive LECs have two alternative choices (apart from the incumbent LEC's network) to purchase wholesale high-capacity loops, including intermodal alternatives, *at a particular premises*, we conclude that impairment does not exist at that location for that type of high-capacity loop." (emphasis added). Likewise, in defining the wholesale trigger for transport, in paragraph 400, the FCC states, "[s]pecifically we find that competing carriers are not impaired where competing carriers have available two or more alternative transport providers, not affiliated with each other or the incumbent LEC, immediately capable and willing to provide transport at a specific capacity *along a given route* between incumbent LEC switches or wire centers." (emphasis added). Ms. Padgett's proposal to essentially label every CLEC route and building as wholesale is clearly at odds with the FCC's location- and route-specific requirements.

Q. ON PAGE 7 OF HER TESTIMONY, MS. PADGETT STATES THAT A CLEC'S SERVICE SHOULD QUALIFY FOR THE SELF-

PROVISIONING TRIGGER EVEN IF THE CLEC DOES NOT HAVE ACCESS TO THE ENTIRE CUSTOMER LOCATION. IS SHE CORRECT?

A. No. Ms. Padgett bases her assertion solely upon her contention that the rule for the wholesale loop trigger explicitly requires that the CLEC has access to the entire customer premises, while the self-provisioning trigger, according to Ms. Padgett, does not state the same in explicit terms. Ms. Padgett ignores the fact that the self-provisioning trigger also has a different set of requirements from the wholesale trigger, and that the FCC is using self-provisioned service as evidence that CLECs can overcome the economic barriers to providing standalone DS3 services. The self-provisioning trigger requires evidence of actual service to a customer location, as opposed to the wholesale trigger, which requires evidence of the ability to serve an entire building. This is a distinct difference for large multi-unit buildings, in that a customer location may be a particular floor within the building. To the extent that the CLEC only has provisioned service to that particular customer location, then there cannot be a finding of non-impairment for the remaining customers and customer locations within the building. To have the entire building meet the trigger would produce a result that is contrary to the FCC's impairment analysis. Indeed, in the *TRO*, the FCC stated that CLECs must "have existing

facilities in place serving customers at that location." *TRO* ¶ 332. If the CLEC only has provisioned facilities to serve part of the building, then the entire building does not meet this requirement. The appropriate interpretation is for the individual customer location to be counted toward the trigger, but not the entire building.

Q. ON PAGE 6 OF HER TESTIMONY, MS, PADGETT STATES THAT CLEC LOOPS THAT DO NOT TERMINATE IN A CLEC COLLOCATION SHOULD BE COUNTED TOWARD THE WHOLESALE TRIGGER. IS THIS AN APPROPRIATE INTERPRETATION?

A. No. Ms. Padgett ignores the requirement that wholesale services be made "widely available" to other CLECs. To the extent that wholesale loops are made available at an ILEC wire center, all of the CLECs that have access to that wire center also will have reasonable access to the wholesale CLEC's loops. As I described above, CLECs generally have configured their networks to use unbundled loops at the ILEC wire center. To the extent that a wholesale CLEC requires its customers to extend their networks to a different location, then the wholesale CLEC's loops would not be widely available, and CLECs would be limited both economically and logistically from using the wholesale service.

II. CRITIQUE OF BELLSOUTH'S SELF-PROVISIONING TRIGGER ANALYSIS

A. HIGH CAPACITY LOOPS

Q. HAVE YOU REVIEWED BELLSOUTH'S TESTIMONY CONCERNING THE APPLICATION OF THE SELF-PROVISIONING TRIGGER TO HIGH CAPACITY LOOPS?

A. Yes, I have reviewed the testimony of Shelley W. Padgett regarding High-Capacity Loops beginning on page 4.

Q. WHAT WERE BELLSOUTH'S CONCLUSIONS REGARDING THE SELF-PROVISIONING TRIGGER ANALYSIS?

A. BellSouth has asserted that one customer location satisfies the self-provisioning trigger at both the DS3 and the dark fiber capacity levels. *See* Padgett Direct at Exhibit SWP-3.

Q. PLEASE DESCRIBE THE PROCESS THAT BELLSOUTH USED TO IDENTIFY THIS HIGH CAPACITY LOOP LOCATION FOR ITS SELF-PROVISIONING TRIGGER ANALYSIS.

A. BellSouth identified this customer location using discovery responses from competitive providers and data from GeoResults, a third-party marketing firm. BellSouth asserts that two competitive carriers provide

high capacity loops at the building at both the dark fiber and DS3 capacity levels, and thus claims that the self-provisioning trigger has been met. BellSouth lists the following carriers as self-provisioning trigger providers: ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****

Q. WHAT DATA DID BELLSOUTH RELY UPON TO REACH ITS CONCLUSION THAT THESE CARRIERS SELF-PROVIDE LOOPS?

A. BellSouth used GeoResults data exclusively. ***** BEGIN CONFIDENTIAL ***** ***** END CONFIDENTIAL *****

Q. DID BELLSOUTH VERIFY GEORESULTS DATA?

A. There is no indication that BellSouth independently verified the GeoResults data.

Q. BASED UPON YOUR REVIEW OF GEORESULTS OUTPUTS IN OTHER STATES, DOES GEORESULTS PROVIDE SUFFICIENT INFORMATION TO DETERMINE WHETHER CLECS ARE PROVIDING SERVICE CONSISTENT WITH THE SELF-PROVISIONING OR WHOLESALE TRIGGERS?

A. No. GeoResults produces a lengthy list of companies for which it identifies as "Lit CLECs", including retail establishments, banks, enterprise customer locations, paging companies, and long distance resellers. It does not appear to have the intelligence to distinguish actual fiber facilities from those using another carrier's facilities.

Q. HAS ANOTHER ILEC ACKNOWLEDGED THAT GEORESULTS FALSELY IDENTIFIES CLECS AS PRESENT IN BUILDINGS WHEN THEY ACTUALLY ARE NOT?

A. Yes. For example, in Illinois, SBC testified that GeoResults had identified ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****

Testimony of Rebecca L. Sparks on Behalf of SBC Illinois, Illinois Commerce Commission, Docket No. 03-0596, at 17 (Feb. 4, 2004).

Q. DID YOU REVIEW ANY OF THE DATA RESPONSES PROVIDED BY THESE CLECS?

A. Yes. Only one of the two trigger candidates, ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL ***** based on information from GeoResults.

