Exhibit No.
Issue: Dedicated Transport and High Capacity Loops
Witness: Gary J. Ball
Type of Exhibit: Phase III Rebuttal
Sponsoring Party: Brooks, Intermedia, MCIWorldCom and MCImetro
Case No. TO-2004-0207
Date Prepared: 3/01/04

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of a Commission Inquiry into the Possibility of Impairment without Unbundled Local Circuit Switching When Serving the Mass Market	**)** **)** **)** **)**	**Case No. TO-2004-0207**

PHASE III REBUTTAL TESTIMONY OF

GARY J. BALL

ON BEHALF OF

BROOKS FIBER COMMUNICATIONS OF MISSOURI, INC.
INTERMEDIA COMMUNICATIONS, INC.
MCI WORLDCOM COMMUNICATIONS, INC. and
MCIMETRO ACCESS TRANSMISSION SERVICES, LLC

Regarding Dedicated Transport and High Capacity Loops

NON PROPRIETARY VERSION

March 1, 2004

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of a Commission Inquiry into the Possibility of Impairment without Unbundled Local Circuit Switching When Serving the Mass Market	))))	**CASE NO. TO-2004-0207**

AFFIDAVIT OF GARY BALL

STATE OF OHIO)
) SS.
COUNTY OF FRANKLIN)

I, GARY BALL, of lawful age, being duly sworn, depose and state:

1. My name is Gary Ball. I am A CONSULTANT.

2. Attached hereto and made a part hereof for purposes is my Phase III rebuttal testimony in the above proceeding.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Gary Ball

Subscribed and sworn to before me this 14TH day of FEBRUARY, 2004.

Notary Public

My Commission Expires:

JUDITH B. SANDERS
Attorney at Law
Notary Public, State of Ohio

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I. INTRODUCTION OF WITNESS AND PURPOSE OF TESTIMONY.

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. WHAT IS YOUR RELEVANT EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE?

A. I graduated from the University of Michigan in 1986 with a Bachelor of Science degree in Electrical Engineering. I received a Masters in Business Administration from the University of North Carolina – Chapel Hill in 1991, with a concentration in economic and financial coursework. I have worked in the telecommunications industry for the past twelve years, and I have extensive experience in developing and analyzing financial and costing models associated with telecommunications networks and services, as well as the design, implementation, and operation of such networks and services.

From 1991 through 1993, I was employed by the Rochester Telephone Corporation (now part of Citizens Communications) where I served in various engineering, financial, and regulatory roles. From 1993 to 1994, I was the manager of Regulatory Affairs for Teleport Communications Group.

Beginning in 1994, I served initially as the Regional Director of Regulatory Affairs for MFS Communications Company for the Northeast, and was subsequently promoted to Assistant Vice President of Regulatory Affairs. In 1996, WorldCom acquired MFS, after which I was promoted to Vice President of Regulatory Policy Development. In that capacity, I was responsible for coordinating and developing the Company's regulatory positions on issues such as access charges, interconnection,

intercarrier compensation, unbundled network elements, and new service technologies. I remained at WorldCom until beginning my own consulting practice in 2002 .

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

A. I am testifying on behalf of Brooks Fiber Communications of Missouri, Intermedia Communications, Inc., MCI WorldCom Communications, Inc. and MCImetro Access Transmission Services, LLC.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to analyze and rebut SBC Missouri's ("SBC") assertions as to the self-provisioning and wholesale triggers for high capacity loops and dedicated transport, as well as SBC's claims that numerous customer locations and transport routes satisfy the FCC's rigorous potential deployment requirements.

In its *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"). In support of this, 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 to such an extent that CLECs may be deemed not to be impaired, the FCC developed a procedure known as the

[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 No. 03-36 (rel. Aug. 21, 2003).

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

In my testimony, I will show that SBC's prefiled direct testimony has grossly overstated the number of enterprise customer locations (i.e., buildings) and transport routes that satisfy the self-provisioning and wholesale triggers. Additionally, I will explain how SBC's potential deployment analysis for high capacity loops and transport (contained in the testimonies of J. Gary Smith, Gary O. Smith, and Joseph Ramatowski) fails to incorporate the FCC's location and route specific analysis, and as a result produces completely unjustifiable quantities of both loops and transport routes for which SBC erroneously contends that the Commission should make non-impairment findings and relieve SBC of its unbundling obligations.

In summary, my testimony shows:

(1) SBC has not provided sufficient evidence to support a conclusion that any loop location meets the FCC's self-provisioning trigger or wholesale trigger for high-capacity loops at any applicable capacity levels.

(2) SBC has not provided sufficient evidence to support a conclusion that any transport route meets the FCC's self-provisioning trigger or wholesale trigger for dedicated transport at any applicable capacity levels.

(3) SBC has not provided sufficient evidence to support a conclusion that any loop location or transport route meets the requirements of the FCC's potential deployment analysis.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is divided into eight sections. Section I is a discussion of my personal background, the general scope and purpose of my testimony, and a summary of my conclusions. Section II discusses the FCC's impairment analysis and how it relates to the unbundled loop and transport elements necessary for a facilities-based CLEC to effectively compete with the ILECs. In Section III, I explain the self-provisioning triggers that the FCC devised for high capacity loops and dedicated transport at the DS3 and dark fiber capacity levels, and provide the proper framework for interpreting any SBC claim that the triggers have been met. In Section IV, I critique SBC's self-provisioning analysis. Section V explains the wholesale triggers for high capacity loops and transport, and explains the additional requirements (which SBC has failed to address in its testimony) needed to define a carrier as a wholesale provider. In Section VI, I critique SBC's wholesale trigger analysis. In Section VII, I discuss the concept of potential deployment claims for high capacity loops and transport. Lastly, in Section VIII, I critique SBC's potential deployment analysis.

Q. WHAT DOCUMENTS DID YOU REVIEW TO PREPARE TO GIVE THIS TESTIMONY?

A. In preparation for this testimony, I have tried to review all of the available pertinent materials relating to this proceeding, but with particular emphasis on the TRO itself, the testimony submitted by SBC and accompanying attachments, and discovery requests and responses to those requests. I have also reviewed certain materials that were submitted to

the FCC during its Triennial Review proceedings as well as certain of the testimony that SBC has filed in other state proceedings concerning the loop and transport issues.

II. THE FCC CONCLUDED IN THE TRO THAT CLECS ARE IMPAIRED WITHOUT UNBUNDLED ACCESS TO HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT.