Q. DID BELLSOUTH APPROPRIATELY IMPLEMENT THE SELF-PROVISIONING TRIGGER FOR HIGH CAPACITY LOOPS?

A. No. Only one CLEC admitted that it self-provisioned loops in Kentucky. There are no buildings for which two or more CLECs have stated that they self-provision service at either the DS3 or dark fiber level in Kentucky. As I stated above, BellSouth cannot rely on GeoResults data to support its claim that the trigger is satisfied. GeoResults, however, does not provide information regarding capacity, for example. As a result, the building that BellSouth identifies does not satisfy the self-provisioning trigger.

Q. ABOVE YOU STATED THAT YOU REVIEWED THE * *BEGIN CONFIDENTIAL* *****

****** END CONFIDENTIAL ******

A. No, ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****

Q. WHAT IS THE IMPACT OF REMOVING * *BEGIN CONFIDENTIAL* *** *** *END CONFIDENTIAL* *** AS A TRIGGER CANDIDATE AT THIS LOCATION?**

A. As I stated above, *** **BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL ***** As a result, there is only one remaining trigger candidate listed at this location for each capacity level. To satisfy the self-provisioning trigger, there must be at least two carriers self-providing

loops at the appropriate capacity level at the building. Therefore, 500 West Market Street cannot qualify for the self-provisioning trigger at any capacity level.

Q. HOW SHOULD THE GEORESULTS DATA BE USED IN THE TRIGGER ANALYSES?

A. The data could be used to develop a baseline list of buildings, which then could be presented to the CLECs. The CLECs, in turn, could validate whether the information contained in GeoResults is accurate and whether they are providing the appropriate type and capacity level of service required by the triggers.

B. DEDICATED TRANSPORT

Q. HAVE YOU REVIEWED BELLSOUTH'S TESTIMONY CONCERNING THE APPLICATION OF THE SELF-PROVISIONING TRIGGER TO DEDICATED TRANSPORT ROUTES?

A. Yes, I have reviewed the testimony of Shelley W. Padgett beginning on page 18.

Q. WHAT WERE BELLSOUTH'S CONCLUSIONS REGARDING THE SELF-PROVISIONING TRIGGER ANALYSIS FOR DEDICATED TRANSPORT?

A. BellSouth does not claim that any transport route in Kentucky satisfies the self-provisioning trigger at any capacity level. *See* Padgett Testimony at Exh. SWP-7.

III. CRITIQUE OF BELLSOUTH'S WHOLESALE TRIGGER ANALYSES

A. HIGH CAPACITY LOOPS

Q. HAVE YOU REVIEWED BELLSOUTH'S TESTIMONY CONCERNING THE APPLICATION OF THE WHOLESALE TRIGGER TO HIGH CAPACITY LOOPS?

A. Yes, I have reviewed the testimony of Shelley W. Padgett beginning at page 12.

Q. WHAT WERE BELLSOUTH'S CONCLUSIONS REGARDING THE WHOLESALE TRIGGER ANALYSIS?

A. BellSouth has asserted that the same building that it claimed for the self-provisioning trigger also satisfies the wholesale facilities trigger at the DS1 and the DS3 capacity levels. The customer location that BellSouth

claims satisfies the wholesale trigger is listed in Exhibits SWP-3 and SWP-4 to Ms. Padgett's testimony.

Q. DO YOU AGREE WITH BELLSOUTH'S CONCLUSIONS?

A. No. Based upon my review of the CLEC data responses, there is no evidence that either of the CLECs listed for the one building offer wholesale service at either the DS1 or the DS3 capacity levels have access to the entire building as required by the *TRO*, or have put in place the network capacity and back office systems necessary to provide an offering consistent with the requirements of the *TRO*.

Q. WHAT WAS THE PROCESS BELLSOUTH USED TO IDENTIFY THE BUILDINGS THAT IT CLAIMS SATISFY THE WHOLESALE TRIGGER?

A. On page 13 of Ms. Padgett's testimony, Ms. Padgett lists the broad range of sources that she used to identify carriers as wholesalers, including CLEC discovery responses, BellSouth's "experience" in losing wholesale contracts, carriers' advertisements, carriers' public statements, and analyst and industry reports. Ms Padgett then continues with a creative assertion that the carrier does not even have to be currently selling wholesale service to qualify for the wholesale trigger. Instead, according to Ms.

Padgett, the carrier simply needs to express some sort of "willingness" to provide wholesale services. Under BellSouth's view, all carriers are wholesalers, whether they realize it or not.

Q. DOES THE *TRO* ALLOW FOR CLECS TO BE DECLARED WHOLESALERS AGAINST THEIR WILL?

A. No. The purpose of the wholesale trigger is to identify locations where CLECs have made an affirmative business decision to provide wholesale services, and have implemented the appropriate network configurations and back office support systems to provide a comparable service to that provided by the UNE that is being replaced. In paragraph 337 of the *TRO*, the FCC enumerates the numerous requirements that a CLEC must meet to be a wholesaler for the purposes of the trigger: "where the relevant state commission determines that two or more unaffiliated alternative providers…offer an equivalent wholesale loop product at a comparable level of capacity, quality, and reliability, have access to the entire multiunit customer premises, and offer the specific type of high-capacity loop over their own facilities on a widely available wholesale basis to other carriers desiring to service customers at that location, then incumbent LEC loops at the same loop capacity level serving that particular building will no longer be unbundled." Clearly, the FCC

intends that CLECs only will be identified as trigger candidates if they have chosen to provide wholesale service to the given locations, and have implemented the necessary network and back-office systems to provide such services.

Q. DID THE FCC REQUIRE EVIDENCE OF BACK OFFICE SUPPORT SYSTEMS TO QUALIFY A CLEC AS A WHOLESALER?

A. Yes. In making its determination that there is "scant evidence of wholesale alternatives for serving customers at the DS1 level" in the *TRO* the FCC concluded that, "[t]he record indicates that even competitive carriers that have deployed their own loop facilities do not have the back office support systems in place that are necessary to offer any excess capacity on a wholesale basis to other competitive LECs." *TRO* at note 958.

Q. WHY IS IT IMPORTANT THAT THE WHOLESALE TRIGGER BE TREATED SEPARATELY FROM THE SELF-PROVISIONING TRIGGER AND THAT CARE BE TAKEN TO AVOID INCORRECTLY LABELING A CARRIER AS A WHOLESALER?

A. Unlike the self-provisioning trigger, the wholesale trigger includes access to loops at the DS1 capacity level, meaning that CLECs potentially could be denied access to those loops if the wholesale trigger were met despite the FCC's finding that it is practically impossible for a CLEC to economically provision a standalone DS1 loop. DS1 loops are the primary means of provisioning service to medium-size enterprise customers for CLECs, and denial of DS1-loops would be a severe impediment to the CLEC's ability to provide competitive services.