Q. WHAT STANDARDS DID THE FCC APPLY TO DETERMINE IMPAIRMENT FOR UNBUNDLED NETWORK ELEMENTS?

A. The FCC based its impairment findings upon a determination that "[a] requesting carrier is impaired when lack of access to an incumbent LEC network element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic." The FCC also found that "[a]ctual marketplace evidence is the most persuasive and useful evidence to determine whether impairment exists." TRO ¶ 7.

Q. WHAT DID THE FCC CONCLUDE SPECIFICALLY WITH REGARD TO HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT?

A. The FCC concluded that competing carriers are impaired on a national level without access to unbundled high capacity loops (DS1, DS3, and dark fiber) and transport (DS1, DS3, and dark fiber). *See TRO* ¶ 202 (stating that "requesting carriers are impaired on a location-by-location basis without access to incumbent LEC loops nationwide."); *see also TRO* ¶ 359 (stating that the FCC finds "on a national level that requesting carriers are impaired without access to unbundled dark fiber transport facilities … [DS3 transport and DS1 transport]." As a result, the FCC rules require that competing carriers have access to unbundled loops and transport everywhere unless a state commission finds a lack of impairment as to specific locations or routes.

Q. DID THE FCC'S IMPAIRMENT ANALYSIS DISTINGUISH BETWEEN DIFFERENT TYPES OF UNBUNDLED LOOPS AND TRANSPORT?

A. Yes. The FCC defined two distinct loop types: Mass Market Loops, representing voice-grade DS0-level loops, and Enterprise Market Loops, representing higher capacity loops, which typically are used by business customers. The FCC defined Enterprise Market Loops as loops at a capacity level of DS1 or above, and it analyzed these loops -- separately -- at the following capacity levels: OC(n), dark fiber, DS3, and DS1. For the purposes of my testimony, the term "Enterprise Market Loops" is equivalent to high capacity loops. See TRO ¶ 7.

Similarly, the FCC segregated dedicated transport by levels of capacity before performing its impairment analysis, stating that this would "be the most informative manner to review the economic barriers to entry that affect how a competing carrier is impaired without access to unbundled transport." *TRO* ¶ 380. The FCC performed separate impairment analyses for OC(n) Transport, Dark Fiber Transport, DS3 Transport, and DS1 Transport. See TRO ¶ 7.

Q. WHAT WAS THE FCC'S BASIS FOR FINDING THAT COMPETING CARRIERS WERE IMPAIRED WITHOUT ACCESS TO HIGH-CAPACITY LOOPS AT THE DARK FIBER, DS3, AND DS1 CAPACITY LEVELS?

A. The FCC's impairment analysis examines whether carriers can economically self-provision high-capacity loops, and if competitive alternatives exist to unbundled access to the ILEC's high-capacity loops. The FCC based its impairment findings regarding enterprise market loops at the dark fiber, DS3, and DS1 capacity levels in large part on the fact that the costs to construct loops and transport are fixed and sunk. The FCC stated that "[b]ecause the distribution portion of the loop serves a specific location, and installing and rewiring that loop is very expensive, most of the costs of constructing loops are sunk costs." *TRO* ¶ 205. The FCC concluded that it would be extremely difficult to recover these construction costs and be a viable competitor in the marketplace.

The FCC found that there are substantial economic and operational barriers to deploying loops. For example, the FCC found that "the cost to self-deploy local loops at any capacity is great . . . and that a competitive LEC that plans to self-deploy its facilities must target customer locations where there is sufficient demand from a potential customer base, usually a multi-tenant premises location, to generate a revenue stream that could recover sunk construction costs of the underlying loop transmission facility …." *TRO* ¶ 303.

Q. ARE THE BARRIERS TO DEPLOYING HIGH-CAPACITY LOOPS STRICTLY ECONOMIC IN NATURE?

A. No. The FCC emphasized that other obstacles to deploying high capacity loops exist even if the carrier can overcome the cost issues. For example, carriers encounter barriers in obtaining reasonable and timely access to buildings and customer premises and in "convincing customers to accept the delays and uncertainty associated with deployment of alternative loop facilities." *TRO* ¶ 303 (citations omitted).

Q. WHAT RATIONALE WAS PROVIDED BY THE FCC FOR ITS FINDING THAT COMPETING CARRIERS ARE IMPAIRED WITHOUT ACCESS TO UNBUNDLED DEDICATED TRANSPORT AT THE DARK FIBER, DS3, AND DS1 CAPACITY LEVELS?

A. The FCC stated that its "impairment findings with respect to DS1, DS3, and dark fiber transport facilities recognize that competing carriers face substantial sunk costs and other barriers to self-deploy facilities and that competitive facilities are not available in a majority of locations, especially non-urban areas." *TRO* ¶ 360 (citations omitted). The FCC concluded that it would be extremely difficult to recover these costs and to be a viable competitor in the marketplace. Indeed, the FCC concluded that "[d]eploying transport facilities is an expensive and time-consuming process for competitors, requiring substantial fixed and sunk costs." *TRO* ¶ 371 (citations omitted). The FCC elaborated

that the costs of self-deployment include collocation costs, fiber costs, costs to physically deploy the fiber, and costs to light the fiber. *Id.*

Q. ARE THERE NON-ECONOMIC COSTS TO CONSTRUCTING DEDICATED TRANSPORT?

A. Yes. CLECs also encounter delays in constructing dedicated transport due to having to obtain rights-of-way and other permits. *Id.*

Q. DID THE FCC FIND THAT THERE WAS ANY EVIDENCE OF NON-IMPAIRMENT FOR HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT AT THE DARK FIBER, DS3, AND DS1 LEVELS?

A. In making a national finding of impairment for loops and transport, the FCC found that any evidence of non-impairment was minimal. For example, the FCC found little evidence of deployment for DS1 loops and found "scant evidence of wholesale alternatives" for DS1 loops. *TRO* ¶¶ 298 (competitive loop deployment) & 325 (wholesale loop availability).

For transport, the FCC found that "alternative facilities are not available to competing carriers in a majority of areas." *TRO* ¶ 387. Indeed, even relying on ILEC data, which was not subject to cross-examination in the FCC proceeding, the FCC found that at most 13 percent of Bell Operating Company wire centers have a single competing carrier collocated using non-ILEC transport facilities. *TRO* fn. 1198.

Q. ARE THE FCC'S FINDINGS ON IMPAIRMENT CONSISTENT WITH TYPICAL CLEC FACILITIES-BASED NETWORKS, INCLUDING THE NETWORKS OF THE CLECS ON WHOSE BEHALF YOU ARE TESTIFYING?

A. Yes. While CLECs use a variety of entry strategies to provide services to their customers throughout Missouri, the CLECs on whose behalf I am testifying use facilities-based networks or depend upon access to UNEs from ILECs. Generally, these facilities-based CLECs have constructed one or more fiber rings of varying scope, and serve customers

using those fiber rings when possible, although in a majority of instances, the CLEC will need access to unbundled loops and loop/transport combinations (i.e., "enhanced extended links", or "EELS") to provide service to customers. These fiber rings connect aggregation points, such as collocation arrangements, and major customer sites to the carrier's switching or hub site. The collocation arrangements are typically used to aggregate unbundled loops as opposed to providing transport hubs.

Facilities-based CLEC networks typically rely on UNE loops to serve the majority of their customers, as the fixed and sunk costs associated with building out loop facilities, as well as the delays in constructing such facilities, would place the CLECs at such a disadvantage that they would not be able to compete with the ILECs. CLECs also use loop and transport UNEs in a combination commonly referred to as an EEL. CLECs need access to unbundled dedicated transport, so that, in conjunction with the use of EELs, they can access customers whose loops terminate in central offices where the CLECs are not collocated (or where they do not serve enough customers to warrant constructing separate CLEC facilities), thereby greatly expanding the scope of customers they can serve, thus directly benefiting customers and the competitive telecommunications market.

Depending upon the CLEC, network architectures often are composed of multiple fiber rings, which have been completed at different times and are in different stages of deployment, due to the timing and availability of construction funding, capacity issues, or, in some cases, acquisitions. In many situations, a CLEC will serve two ILEC central offices that are not on the same fiber ring. Although it is theoretically possible to connect central offices on different fiber rings (indeed it is "theoretically possible" to connect any

two points), transport routes linking the two central offices are not generally provisioned in such circumstances because doing so is unnecessary and would entail significant expense.

III. SELF-PROVISIONING TRIGGERS FOR HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT.

Q. WHAT IS THE PURPOSE OF THE FCC'S SELF-PROVISIONING TRIGGERS FOR UNBUNDLED LOOPS AND TRANSPORT?

A. In the TRO, the FCC made a national finding that CLECs are impaired with respect to access to high-capacity loops and dedicated transport. The FCC allowed ILECs to challenge these impairment findings on a location- and route-specific basis before state commissions. One of the ways ILECs may demonstrate non-impairment is by showing that CLECs themselves provide, to a sufficient degree, high-capacity loops and dedicated transport on their own. These are known as the "Self-Provisioning Triggers."

The Self-Provisioning Triggers are intended to identify those customer locations and transport routes where there exists sufficient deployment of competitively owned facilities to demonstrate that competitors are not impaired without access to unbundled loops and transport (i.e., to show that the "barriers to entry" that constitute impairment have been and thus can be overcome), even if the competitors that own those facilities do not make them available to other competitive providers. The self-provisioning triggers are designed to evaluate facilities that currently exist and how they are currently used, not whether facilities could be built or used differently.

Q. WHAT CAPACITY LEVELS ARE SUBJECT TO THE SELF-PROVISIONING TRIGGERS?

A. The Self-Provisioning Triggers only apply to DS3 and dark fiber loops and transport. DS1 loops and transport are not included under these triggers. See 47 CFR 51.319(a) and (e).

Q. WHAT MUST SBC DEMONSTRATE TO THE COMMISSION TO SATISFY THE SELF-PROVISIONING TRIGGERS AT THE RELEVANT CAPACITY LEVEL?

A. For loops, SBC must demonstrate that there are ***two or more*** competing providers that have deployed their own facilities at the specific capacity level (DS3 or dark fiber), and that they are serving customers using those facilities. For transport, SBC must demonstrate there are ***three or more*** competing providers that have deployed their own facilities at the specific capacity level (DS3 or dark fiber), and that they are offering service using those facilities. See 47 CFR 51.319(a)(5)(i)(A) and (a)(6)(i) and (e)(2)(i)(A) and (e)(3)(i)(A).

Q. WHAT MUST SBC DEMONSTRATE TO PROVE THAT THE SELF-PROVISIONING TRIGGER IS SATISFIED FOR HIGH-CAPACITY LOOPS AT A SPECIFIC CUSTOMER LOCATION?

A. As a preliminary matter, SBC must demonstrate that the two competitive providers:

- ? Are not affiliated with each other or SBC;
- ? Use their own facilities and not facilities owned or controlled by the other competitive provider or SBC; and
- ? Are serving customers using their own facilities at that location over the relevant capacity level.

See 47 CFR 51.319(a)(5)(i) and (a)(6)(i).

Q. WHAT MUST SBC DEMONSTRATE TO PROVE THAT THE SELF-PROVISIONING TRIGGER IS SATISFIED FOR DEDICATED TRANSPORT BETWEEN TWO SBC WIRE CENTERS?

A. SBC must demonstrate that, for each of the three competitive providers, that:

- ? They not affiliated with each other or the SBC;
- ? Each counted self-provisioned facility along a route must be operationally ready to provide transport into or out of an SBC central office;
- ? Each counted self-provisioned facility terminates in a collocation arrangement.

See 47 CFR 51.319(e)(2)(i)(A) and (e)(3)(i)(A).

Q. FOR THE SELF-PROVISIONING TRIGGERS TO APPLY, MUST A CLEC SELF-PROVISION THE SPECIFIC CAPACITY LEVEL IN QUESTION?

A. Yes. The *Triennial Review Order* contemplates that the Self-Provisioning Triggers apply when a CLEC self-provisions the particular capacity level in question. For example, a CLEC that self-provisions at the OC(n) capacity level does not necessarily self-provision at the DS1 or DS3 capacity level. See TRO ¶ 328 et seq.

Q. WHAT ARE THE KEY TERMS UNDER THE SELF-PROVISIONING TRIGGERS FOR WHICH THE COMMISSION MUST ENSURE THAT SBC IS USING THE APPROPRIATE INTERPRETATION?

A. The first key issue is to ensure that the SBC is defining loops and transport routes in a manner consistent with the FCC, and is applying those definitions appropriately. For loops, the FCC's definition is "a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises." See 47 CFR 51.319(a).

The FCC defined a transport route as "a connection between wire center or switch 'A' and wire center or switch 'Z'." The FCC elaborated that "even if, on the incumbent LEC's network, a transport circuit from 'A' to 'Z' passes through an intermediate wire center 'X,' the competing 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'." Thus, the FCC requires that transport service must be offered between the two wire centers in question. TRO ¶ 401.

Q. WHAT IS THE APPROPRIATE EVIDENCE THAT SBC SHOULD PROVIDE TO MEET THE FCC'S REQUIREMENT OF OPERATIONAL READINESS FOR THE SELF-PROVISIONING TRIGGERS?