Q. DID BELLSOUTH PROPERLY VERIFY THE AVAILABILITY OF DS1 LOOP SERVICES ON A WHOLESALE BASIS FOR THE BUILDINGS IT LISTED?

A. No. According to BellSouth witness Padgett, BellSouth made an assumption that any existing fiber facility can provide DS1 level service, and that the appropriate level of customer demand exists to support standalone DS1 loops. This assumption is incorrect. DS1-level service only can be provided when a fiber facility has been equipped with the appropriate electronics, including an optical multiplexer with the capability of provisioning DS1 channels. The FCC was very clear in its requirement that wholesale service must be available at the specific capacity level in order for the trigger to be satisfied.

Q. DID THE FCC ANTICIPATE THAT A VERY SMALL NUMBER OF BUILDINGS WOULD SATISFY THE WHOLESALE TRIGGERS?

A. Yes. In paragraph 338 of the *TRO*, the FCC stated, "[w]e recognize that, while the record indicates that there are presently a limited number of alternative wholesale loop providers serving multiunit premises, we anticipate that a competitive market will continue to *develop*." (emphasis added).

Q. DOES THE CUSTOMER LOCATION THAT BELLSOUTH HAS IDENTIFIED SATISFY THE WHOLESALE PROVISIONING TRIGGER FOR EITHER DS1 OR DS3?

A. No. ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****

BellSouth only identifies one other carrier at this location. Under the FCC's triggers, there must be two carriers that provide wholesale loops at each location and at each capacity level challenged. After ***** BEGIN CONFIDENTIAL ***** *******

END CONFIDENTIAL *** there is only one remaining carrier allegedly providing wholesale service at the listed location, and, therefore, the location does not satisfy the wholesale trigger for loops at any capacity level, and cannot be delisted.

B. DEDICATED TRANSPORT

Q. HAVE YOU REVIEWED BELLSOUTH'S TESTIMONY CONCERNING THE APPLICATION OF THE WHOLESALE TRIGGER TO DEDICATED TRANSPORT ROUTES?

A. Yes, I have reviewed the testimony of Shelley W. Padgett beginning on page 26.

Q. WHAT WERE BELLSOUTH'S CONCLUSIONS REGARDING THE WHOLESALE TRIGGER ANALYSIS?

A. BellSouth has asserted that six routes satisfy the wholesale trigger at the DS1, DS3, and dark fiber capacity levels. *See* Padgett Direct, Exhibits SWP-7-10.

Q. WHAT WAS THE PROCESS THAT BELLSOUTH USED TO IDENTIFY DEDICATED TRANSPORT ROUTES THAT IT CLAIMS SATISFY THE WHOLESALE TRIGGER?

A. Similar to her process for loops, BellSouth witness Padgett developed a list of wire centers at which competitive providers have established collocation arrangements based upon information that BellSouth gathered in discovery and through examining its own collocation records. BellSouth then assumed that transport routes exist between each and every collocation arrangement within a given LATA for each individual carrier for both the DS3 and dark fiber capacity levels.

Q. IS IT APPROPRIATE FOR BELLSOUTH TO IDENTIFY A ROUTE BASED SOLELY UPON ITS OWN COLLOCATION RECORDS?

A. No. BellSouth does not have enough information to make a determination that a transport route satisfies the wholesale trigger based solely on its collocation records. For example, collocation records do not indicate whether the carrier actually is providing a transport service between those collocations. Nor does BellSouth have information regarding the capacity level at which the carrier provides service, if any, or whether the service is self-provisioned or wholesale.

Q. HAS BELLSOUTH IDENTIFIED "FALSE ROUTES" IN OTHER STATES BASED UPON FAULTY INTERNAL COLLOCATION RECORDS?

A. Yes. As one example, in Florida, BellSouth identified ***** BEGIN CONFIDENTIAL *****

****

END CONFIDENTIAL *** Therefore, BellSouth should not have included dedicated transport routes between those collocations.

Q. DID BELLSOUTH PERFORM THE APPROPRIATE ANALYSIS TO DEMONSTRATE THAT THE SELF-PROVISIONING TRIGGERS WERE SATISFIED FOR DEDICATED TRANSPORT?

A. No. BellSouth's analysis relies exclusively on the "connect the dots" approach, in which it simply asserts that a transport route exists between each and every CLEC wire center collocation even if the CLEC itself denies or does not indicate that it provides a dedicated transport route between the two wire centers. Additionally, BellSouth relies almost solely upon its own unverified collocation records for all but one of the CLECs, an approach that has been highly inaccurate in other states.

Q. HOW MANY ROUTES MAY BE ELIGIBLE FOR THE WHOLESALE TRIGGER?

A. Based on my review of the CLEC data responses, none of the routes BellSouth identified qualify for the wholesale trigger at any capacity level.

Q. PLEASE EXPLAIN WHY NONE OF THE ROUTES SATISFY THE WHOLESALE FACILITIES TRIGGER FOR DEDICATED TRANSPORT?

A. There must be at least two carriers that provide wholesale dedicated transport on each dedicated transport route and at each capacity level to delist a particular route. ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****

Therefore, not one of these transport routes satisfies the wholesale trigger.

Bellsouth, however, chose to ignore ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****

Q. HAS BELLSOUTH PRESENTED EVIDENCE DEMONSTRATING THAT THESE CARRIERS PROVIDE WHOLESALE LOOPS?

A. No. First and foremost, there is no basis to disregard ***** BEGIN CONFIDENTIAL *****

***** END CONFIDENTIAL *****thus further indicating that that the quoted statements lack the necessary information to demonstrate that a carrier truly is providing wholesale services at specific capacity levels on specific routes as required by the FCC's rules.

Q. WHAT FURTHER INFORMATION WOULD NEED TO BE GATHERED TO MAKE A DETERMINATION AS TO WHETHER ANY OF THE ROUTES BELLSOUTH LISTS ACTUALLY MEET THE WHOLESALE TRIGGER?

A. First, an evaluation must be made as to whether the CLECs currently are equipped and operationally ready to provide dedicated transport on the route at the relevant capacity level. Second, evidence must be gathered as to whether the CLEC is willing and capable of immediately providing wholesale service to another CLEC, including whether the CLEC has implemented all of the necessary back office systems necessary to provide such a service.