A. The only effective and practical way of demonstrating that a CLEC is operationally ready under the Self-Provisioning Triggers is to produce evidence that the CLEC is actually

providing service at the customer location or on the given transport route. This is consistent with the FCC's requirement that evidence be provided that CLECs are *serving* customers using self-provisioned loop services, and that CLECs *provide service* between two wire centers on a given transport route. While the existence of CLEC facilities is obviously a prerequisite to the provision of service, the mere existence of such facilities does not demonstrate whether the equipment can be used to provide the service to satisfy the trigger, whether the CLEC can provide service at the requisite capacity level, nor whether the CLEC has performed the necessary engineering, provisioning, and administrative tasks to ensure that service can be provided at all or in a sufficiently timely manner to permit provisioning services to customers seeking the services within a competitive timeframe.

Q. FOR PURPOSES OF APPLYING THE TRIGGERS, WHICH FACILITIES COUNT AS "OWNED FACILITIES"?

A. In order for facilities to count as "owned", the carrier must have deployed its "own facilities" on the entire loop or transport route. There are two ways that a carrier can have ownership over the facilities: (1) the carrier can have legal title to the facilities or (2) the carrier can have a "long-term" (*i.e.*, 10 years or more) dark fiber indefeasible right of use ("IRU") if the fiber is lit by the qualifying carrier by attaching its own optronics to the facilities. If the carrier does not use its own facilities, then the carrier cannot count for purposes of the self-provisioning trigger. See, e.g., 47 CFR 51.319(a)(5)(i)(A).

Q. WHICH FACILITIES DO NOT COUNT AS "OWNED FACILITIES"?

A. Facilities obtained from other sources such as through special access arrangements, UNEs, capacity leases (unless they are long term IRUs), and all third party provided facilities do not count as "owned facilities." The FCC specifically emphasized that a

CLEC "using the special access facilities of the incumbent LEC or the transmission facilities of the other competitive provider … would *not* satisfy the definition of a self-provisioning competitor for purposes of the trigger." *TRO* ¶ 333.

In addition, the triggers are designed to prevent double counting of facilities. Therefore, for purposes of the self-provisioning test, a carrier may not be using "facilities owned or controlled by one of the other two providers on the premises [for loops]." *TRO* ¶ 333.

Q. IF A CARRIER SATISFIES THE REQUIREMENTS FOR THE SELF-PROVISIONING TRIGGERS, WILL IT AUTOMATICALLY QUALIFY AS AN ELIGIBLE PROVIDER UNDER THE COMPETITIVE WHOLESALE FACILITIES TRIGGERS OR VICE VERSA?

A. No. The FCC emphasized that the triggers are separate and distinct. The purpose of the Self-Provisioning Trigger is to determine through actual experience whether similar situated CLECs feasibly can deploy their own facilities on a particular route. In contrast, the Wholesale Trigger examines whether the provider makes its facilities available to other carriers. Some wholesale carriers also may self-provide facilities to serve their own retail customers. However, other wholesale carriers may not provide any retail service and thus cannot be self-provisioners under the triggers. Obviously, if every wholesale carrier was also counted as a "self-provisioner" solely by virtue of the fact that it owns facilities, it would eliminate the distinction between these two triggers.

IV. CRITIQUE OF SBC MISSOURI'S SELF-PROVISIONING TRIGGER ANALYSIS.

A. HIGH CAPACITY LOOPS

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

A. Yes, I have reviewed the testimony of J. Gary Smith Regarding High-Capacity Loops beginning at page 13 of his Loop Testimony.

Q. WHAT WERE THE CONCLUSIONS OF THE SELF-PROVISIONING TRIGGER ANALYSIS AS PROVIDED BY SBC?

A. SBC has asserted that 86 customer loop locations satisfy the self-provisioning trigger for both the DS3 and dark fiber capacity levels. The specific customer locations are listed on Attachments JGS-4L and JGS-5LHC of Mr. Smith's loop testimony.

Q. PLEASE DESCRIBE THE PROCESS SBC USED TO IDENTIFY HIGH CAPACITY LOOP LOCATIONS FOR ITS SELF-PROVISIONING TRIGGER ANALYSIS.

A. SBC developed a list of building locations for which it claims competitive providers have deployed fiber optic facilities using two sources: discovery directly from the competitive providers, and indirect information generated by GeoResults, which is a third-party market research firm. For each building on the list, SBC asserts that two or more competitive providers are providing services and thus that the self-provisioning trigger has been met. SBC lists the following carriers as self-provisioning trigger providers at one or more locations: ** _____

_____

_____**

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

A. No. SBC has overstated the number of customer locations for which the self-provisioning loop trigger is met. There are three main reasons for SBC's overstatement. First, for all CLECs except **_____**, SBC relies entirely upon unverified data from GeoResults, a third party marketing firm. Second, for the CLECs for whom SBC did rely upon data responses from the companies, SBC did not

identify whether the CLEC is providing loop service at the standalone DS3 or dark fiber capacity levels.

Q. WHY IS IT INCORRECT TO INCLUDE BUILDINGS IDENTIFIED BY GEORESULTS IN THE SELF-PROVISIONING ANALYSIS?

A. As these buildings were not identified through CLEC discovery responses, there is no way of knowing the accuracy of the information without validation by the CLECs themselves. Even if the CLEC is actually serving a building, all of the requirements of the self-provisioning trigger must by analyzed, including whether the relevant capacity level is being providing, whether the CLEC has access to the entire building, and whether the CLEC is operationally ready to provide service. None of this can be determined solely from the GeoResults data.

Q. BASED UPON YOUR REVIEW OF GEORESULTS DATA IN OTHER STATES, IS GEORESULTS AN ACCURATE TOOL TO IDENTIFY FACILIITES-BASED CLECS?

A. No. GeoResults identifies a broad range of locations as "lit CLECs", including banks, retail stores, paging companies, long distance resellers, and enterprise customers. It does not appear to have the intelligence built-in to distinguish a customer from a carrier, or a reseller from a facilities owner.

Q. WHAT WOULD BE THE IMPACT OF REMOVING THE GEORESULTS LOCATIONS FROM SBC'S LIST OF 86 CUSTOMER LOCATIONS?

A. There are 23 locations that rely upon unverified GeoResults data, thus the remaining number of buildings would be 63. These results are summarized in Schedule GJB-1 (HC). It is unclear whether SBC would consider the source-identifying aspects of the Geo Results column of this summary as highly confidential. Out of caution those portions have been so classified.

Q. PLEASE EXPLAIN HOW SBC FAILED TO IDENTIFY THE RELEVANT CAPACITY LEVELS OF THE CLECS FOR WHOM SBC RELIED UPON THEIR DATA RESPONSES?

A. Based upon my review of the CLEC data responses, SBC did not collect capacity-specific information from any of the CLECs. It is likely that many of the customer locations are actually being served at the OC(n) or multiple DS3 level, and thus should not be included in the trigger analysis for standalone DS3 or dark fiber .

Q. PLEASE EXPLAIN YOUR POSITION THAT IT IS LIKELY THAT THE CLEC LOCATION IS AN OC(N) OR MULTIPLE DS3 LOCATION?

A. The FCC's impairment analysis concluded that CLECs generally can only justify building to a location if they have at least an OC(3) or 3 DS3 level of demand. It would be a reasonable to assume that the buildings CLECs have already built to are "low hanging fruit" which have more than sufficient demand for OC(n) or multiple DS3 services.

Q. HOW WOULD SUCH A PRESUMPTION IMPACT THE SELF-PROVISIONING ANALYSIS IN THIS CASE?

A. As an example, **_____** has indicated in other states that it only provisions loops to locations that have an OC(n) level of demand. If it were removed as a trigger candidate based upon lack of DS3 service, there would be only 6 locations that may meet the self-provisioning trigger. These locations are provided in Schedule GJB-1(HC) .

Q. ARE YOU SUGGESTING THAT THE COMMISSION AUTOMATICALLY ELIMINATE BUILDINGS FROM CONSIDERATION IF THE CLEC DOES NOT INDICATE THE RELEVANT CAPACITY LEVEL?

A. Absolutely not. I would encourage the Commission to elicit as much information from the CLECs as necessary in order to gain a full understanding as to the scope and type of services a CLEC is providing into a given building. In the meantime, however, the buildings in question should not be presumed to meet the trigger, as SBC has assumed,

especially as it is unlikely that the CLEC is providing service in such a way as would satisfy all of the requirements of the trigger analysis. ** _____

_____

_____

_____

_____**

Q. ON PAGE 20 OF HIS TESTIMONY, J. GARY SMITH CLAIMS THAT ANY FIBER OPTIC-BASED LOOP, EVEN AT THE OC(N) LEVEL, CAN BE COUNTED TOWARDS THE DS3 TRIGGER. IS HE CORRECT?

A. No. All of the triggers require a demonstration that the actual level of capacity (DS3 or dark fiber) is being provided at the specific location. In paragraph 329 of the TRO, 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.)

Q. J. GARY SMITH 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 SATISIFIES 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 OCn 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. WHAT IS YOUR RECOMMENDATION REGARDING THE SELF-PROVISIONING TRIGGERS FOR LOOPS?

A. As SBC has not provided sufficient information to support the triggers, none of the buildings proposed by SBC should be included unless additionally information is collected to ensure that the CLECs are actually serving the building, and are providing service at the requisite DS3 or dark fiber capacity levels.

B. <u>DEDICATED TRANSPORT</u>

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

A. Yes, I have reviewed the testimony of J. Gary Smith starting on Page 23 of his Dedicated Transport testimony.

Q. WHAT WERE THE CONCLUSIONS OF THE SELF-PROVISIONING TRIGGER ANALYSIS AS PROVIDED BY SBC?

A. SBC has asserted that 30 routes satisfy the self-provisioning trigger for both DS3 and dark fiber service. The specific routes are listed on Attachment JGS-10THC to J. Gary Smith's dedicated transport testimony.

Q. WHAT WAS THE PROCESS SBC USED TO IDENTIFY THE 30 DEDICATED TRANSPORT ROUTES THAT IT CLAIMS SATISFY THE SELF-PROVISIONING TRIGGER?

A. SBC developed its list of routes based upon CLEC data responses and its own collocation records. SBC's list of routes is based upon a total of seven CLECs **_____ _____** that, collectively, SBC claims are self-provisioners.

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

A. No. SBC has exaggerated the number of self-provisioned dedicated transport routes. First, SBC includes the routes of two CLECs **_____** who deny providing dedicated transport as defined by the TRO between SBC wire centers. For the remaining CLECs, SBC simply asserted that a route exists between each and every CLEC collocation arrangement without any actual indication from the CLEC as to whether it has provisioned a dedicated transport route between the two wire centers.

Q. WHAT IS THE RESULT OF REMOVING THE TWO CLECS FROM SBC'S LIST OF SELF-PROVISIONERS?

A. If both carriers were appropriately removed, there would be only 14 routes for which there may be self-provisioned transport. These routes are listed in Schedule GJB-2 (HC).

It appears the company-identity portions of this schedule were classified as highly confidential by SBC and/or its "sources".

Q. IS THERE ADEQUATE EVIDENCE THAT DEDICATED TRANSPORT IS BEING PROVIDED ON THE REMAINING 14 ROUTES BY 3 OR MORE CLECS?

A. No. It appears that these CLECs have been included solely upon the basis of collocation arrangements. SBC merely assumes that dedicated transport routes exist between each and every CLEC collocation arrangement. I call this approach the "connect the dots" methodology.

Q. PLEASE CLARIFY WHY THE "CONNECT THE DOTS" METHODOLOGY IS AN IMPROPER ASSUMPTION FOR PURPOSES OF DETERMINING WHERE A CLEC HAS DEDICATED TRANSPORT ROUTES.

A. As I stated in Section III above, the FCC has defined dedicated transport as "a connection between wire center or switch 'A' and wire center or switch 'Z'." The FCC elaborated that "even if, on the incumbent LEC's network, a transport circuit from 'A' to 'Z' passes through an intermediate wire center 'X,' the competing 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'." Without this information about where CLECs offer service between wire centers it is impossible to determine that any of the endpoints that SBC has identified as route are actually dedicated transport routes. TRO ¶ 401.

Q. WHY IS IT NECESSARY FOR SBC TO DEMONSTRATE THAT TRANSPORT SERVICE IS BEING PROVIDED ON EACH ROUTE?

A. As I stated earlier in my testimony, CLECs generally establish collocation arrangements for the purpose of aggregating unbundled loop facilities, and as a result they will typically place loop aggregation equipment such as digital loop carrier systems (DLCs) or digital subscriber line access multiplexers (DSLAMs) in these collocations. As most

transport out of a wire center collocation is routed to a CLEC node or interexchange carrier point of presence, it will be an unusual occurrence for a CLEC to have provisioned a connection between two ILEC wire centers, unless there are customer locations in each wire center that need to be connected. Because collocations are generally not used for transport between ILEC wire centers, SBC's "connect the dots" approach drastically overstates the number of actual transport routes connecting wire centers and cannot properly be used for the trigger analysis.