IV. POTENTIAL DEPLOYMENT ANALYSIS

Q. PLEASE DESCRIBE WHAT IS MEANT BY POTENTIAL DEPLOYMENT.

A. The potential deployment analysis essentially provides that BellSouth may attempt to demonstrate that no impairment exists for loop locations or transport routes even though the self-provisioning trigger has not been satisfied.

Q. ARE DS1-CAPACITY LEVEL LOOPS AND TRANSPORT ELIGIBLE FOR A POTENTIAL DEPLOYMENT CLAIM?

A. No. The FCC defined potential deployment as a theoretical substitute for the self-provisioning trigger. As such, only those capacity levels eligible for the self-provisioning trigger (DS3 and dark fiber) are eligible for potential deployment claims.

Q. CAN AN ILEC MAKE A GENERAL CLAIM FOR POTENTIAL DEPLOYMENT, SUCH AS A CLAIM THAT NO IMPAIRMENT EXISTS FOR ALL BUILDINGS SERVED OUT OF A WIRE CENTER?

A. No. The FCC's language is clear that potential deployment claims must be location- or route-specific.

Q. WHAT TYPE OF DEMONSTRATION MUST BELLSOUTH MAKE TO SUCCESSFULLY PROVE NO IMPAIRMENT EXISTS AT A LOCATION OR ROUTE EVEN THOUGH THE TRIGGERS HAVE NOT BEEN MET?

A. BellSouth must demonstrate *for each specific customer location and route* that, contrary to the FCC's impairment determination, multiple competitive providers would be able to overcome the significant

operational and economic barriers identified by the FCC and still be able to compete successfully. BellSouth therefore must demonstrate that the competitive providers would earn sufficient revenues relative to their significant fixed and sunk costs of providing dark fiber loops or transport, and fewer than two DS3s of traffic for loops or 12 DS3s of traffic for transport (the maximum amount of capacity that CLECs may purchase as UNEs) or dark fiber loops and dedicated transport to cover the costs. Again, this demonstration must be location-specific.

Q. WHAT ARE THE FACTORS THAT BELLSOUTH MUST DEMONSTRATE TO THE COMMISSION TO SATISFY THE POTENTIAL DEPLOYMENT TEST FOR HIGH CAPACITY LOOPS TO A SPECIFIC CUSTOMER LOCATION?

A. In paragraph 335 of the *TRO*, the FCC requires that "when conducting its customer location specific analyses, a state must consider and may also find no impairment at a particular customer location even when this trigger has not been facially met *if* the state commission finds that no material economic or operational barriers at a customer location preclude competitive LECs from economically deploying loop transmission facilities to that particular customer location at the relevant loop capacity level. In making a determination that competitive LECs *could*

economically deploy loop transmission facilities at that location at the relevant capacity level, the state commission must consider numerous factors affecting multiple CLECs' ability to economically deploy facilities at that particular customer location." In the *TRO*, the FCC then lists the following factors:

- Evidence of alternative loop deployment at that particular customer location;
- Local engineering costs of building and using transmission facilities;
- The cost of underground or aerial laying of fiber or copper;
- The cost of equipment needed for transmission;
- Installation and other necessary costs involved in setting up service;
- Local topography such as hills and rivers;
- Availability of reasonable access to rights-of-way;
- Building access restrictions/costs; and
- Availability/feasibility of similar quality/reliability alternative transmission technologies at that particular location.

TRO ¶ 335.

Q. WHAT ARE THE FACTORS THAT BELLSOUTH MUST DEMONSTRATE TO THE COMMISSION TO SATISFY THE POTENTIAL DEPLOYMENT TEST FOR DEDICATED TRANSPORT ROUTES?

A. For transport, the FCC also found that actual deployment is the best indicator of impairment, but noted that a state commission must also consider potential deployment for a particular route "that it finds is suitable for 'multiple, competitive supply,' but along which [the actual deployment] trigger is not facially satisfied." *Id*. ¶ 410. The factors that the Commission must evaluate for transport are similar to those for loops and include the following characteristics:

- Local engineering costs of buildings and utilizing transmission facilities;
- The cost of underground or aerial laying of fiber;
- The cost of equipment needed for transmission;
- Installation and other necessary costs involved in setting up service;
- Local topography such as hills and rivers;
- Availability of reasonable access to rights-of-way;
- The availability or feasibility of alternative transmission technologies with similar quality and reliability;
- Customer density or addressable market; and
- Existing facilities-based competition.

TRO ¶ 410.

Each of these characteristics must be evaluated in the potential deployment analysis. For that reason, an ILEC that claims that CLECs are not impaired without access to UNEs in serving a specific route will need

to introduce evidence with respect to each factor that demonstrates that the factor alone, or in combination with others, does not operate as a barrier to the CLECs' ability to deploy the facilities in question.

Q. WITH RESPECT TO BOTH HIGH CAPACITY LOOPS AND DEDICATED TRANSPORT, WHAT SORT OF EVIDENCE MUST BELLSOUTH OFFER WITH RESPECT TO CAPACITY LEVELS?

A. Any evidence an ILEC presents on potential deployment necessarily will have to address the limitations on the availability of UNEs that are *already built* into the FCC's new unbundling rules. Thus, with respect to loops, BellSouth's factual showing and analysis concerning potential deployment needs to explain how CLECs are not impaired in their ability to deploy dark fiber loops or up to two DS3 loops at a specific customer location. *TRO* ¶ 324. Similarly, with respect to transport, BellSouth's analysis must reflect the FCC's decision that CLECs are impaired without unbundled access to dark fiber transport and twelve or fewer DS3s of transport along any given transport route. *TRO* ¶ 388.

Q. IS IT LIKELY THAT MOST ILECS WOULD BE ABLE TO MAKE THIS SORT OF SHOWING?

A. It is difficult to see how an ILEC would make such a detailed and site-specific showing. The FCC already has restricted the availability of loop and transport UNEs by placing strict limits on the capacity levels (2 DS3s for loops, 12 DS3s for transport) that any individual CLEC may obtain at a given location. The record before the FCC contained overwhelming evidence, summarized in the *TRO*, that CLECs remain impaired without the limited access granted by the *TRO* to UNEs at these lower-capacity levels, because "the potential revenue stream associated" with lower-capacity facilities "is many times smaller than that" of a higher-capacity facility. *TRO* ¶ 320 n.945. It is highly unlikely that these lower revenues would cover the high fixed and sunk costs of facilities deployment, *id.*, and consequently, the lower revenues compound the "other economic and operational barriers" that CLECs face in deploying their own facilities. *TRO* ¶ 320 & n. 946; *see, e.g.*, *TRO* ¶¶ 205-07, 298-99 & n.860, 302-06, 324-27 & n.954, 360, 370-71, 376, 381-93, 399. Moreover, loop economics depend upon certain best-case assumptions – such as the existence of a fiber transport ring with an access point (that is, a point where a lateral line may be attached to an add/drop multiplexer to allow interconnection between the loop facility and the fiber ring) close to the building in question – that may not be satisfied at any given location. Finally, no one seriously contests that "build it and they will come" is

anything but a failed entry strategy, and that CLECs therefore need access to UNEs or wholesale capacity at some minimum threshold level in order to obtain a customer base sufficient to support the building of their own facilities.