Q. FOR THE REMAINING 14 ROUTES, DID SBC PROVIDE EVIDENCE THAT EACH CLEC IS PROVIDING TRANSPORT SERVICE AT THE RELEVANT DS3 OR DARK FIBER CAPACITY LEVELS?

A. Not that I could determine. It appears that SBC merely asserts that any collocation arrangement is potentially capable of providing any capacity level, so SBC decided not to pursue such information.

Q. WHY IS IT NECESSARY FOR SBC TO IDENTIFY THE SPECIFIC CAPACITY LEVELS IN SERVICE AT EACH LOCATION?

A. As is the case for loops, it is essential that equipment being used for OC(n) level services be distinguished from equipment providing DS3 or dark fiber transport. As the FCC determined, carriers generally configure transport facilities at much higher capacity levels than a DS3, so a reasonable assumption is that, even if there really is a connection between two SBC wire centers, it is most likely at an OC(n) level of capacity, which would make it inapplicable for the self-provisioning trigger.

Q. BASED UPON YOUR REVIEW OF THE INFORMATION PROVIDED BOTH BY SBC AND THE CLECS IN THIS CASE, CAN YOU PROVIDE AN EVALUATION AS TO WHICH ROUTES MAY POTENTIALLY SATISFY THE SELF-PROVISIONING TRIGGER?

A. Based upon my review of the CLEC data, there is not sufficient evidence to make a determination that 3 or more CLECs have self-provisioned dedicated transport on any of

the routes presented by SBC. Further information would need to be collected and verified before such a determination could be made. **[redacted] **

Q. WHAT TYPE OF TRANSPORT WOULD NEED TO BE ELIMINATED FROM CONSIDERATION WHEN EVALUATING A CLEC'S ROUTE EVIDENCE?

A. Any route that passes through a CLEC switch must be eliminated, as that route is no longer dedicated transport but instead switched transport. To constitute dedicated transport under the self-provisioning trigger, not only must all or part of the facility be dedicated to a particular carrier or use, but also there cannot be any switching interposed along the transport route. For example, if a CLEC has a transport route that runs from its collocation space to its own switch, that route is not dedicated transport under the TRO and may not be counted toward the self-provisioning (or wholesale) trigger.

Q. DOES J. GARY SMITH AGREE WITH THIS INTERPRETATION?

A. Yes. In testimony he submitted in Illinois Mr. Smith was asked to define "dedicated transport" and he gave the following response: "'Dedicated transport' means all or part of the facility is dedicated to a particular carrier or use *and that there is no switching interposed along the route*." (emphasis added). The pertinent page of Mr. Smith's Illinois testimony is contained in Schedule GJB - 6**.**

Q. HOW SHOULD THE COMMISSION PROCEED TO THE EXTENT THAT SBC HAS NOT COLLECTED ALL OF THE DATA NECESSARY TO EVALUATE WHETHER IT SATISFIES THE TRIGGERS?

A. It is important to avoid rushing to judgment in cases for which the appropriate data has not been collected. The CLECs and their customers will be irreparably harmed if they are denied access to loops or transport for locations or routes where they are truly impaired. It is hard to imagine how SBC will be harmed if extra time is taken to collect the data appropriate to ensuring that true competitive alternatives exist. **_____

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V. WHOLESALE TRIGGERS FOR HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT.

Q. WHAT IS THE PURPOSE OF THE FCC'S WHOLESALE TRIGGERS FOR HIGH CAPACITY LOOPS AND DEDICATED TRANSPORT?

A. In the TRO, the FCC made a national finding that CLECs were impaired with respect to access to high-capacity loops and dedicated transport. The FCC allowed that ILECs may challenge these impairment findings on a location- and route-specific basis before the state commissions. One of the ways SBC could demonstrate non-impairment is by showing that other carriers sufficiently offer high-capacity loops and dedicated transport on a wholesale basis. These are known as the "Wholesale Triggers."

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The Wholesale Triggers provide SBC an opportunity to demonstrate that there is no impairment for a specific customer location or route by identifying locations or routes for which there are alternative providers offering wholesale loop and transport services to CLECs. In addition to evidence provided under the self-provisioning trigger, SBC is also obliged to demonstrate that the alternative provider: (1) is actually offering wholesale service for the specific route or location at the requisite capacity level; (2) has equipped its network to facilitate numerous wholesale customers; and (3) has developed the appropriate systems and procedures to manage a wholesale business. Like the self-provisioning triggers, the wholesale triggers are designed to evaluate facilities that currently exist and how they are currently used, not whether facilities could be built or used differently.

Q. WHAT CAPACITY LEVELS ARE SUBJECT TO THE WHOLESALE TRIGGERS FOR HIGH CAPACITY LOOPS AND TRANSPORT?

A. Wholesale loops and transport at both the DS1 and DS3 level are subject to the Wholesale Triggers. Dark fiber *loops* are not subject to the Wholesale Trigger, while dark fiber *transport* is. See 47 CFR 51.319(a) and (e).

Q. WHAT MUST SBC DEMONSTRATE TO THIS COMMISSION TO SATISFY THE WHOLESALE TRIGGERS FOR HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT?

A. The Wholesale Triggers examine whether there are competing providers offering a bona fide product at the specific location or on the specific route.

Q. WHAT MUST SBC DEMONSTRATE TO SATISFY THE WHOLESALE PROVISIONING TRIGGER FOR HIGH-CAPACITY LOOPS?

A. Specifically, under the FCC's rules, this trigger requires evidence that:

- Two or more competing providers not affiliated with each other or SBC are present at the customer location;

- ? Each provider has deployed its own facilities and is operationally ready to use those facilities to provide wholesale loops at that location;

- ? Each provider is willing to provide wholesale loops on a widely available basis at that location; and

- ? Each provider has access to the entire multiunit customer premises. *See* 47 C.F.R. § 51.319(a)(5)(i)(B).

Q. WHAT MUST SBC DEMONSTRATE TO SATISFY THE WHOLESALE PROVISIONING TRIGGER FOR DEDICATED TRANSPORT?

A. The wholesale trigger for dedicated transport requires specific evidence that:

- ? Two or more competing providers not affiliated with each other or with SBC are present on the route;

- ? Each provider has deployed its own transport facilities "and is operationally ready to use those facilities to provide dedicated … transport along the particular route";

- ? Each provider "is willing immediately to provide, on a widely available basis," dedicated transport to other carriers on that route;

- ? Each provider's "facilities terminate in a collocation arrangement at each end of the transport route that is located at an incumbent LEC premises *and* in a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises"; and

- ? Requesting telecommunications carriers are able to obtain reasonable and nondiscriminatory access to the competing provider's facilities through a cross-connect to the competing provider's collocation arrangement.

See 47 C.F.R. § 51.319(e)(1)(ii) [DS1 transport], 51.319(e)(2)(i)(B) [DS3 transport], 51.319(e)(3)(i)(B) [dark fiber transport].

Q. FOR THE WHOLESALE TRIGGERS TO APPLY, MUST A CARRIER OFFER AT WHOLESALE THE SPECIFIC CAPACITY LEVEL IN QUESTION?

A. Yes. The *Triennial Review Order* contemplates that the Wholesale Triggers apply when a carrier offers for wholesale the particular capacity level in question. For example, a carrier that is a wholesale provider of loops or transport at the OC(n) capacity level

would not necessarily offer on a "widely available" basis loops or transport at the DS1 and DS3 levels. See, e.g., TRO fn. 984.

Q. IN ADDITION TO THE ISSUES YOU HAVE IDENTIFIED THAT NEED TO BE ADDRESSED IN THE SELF-PROVISIONING ANALYSIS, ARE THERE ADDITIONAL ISSUES SBC NEEDS TO ADDRESS IN ORDER TO SATISFY THE WHOLESALE TRIGGERS?

A. Yes. A significant threshold issue is to ensure that SBC is not overly broad in its identification of wholesale providers. Many carriers may provide some wholesale services, but may not be in a position to offer the specific loop or transport services necessary to satisfy the Wholesale Triggers. For example, a carrier may offer wholesale long distance voice services, and may also have established collocation arrangements for the self-provision of a data service for a specific retail customer. The fact that the carrier is a wholesale provider of an unrelated service is not relevant to the trigger analysis if the carrier is not offering wholesale services specific to its collocation arrangements.

Q. ARE THERE ADDITIONAL ISSUES RELATED TO HIGH-CAPACITY LOOPS THAT NEED TO BE ADDRESSED FOR THE WHOLESALE TRIGGER?

A. Yes. First, each loop must terminate at a location that affords alternative providers access to the entire customer premises – including, in multi-tenant buildings, access to the same common space, house, and riser, and other intra-building wire as SBC enjoys. If a loop does not provide alternative providers with access to the entire customer premises, then the carrier providing the loop should not be counted for purposes of either the wholesale or the self-provisioning trigger. With regard to the Wholesale Triggers, in particular, without access to the entire customer premises, that carrier is not truly offering an alternative wholesale service.

Second, the high-capacity loop in question must provide a connection into SBC's central office. Competitors must be able to connect a wholesale loop with another carrier's transport, with their own collocated facilities, or with SBC UNE transport.

Q. CAN YOU EXPLAIN FURTHER THE REQUIREMENT OF OPERATIONAL READINESS REQUIRED UNDER THE WHOLESALE TRIGGERS?

A. Yes. In addition to the requirements of the self-provisioning triggers, SBC must demonstrate that a wholesale provider is operationally ready and willing to provide transport to other carriers at each capacity level. At a minimum, SBC must show that each wholesale provider:

- Has sufficient systems, methods and procedures for pre-ordering, ordering, provisioning, maintenance and repair, and billing;
- Possesses the ability to actually provision wholesale high-capacity loops to each specific customer location identified or to provide dedicated transport along the identified route;
- For loops, has access to an entire multi-unit customer premises;
- Is capable of providing transport at a comparable level of capacity, quality, and reliability as that provided by SBC;
- For transport, is collocated in each central office at the end point of each transport route;
- Has the ability to provide wholesale high capacity loops and transport in reasonably foreseeable quantities, including having reasonable quantities of additional, currently installed capacity;
- Reasonably can be expected to provide wholesale loop and transport capacity on a going-forward basis; and
- Can provide service in a commercially reasonable timeframe, because if it takes too long to receive service customers will not sign up with CLECs.

Q. WHAT DOES "WIDELY AVAILABLE" MEAN FOR THE WHOLESALE FACILITIES TRIGGERS?

A. To be widely available, service must be made available on a common carrier basis, for example, through a tariff or standard contract. An offer to negotiate an individualized private carriage contract does not constitute being widely available. In addition, each carrier identified as a wholesale provider must be able "immediately to provide" wholesale service. 47 C.F.R. § 51.319(e). If the carrier is required to construct facilities in order for the service to be made available, then the service is not widely available.

Q. WHAT DOES IT MEAN TO HAVE REASONABLE ACCESS TO THE WHOLESALE PROVIDER?

A. Requesting carriers must be able to access cross-connects at nondiscriminatory rates, terms, and conditions in accordance with FCC and state commission rules. In addition, SBC must provide requesting carriers with adequate cross-connect terminations at cost-based rates, and must enable sufficient capacity expansion. If carriers are not able to cross connect at the SBC central office, then they cannot obtain access to the wholesale providers' facilities.

As I stated above, for a competitive wholesale market to be in place, there must be proper systems and processes for ordering and provisioning. In addition, carriers must be able to obtain from the wholesale provider the service at nondiscriminatory rates and on nondiscriminatory intervals. Requesting carriers also must be able to order circuits to terminate in all qualified wholesale providers' collocation space.

Q. WHAT ARE THE REMAINING STEPS IN THE WHOLESALE TRIGGER ANALYSIS?

A. Once the Commission has determined the appropriate application of the triggers, then it must gather the evidence for each route and location identified by SBC. As I stated above, SBC is responsible for challenging the national finding of impairment and must provide specific evidence that a trigger is satisfied for each route or transport for which it

challenges the FCC's national finding. SBC then must demonstrate that the competing carriers that it has identified indeed satisfy a trigger for the particular loop location or transport route at issue. SBC's evidence must be differentiated among each capacity type and for each loop location or transport route.

Once SBC has put forth the routes that it intends to challenge and the supporting evidence, then the Commission must evaluate whether the carriers that SBC has identified as satisfying a trigger for each loop location or transport route meet the FCC's qualifying criteria. The Commission then must classify the location or route as impaired or not impaired based on all of evidence that the parties have submitted.

Q. IF THIS COMMISSION FINDS THAT A TRIGGER IS SATISFIED, IS IT REQUIRED TO MAKE A FINDING OF IMPAIRMENT ON A PARTICULAR LOOP LOCATION OR TRANSPORT ROUTE?