Therefore, to demonstrate potential deployment in accordance with the *TRO*, the ILEC would have to show – for each particular building or transport route – that the revenues available to a CLEC at that location would be sufficient to overcome the fixed and sunk costs of constructing a facility at that location (taking into account all the location-specific variables listed by the FCC) that affect those costs and revenues. In addition, the ILEC's evidence also would need to show that no other economic and operational barriers exist for the particular location or route in question. The inherent limitations of fixed, low-capacity facilities to generate adequate revenues to cover the high costs of loop deployment make it highly unlikely that any ILEC could make the requisite showing for any individual location or route. The universal nature of entry barriers such as gaining necessary rights of way, gaining adequate building access, deploying the facilities, and convincing customers to accept the delays inherent in service provided over new facilities, make it even more doubtful that ILECs could provide evidence for *specific* locations that would overcome the FCC's findings of impairment and demonstrate

instead that there could be "multiple competitive supply" so that competition can be effectively served by denying CLECs access to unbundled facilities at locations where CLECs have not found it economical or desirable to deploy their own facilities.

V. CRITIQUE OF BELLSOUTH'S POTENTIAL DEPLOYMENT ANALYSIS

A. HIGH CAPACITY LOOPS

Q. HAVE YOU REVIEWED BELLSOUTH'S TESTIMONY CONCERNING THE APPLICATION OF THE POTENTIAL DEPLOYMENT ANALYSIS TO HIGH CAPACITY LOOPS?

A. Yes, I have reviewed the testimony of Aniruddha (Andy) Banerjee.

Q. WHAT WERE THE CONCLUSIONS OF THE POTENTIAL DEPLOYMENT ANALYSIS AS PROVIDED BY BELLSOUTH?

A. BellSouth, through Dr. Banerjee's testimony, has asserted that 48 customer locations satisfy the potential deployment analysis for high capacity loops.

Q. DO YOU BELIEVE IT IS CREDIBLE THAT THERE ARE MORE THAN 48 TIMES MORE BUILDINGS THAT BELLSOUTH

CLAIMS QUALIFY FOR POTENTIAL DEPLOYMENT THAN BELLSOUTH IDENTIFIED FOR SELF-PROVISIONING?

A. No. The current scope of CLEC networks represents more than 10 years of laborious efforts by individual companies, who have pieced together their networks building by building, working through the myriad issues facing companies that perform construction tasks in major city areas. At most of those buildings for which some form of service is being provided, installation of CLEC facilities were most likely economically justified based upon the provision of OC(n) level services. Also, it is likely that the remaining buildings (the ones not served by CLEC facilities) either are not as attractive due to the type of customers in the building, or the competitive providers have been dissuaded from entry due to other barriers such as building access or other building-specific issues. Finally, in the current financial environment, competitive carriers do not have the same level of available financing as they did in the previous years to justify new construction. It defies the realities of today's telecommunications marketplace – as well as basic common sense – to believe that, with all of these considerations, CLECs would be able to economically build out to even a small percentage of the buildings listed by BellSouth for the sole purpose of provisioning only one or two DS3s of

capacity or providing dark fiber, let alone to the number of buildings that BellSouth identifies.

Q. PLEASE DESCRIBE, BASED UPON WITNESS BANERJEE'S TESTIMONY, THE PROCESS BELLSOUTH USED TO DETERMINE THAT 48 BUILDINGS SATISFIED THE POTENTIAL DEPLOYMENT ANALYSIS FOR HIGH CAPACITY LOOPS.

A. Dr. Banerjee developed a list of buildings that had a monthly "telecommunications spend" of $5,000 or more, or $60,000 annually. To obtain an estimate of building spending levels, Dr. Banerjee used data it obtained from TNS Telecoms, a third-party market research firms. For each building, Dr. Banerjee then performed what he described as a net present value analysis on each building based upon hypothetical cost assumptions. Buildings that had a positive net present value based upon his assumptions were then presumed to pass the potential deployment analysis.

Q. DO YOU BELIEVE THAT THE PROCESS BELLSOUTH USED COMPLIES WITH THE STANDARDS THE FCC SET FORTH IN THE *TRO*?

A. No. Even before any analysis of the cost or revenue information provided by BellSouth is considered, it appears that BellSouth simply is performing the wrong analysis. Instead of identifying those buildings for which the costs of providing 2 DS3 loops is less than the expected revenues, BellSouth appears to have identified buildings for which it believes there is a demand for at least 3 DS3s. These locations are not relevant to the analysis, as the FCC has already made the determination that no impairment exists for locations that demand 3 or more DS3s.

Q. WHAT IS THE BASIS OF YOUR BELIEF THAT BELLSOUTH IS IDENTIFYING BUILDINGS THAT HAVE DEMAND FOR AT LEAST 3 DS3S WORTH OF CAPACITY?

A. Typically, the monthly revenue associated with an individual DS3 loop is in the range of $1,000 to $2,000 depending upon how long a commitment a customer makes. If it is assumed that a CLEC will receive at least $5,000 per month, that is indicative of at least 3 DS3s, for which the FCC has already concluded that sufficient revenue exists to recover the cost of loop deployment.

Q. CAN YOU PROVIDE AN EXAMPLE OF HOW AN APPROPRIATE ANALYSIS SHOULD HAVE BEEN PERFORMED?

A. Yes. Assuming a CLEC could expect to receive $15,000 per year in revenue for a DS3 loop, the maximum revenue it could receive for two DS3s would be $30,000 per year. The potential deployment analysis would then attempt to locate buildings such that a CLEC's annualized cost of deploying loops, as defined through the FCC's factors, does not exceed $30,000.

Q. APART FROM THE MISGUIDED APPROACH AND LACK OF GRANULARITY IN BELLSOUTH'S ANALYSIS, WHAT ARE SOME OF THE SPECIFIC CRITICISMS YOU HAVE OF BELLSOUTH'S APPROACH ON LOOP POTENTIAL DEPLOYMENT?

A. I have several specific criticisms. First, BellSouth does not analyze any of the building-specific factors listed in the *TRO* for any of the buildings it has identified. Second, BellSouth's use of a building's "total telecom spend" is an inappropriate means of identifying potential buildings, and it is also inappropriate to assume the "total telecom spend" of a building as potential revenue a CLEC could expect to receive. Third, the cost figures

BellSouth relies upon are flawed, in that they assume practically no cost of fiber construction. Finally, several key assumptions used in Dr. Banerjee's Net Present Value analysis, notably the project life and discount rates, are inappropriate and have the result of inflating the resulting net present value of each building location.

Q. DO YOU BELIEVE THAT THE PROCESS BELLSOUTH USED COMPLIES WITH THE GUIDANCE THE FCC PROVIDED IN THE *TRO*?

A. No. BellSouth's process is the exact opposite of what the FCC specified in the *TRO*. The FCC made clear that, with respect to both the triggers and to potential deployment analysis, "a more granular analysis should be applied on a *customer-by-customer location basis*." *TRO* ¶ 328 (emphasis added). It bears repeating that this granular analysis was to be conducted on a building-by-building basis in order to identify those limited instances in which multiple alternative loop deployment was possible even though it had not yet taken place. BellSouth, however, has attempted to "de-granularize" this analysis by instead developing a list of generic criteria that it then applied equally to hundreds of customer locations. But these generic criteria do not address or even take into account, the specific factors identified in the *TRO*. For example, two factors that the *TRO*

requires to be evaluated for each building are (1) availability of rights-of-way and (2) building access restrictions; BellSouth's testimony does not evaluate these factors for even a single building on its potential deployment list.

Q. IS BELLSOUTH'S USE OF A BUILDING'S ESTIMATED TOTAL ANNUAL TELECOMMUNICATIONS SPENDING, IN THIS INSTANCE $60,000, AN APPROPRIATE WAY OF IDENTIFYING BUILDINGS FOR THE POTENTIAL DEPLOYMENT ANALYSIS?

A. No. The appropriate approach should be to determine whether a building has sufficient demand for DS3 or dark fiber loops to allow for multiple, competitive supply into the building. A large building (or even a single customer in that building) easily could surpass the $60,000 threshold without having any demand whatsoever for DS3 or dark fiber loops. BellSouth should have the capability based upon its own customer records to determine which buildings actually have a demand for the specific capacity levels, the number of which should be significantly less than the quantity meeting the $60,000 threshold.

Q. IS IT APPROPRIATE TO USE THE $60,000 ESTIMATED TOTAL BUILDING TELECOMMUNICATIONS SPENDING AMOUNT AS

A POTENTIAL REVENUE STREAM CLECS COULD EXPECT TO RECEIVE TO OFFSET THEIR COST OF LOOP CONSTRUCTION?

A. No. Consistent with the capacity-specific nature of the analysis, the only revenues that should be considered are those specific to the building of individual DS3s or dark fiber loops. This is consistent with the FCC's determination as mentioned above that "the potential revenue stream associated" with lower-capacity facilities "is many times smaller than that" of a higher-capacity facility. *TRO* ¶ 320 n.945. Notably, the view here must be of a carrier that has the opportunity to obtain access to UNEs (otherwise an impairment review is unnecessary). Thus, since a requesting carrier may only obtain up to 2 DS3s at UNE rates per customer location, the question is whether that carrier – not a carrier seeking to serve a larger demand – could afford to self-deploy its own facilities to serve at that level. Accordingly, any reference to a "total building revenue" is inappropriate. That figure certainly would contain revenues other than those for the specific one or two DS3s that a requesting carrier could obtain as a UNE, and can be expected to include potential OC(n) circuits, long distance service, and data services, and, as a result, improperly skews such analysis. If the total revenues for such services were to be included in an potential deployment analysis, without

access to specific revenues available from specific uncommitted customers in a location, the Commission only could anticipate that they would generate average revenues for services provided over such facilities. BellSouth does not offer proof of either. Moreover, if total revenues from the use of a loop are to be considered, then the analysis must consider all of the costs of providing all services over such facilities. BellSouth also fails to produce this evidence. Moreover, this revenue figure does not consider that enterprise customers in commercial buildings are generally tied up in long-term contracts that make them economically unavailable for a competitive provider.

Since loops are used as an input to other services and represent only a small portion of the facilities needed to provide entire high capacity services to enterprise customers, it would be both reasonable and consistent to measure the costs of provisioning such facilities against the revenues that a CLEC could earn by providing DS3s or dark fiber as a wholesale offering. It is also consistent with CLEC "build or buy" analyses for an individual building. For example, a CLEC's decision to replace an existing special access line into a building with the CLEC's own DS3 loop is driven solely by whether the cost to provision its own loop is less than the cost of purchasing the special access line.

Q. DOES DR. BANERJEE'S ANALYSIS USE ANY BUILDING SPECIFIC COSTS FOR HIS POTENTIAL DEPLOYMENT ANALYSIS?

A. No. Dr. Banerjee's analysis uses two primary cost sources for his analysis: hypothetical network cost information provided by BellSouth witness Wayne Gray, and hypothetical expense information based upon a proprietary BellSouth marketing model called the BellSouth Analysis of Competitive Entry ("BACE").

Q. IS THE COST INFORMATION PROVIDED BY BELLSOUTH WITNESS GRAY MEANINGFUL IN THE CONTEXT OF THE FCC'S POTENTIAL DEPLOYMENT REQUIREMENTS?

A. No. Mr. Gray provided cost information that was used in developing TELRIC rates. It is important to remember that, unlike typical costing proceedings used to establish UNE rates, the potential deployment analysis requires an evaluation of costs specific to CLECs, that do not have BellSouth's scale, access to buildings, and access to rights-of-way.

Q. WHAT ARE THE KEY ELEMENTS OF THE NETWORK COST INFORMATION AS PRESENTED BY BELLSOUTH WITNESS GRAY?

A. Mr. Gray provides hypothetical network cost information for the optical electronics used to derive a DS3 loop, and a hypothetical per-foot cost estimate of fiber extension.

Q. PLEASE EXPLAIN WHY YOU DO NOT BELIEVE IT IS REASONABLE TO DETERMINE POTENTIAL DEPLOYMENT BASED UPON A HYPOTHETICAL COST FACTOR BASED UPON DISTANCE BETWEEN CLEC FACILITIES AND SPECIFIC BUILDINGS.

A. The use of a hypothetical per-foot cost factor that BellSouth proposes is flawed because does not take into consideration the location-specific obstacles that might be located between the CLEC's facilities and the building, especially in large city areas. Numerous obstacles and delays almost always occur for projects that involve digging up city streets, and the costs of such endeavors often accumulate to levels much higher than originally expected. Probably the most famous recent example of this is the "Big Dig", a highway renovation project that was recently completed in Boston. That project, which replaced only 7.5 miles of highway, ended up taking 15 years and costing in excess of $14 billion, $10 billion more than originally expected. Although this obviously is an extreme example, it demonstrates that construction and installation of facilities over even

short distances in city areas can present much greater economic barriers than constructing facilities over longer distances in rural areas.

Q. FROM A PRACTICAL PERSPECTIVE, DOES THE COST INFORMATION THAT MR. GRAY PROVIDES MAKE SENSE IN THE CONTEXT OF POTENTIAL DEPLOYMENT?

A. No. Mr. Gray's analysis assumes a total installed investment of ***** BEGIN CONFIDENTIAL *****

*****END CONFIDENTIAL ***** including conduit and pole cost factors. This means that, for a 1,000 foot build, BellSouth is assuming less than ***** BEGIN CONFIDENTIAL *** *** END CONFIDENTIAL ***** of construction costs, which reflects practically no construction at all, as construction projects of this type can often run into the hundreds of thousands of dollars depending upon the circumstances.

Q. PLEASE COMMENT ON THE NET PRESENT VALUE ANALYSIS PERFORMED BY DR. BANERJEE.

A. Although Dr. Banerjee appropriately uses a net present value analysis to evaluate the economic viability, the assumptions he uses in the analysis do not reflect the requirements of the FCC's potential deployment analysis. First, as mentioned above, all of the inputs, both revenue and cost, are

hypothetical. Outside of the estimated distance between a CLEC and the building, there is not one building-specific analysis for any of the nine criteria outlined by the FCC. Second, Dr. Banerjee chooses two unrealistic assumptions for the net present value analysis, both of which increase the resulting net present value for each building.

Q. PLEASE DESCRIBE THE FIRST UNREALISTIC ASSUMPTION DR. BANERJEE USES IN HIS ANALYSIS.

A. Dr. Banerjee choose a 10 year project life for his analysis, meaning that he is assuming that the CLEC will have 10 years of revenue from customers in the building to recover the up front capital costs and ongoing expenses related to the loop. Obviously, the longer the project life, the more revenue there is available to offset the costs.

Q. BASED UPON YOUR EXPERIENCE, IS 10 YEARS AN APPROPRIATE PERIOD TO ASSUME A CLEC WILL BE ABLE TO RETAIN A CUSTOMER?

A. No. Typically, customers are unwilling to commit to contracts greater than 5 years, especially as prices of telecommunications services tend to decline over time due to competition and technological innovation. In my

experience, it would be unlikely for a CLEC to allocate capital to a project that did not produce a positive net present value until the 9th or 10th year.

Q. WHAT IS THE SECOND UNREALISTIC ASSUMPTION USED IN DR. BANERJEE'S NPV ANALYSIS?

A Dr. Banerjee uses a discount rate of only 10.8%. The discount rate is supposed to reflect the risk-adjusted cost-of-capital of the company making the investment, and is used to reduce the weighting of cash flows farther out into the future for companies with higher risk. The practical effect of a lower discount rate is that cash flows in later years will have more bearing than they would if a higher discount rate were used, and thus provides for a higher net present value.

Q. WHY DO BELIEVE THAT A DISCOUNT RATE OF 10.8% IS UNREASONABLE FOR A CLEC?

A. This discount rate is approximately the same as that ordered of BellSouth in the most recent Florida UNE proceeding, and actually significantly lower than that proposed by BellSouth for itself in those proceedings. As BellSouth is an incumbent local exchange carrier, it's investments are perceived to be less risky relative to CLECs, especially after the numerous CLEC bankruptcies over the past several year.

Q. HOW DID BELLSOUTH REPRESENT ITS OWN COST OF CAPITAL IN THE PREVIOUS UNE PROCEEDING?

A. In Florida Docket No. 990649-TP, BellSouth witness Billingsley testified that the 11.25% cost of capital is BellSouth had proposed is reasonable and conservative given his estimate that BellSouth's actual cost of capital ranges from 14.61% to 14.91%.

Q. ARE YOU AWARE OF ANY OTHER ANALYSES THAT PRESENT A MORE REALISTIC DEPICTION OF THE COSTS AND NECESSARY REVENUES FOR A CLEC TO EXTEND ITS NETWORK INTO A NEW BUILDING?

A. Yes. On November 25, 2002, AT&T filed a study with the FCC, in conjunction with the FCC's Triennial Review proceedings, which analyzes the costs and required revenues necessary to justify extending a typical CLEC's network to a new building. The study is included as Exhibit GJB-1 to my testimony. I have reviewed the AT&T study and, based on my experience, I find it presents a more thorough and realistic analysis of the costs that would be encountered and the revenues that would be considered by a CLEC in determining whether to extend a

typical CLEC network into a new building than the analysis used by BellSouth in this case.

Q. WHAT WERE THE CONCLUSIONS OF THE AT&T STUDY AS IT PERTAINS TO UNBUNDLED LOOPS?

A. The study concluded that CLECs generally need to be able to provision at least 3 DS3s into a given building before the cost of constructing the loops can be recovered. This is consistent with the FCC's conclusion that no impairment exists for OC(3) and above loops.

Q. HOW DO YOU PROPOSE THAT THE AT&T STUDY BE USED BY THE COMMISSION IN EVALUATING BELLSOUTH'S POTENTIAL ANALYSIS?

A. The AT&T study supports the position that it is generally not economic for CLECs to build for the provision of a single DS3 or dark fiber loop to a building, and that any building for which BellSouth claims potential deployment must be treated as a unique exception, which must be supported by a full, building specific analysis.

Q. DID BELLSOUTH PROVIDE EVIDENCE OF ALTERNATIVE LOOP DEPLOYMENT FOR THE 48 BUILDINGS ON ITS LIST?

A. Dr. Banerjee did not indicate which of the buildings on the list had any loop deployment, and if so, how much.

Q. SHOULD ANY OF THE BUILDINGS LISTED BY BELLSOUTH QUALIFY FOR POTENTIAL DEPLOYMENT BASED UPON BELLSOUTH'S SHOWING IN THIS CASE?

A. No. BellSouth's analysis does not meet the FCC's criteria for items the Commission must evaluate, and therefore this Commission should find that BellSouth has not satisfied the potential deployment analysis for any of the buildings listed in the attachments to the Banerjee testimony.

Q. HOW SHOULD BELLSOUTH HAVE DONE ITS POTENTIAL DEPLOYMENT ANALYSIS FOR HIGH CAPACITY LOOPS?

A. BellSouth should have performed an individual discounted cash flow analysis using specific cost and potential revenue information for each building instead of hypothetical values. The analysis would provide evidence of alternate loop deployment for each building, and would specifically address each of the FCC's points. The discounted cash flow analysis would use project lives and depreciation rates that a CLEC actually would use for itself if it were really analyzing whether to extend its network out to a new building.

B. DEDICATED TRANSPORT

Q. DID BELLSOUTH PROPOSE THAT ANY TRANSPORT ROUTES MEET THE POTENTIAL DEPLOYMENT TEST IN THIS MATTER?

A. No.

VI. TRANSITIONAL ISSUES

Q. MS. PADGETT STATES THAT CLECS SHOULD ONLY HAVE A NINETY DAY TRANSITION PERIOD. IS THIS REASONABLE?

A. No. If anything, Ms. Padgett's proposal is the unreasonable one. First, if CLECs were forced to disconnect their existing UNEs on a broad scale and convert them to some other type of service, it would take BellSouth much longer than 90 days just to develop a cutover plan for transitioning the circuits to another CLEC's network. A "special project" such as this would obviously have to be coordinated with the day-to-day operational activities of BellSouth as well as the numerous other carriers involved. Second, the Commission must ensure that CLECs can transition their services to another CLEC before such a transition could occur, which as I stated in my direct testimony, is not a simple conversion process.

Sufficient time must be allowed for this conversion to occur in an orderly manner, without threatening customer disruption.

Q. WHY WOULDN'T CLECS CONVERT THEIR UNES TO BELLSOUTH'S SPECIAL ACCESS SERVICES?

A. While they certainly will have that option, the underlying premise of the triggers is that there will be evidence that the CLECs can either building their own loops or utilize the wholesale offerings of another carrier. It would defeat the purpose of the triggers and the impairment analysis if CLECs were not given a reasonable opportunity to avail themselves of the options implied by the triggers.

Q. WHAT ISSUES ARE INVOLVED IN ESTABLISHING AN APPROPRIATE TRANSITION PERIOD?

A. A transition period is required for two reasons. First, CLECs made specific business decisions to serve or not serve customers in reliance on the availability of UNE loops or UNE transport to the customer location or on the relevant transport route. CLECs must be able to continue to offer service to these customers after a finding of non-impairment. This consideration is essential because services to enterprise customers are contract-based and generally do not allow the provider to terminate or

modify the contract based upon sudden cost increases. Without a transition period, CLECs and their customers would face significant disruptions to their services if access to unbundled loops were disconnected or migrated to other services. A transition is needed, therefore, to prevent rate shock to customers receiving service using UNE arrangements.

Second, a CLEC cannot modify its network overnight. A litany of business arrangements will have to be negotiated, modified and implemented if a state commission determines that one of the triggers has been satisfied. For example, if a state commission determines that two or more wholesale providers make their facilities widely available to other CLECs, CLECs needing loops or transport (as the case may be) will need time to consider the alternative sources of supply that are available to them and to implement the solution that best fits each CLEC's needs. One cannot assume that a CLEC will desire to transition to an ILEC-provided non-UNE service. Indeed, if the wholesale trigger is satisfied, it is because other alternatives are equally viable and presumably equally attractive to the CLEC. A transition period must build in sufficient time to enable the CLEC to make use of the alternatives that underlie the finding of non-impairment.

Q. ARE THERE ADDITIONAL TRANSITION ISSUES THE COMMISSION SHOULD CONSIDER?

A. Yes. The Commission should ensure that ILECs maintain an adequate process for ordering combinations of loops and transport, in situations where one or both network elements of the combination have been delisted. In the *TRO*, over ILEC objections, the FCC specifically stated that competing carriers are permitted to continue to have access to combinations of loops and transport regardless of whether one of the items has been delisted. *See TRO* ¶ 584. Similarly, the Commission should ensure that ILECs have adequate billing processes and procedures in place for CLECs to purchase delisted network elements, whether individually or in combination.

Q. HOW SHOULD THE COMMISSION ADDRESS TRANSITION ISSUES?

A. Establishing an appropriate transition period is a complex task. Ideally, these issues should be addressed in a phase of this proceeding that immediately follows the finding of non-impairment. If the Commission follows such a procedure, ILECs should be prohibited from billing special access rates to CLECs while the Commission receives evidence on the

elements necessary to protect customers from rate shock and to enable CLECs to build replacement facilities and/or to migrate to the network facilities of non-ILEC providers. In the event an interim transition is desired, I recommend the minimum components described below.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE MINIMUM COMPONENTS OF A TRANSITION PROCESS?

A. I recommend that the Commission develop a multi-tiered transition process such as the one applicable to mass-market switching. First, there should be a transition period during which CLECs may order new UNEs for locations and routes where the commission found a trigger is met. This period should be a minimum of nine months in order to enable a CLEC to continue to offer competitive service to new customers while it explores alternatives available to it. Second, CLECs should have a transition period for existing customers similar to that applied to line sharing and mass-market switching. The three year transition process established for customers served by line sharing arrangements may provide a useful model, with one-third of the customers to be transitioned within 13 months, and another one-third transitioned within 20 months. All loop and transport UNEs made available during these transition

periods should continue to be made available at TELRIC rates until migrated.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does

BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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

AFFIDAVIT

STATE OF CONNECTICUT

COUNTY OF FAIRFIELD

Gary J. Ball, being first duly sworn, deposes and says that he is the same Gary J. Ball whose Rebuttal Testimony and Exhibits accompany this affidavit, that such testimony was prepared by him; that he is familiar with the contents thereof; that the facts set forth therein are true and correct to the best of his knowledge, information and belief; and that he does adopt the same as his sworn testimony in this proceeding.

Gary J. Ball

Subscribed and sworn before me on this 30th day of March, 2004.

Notary Public

State of CONNECTICUT **My commission expires on** 9/30/07

OFFICIAL SEAL
SEAN ARCHAMBAULT
NOTARY PUBLIC - STATE OF CONNECTICUT
My Comm. Expires September 30, 2007