A. No. If the Commission finds that a trigger is facially satisfied but believes that impairment still exists, then the Commission may petition the FCC for a waiver of application of the trigger until the barrier to deployment identified by the Commission no longer exists. For example, in the *Triennial Review Order*, the FCC explained that a state commission might find impairment – despite the existence of a trigger – if "a municipality has imposed a long-term moratorium on obtaining the necessary rights-of-way such that a competing carrier can not deploy new facilities." *TRO* ¶ 411. As another example, ILECs have claimed collocation exhaust in many central offices. If a CLEC cannot collocate in one or both of the central offices on a route, then CLECs clearly remain impaired on that route, regardless of whether a trigger is facially satisfied.

VI. CRITIQUE OF SBC MISSOURI'S WHOLESALE TRIGGER ANALYSES.

A. HIGH CAPACITY LOOPS

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

A. Yes, I have reviewed the testimony of J. Gary Smith beginning at page 21 of his loop testimony.

Q. WHAT WERE THE CONCLUSIONS OF THE WHOLESALE TRIGGER ANALYSIS AS PROVIDED BY SBC.

A. SBC has asserted that the same 86 buildings that it claimed for the self-provisioning trigger meet the wholesale trigger for DS1 and DS3 loops.

Q. WHAT WAS THE PROCESS SBC USED TO IDENTIFY THE 86 BUILDINGS THAT IT CLAIMS SATISFY THE WHOLESALE TRIGGER?

A. SBC simply asserts that all of the CLECs on its self provisioning list are wholesale providers.

Q. IS SBC'S APPROACH TO IMPLEMENTING THE WHOLESALE TRIGGER FOR HIGH CAPACITY LOOPS CORRECT?

A. No. The TRO requires that the wholesale trigger is only met if wholesale service at the relevant capacity level is being offered at the specific location. Additionally, the trigger requires that a demonstration be made that CLEC has access to the entire building.

Q. DID SBC PROVIDE ANY DEMONSTRATION THAT ANY OF THE CLECS ARE OFFERING WHOLESALE SERVICE AT THE SPECIFIC LOCATIONS?

A. No. SBC relied solely upon general information taken from CLECs websites. The information collected does not provide any indication of whether the CLECs are offering wholesale loops to the locations listed by SBC. **_____

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_____.**

Q. DID SBC PROVIDE ANY DEMONSTRATION THAT THE CLECS HAVE ACCESS TO THE ENTIRE BUILDING?

A. No. J. Gary Smith claims that "some competing providers have affirmatively identified the buildings where they have access to all units", but he did not identify which CLECs or which buildings.

Q. DID SBC INCLUDE ANY CLECS WHO DENIED PROVIDING WHOLESALE SERVICE?

A. Yes. SBC included **_____** on its list, despite its denial that it provides wholesale loop services.

Q. WHAT WOULD BE THE IMPACT OF REMOVING THAT CLEC FROM SBC'S LIST?

A. **_____** is listed as a trigger on all but 8 of the buildings indicated by SBC. Assuming that the GeoResults buildings are excluded as well, only 6 buildings may qualify for the wholesale trigger. These are the same buildings listed on Attachment GJB-2 (HC).

Q. IS THIS SMALL NUMBER OF BUILDINGS CONSISTENT WITH THE FCC EXPECTATIONS?

A. Yes. In paragraph 338 of the TRO, the FCC stated "We 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. WHAT IS YOUR RECOMMENDATION REGARDING THE WHOLESALE TRIGGER FOR LOOPS?

A. First, it must be made clear that CLECs who deny providing wholesale service are not included on the wholesale trigger. Second, for those remaining companies, additional information must be gathered to demonstrate whether the CLEC is offering wholesale service to that location, whether the CLEC has access to the entire building, and whether the CLEC is offering service at the relevant capacity level. Until this information is collected, no buildings can be said to have met the wholesale trigger for loops.

B. DEDICATED TRANSPORT

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

A. Yes, I have reviewed the testimony of J. Gary Smith Regarding Dedicated Transport beginning at page 31 of his testimony.

Q. WHAT WERE THE CONCLUSIONS OF THE WHOLESALE TRIGGER ANALYSIS PROVIDED BY SBC.

A. SBC has asserted that 43 routes meet the wholesale trigger for DS1, DS3, and dark fiber transport. This number is larger than the self-provisioning trigger mainly because the wholesale trigger only requires two providers (whereas the self-provisioning trigger requires three). The specific transport routes are listed on Attachment JGS-13THC to J. Gary Smith's transport testimony.

Q. PLEASE DESCRIBE THE PROCESS SBC USED TO IDENTIFY DEDICATED TRANSPORT ROUTES THAT IT CONTENDS SATISFY THE WHOLESALE PROVISIONING TRIGGER.

A. SBC relied upon the same discovery and collocation record data as described in my critique of its self-provisioning trigger analysis, but was able to increase the number of asserted routes due to the fact that the wholesale trigger only requires two competing providers on a route.

Q. DOES SBC'S ANALYSIS OF THE WHOLESALE TRIGGERS FOR TRANSPORT SATISFY THE FCC REQUIREMENTS?

A. No. As in the self-provisioning trigger, SBC included **_____** as triggers even though those two CLECs denied providing dedicated transport between ILEC wire centers. For the remaining CLECs, SBC used the same "connect the dots" approach to identify dedicated transport routes, which incorrectly assumes that a dedicated transport route exists between every collocation. Third, SBC incorrectly assumes that all of the capacity levels (DS1, DS3, and dark fiber) are being provided on each route without any confirmation from the identified CLECs. **_____

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Q. WHAT WOULD BE THE RESULT OF ELIMINATING THE TWO CLECS FROM SBC'S LIST?

A. If the two CLECs were appropriately removed from the list, then only 30 routes would be eligible for the wholesale trigger, subject to further evaluation. These routes are listed on Schedule GJB-3(HC). Again this schedule is classified as highly confidential based upon SBC's and its "sources" treatment of the information.

Q. DID SBC PRODUCE ANY INFORMATION TO SUPPORT THAT THE CLECS LISTED ON THE REMAINING 30 ROUTES ARE "IMMEDIATELY CAPABLE AND WILLING TO PROVIDE TRANSPORT AT A SPECIFIC CAPACITY ALONG A GIVEN ROUTE" AS REQUIRED IN PARAGRAPH 400 OF THE TRO?

A. No. SBC did not provide any evidence that wholesale transport is offered on any of the specific routes or at the relevant capacity levels. SBC also did not provide evidence that any of the CLECs are "immediately capable and willing" to provide dedicated transport along those routes. **[redacted] **

Q. IS IT POSSIBLE FOR A CARRIER TO BE PROVIDING SERVICE TO ANOTHER CARRIER ON A GIVEN TRANSPORT ROUTE, BUT NOT BE CONSIDERED A WHOLESALE PROVIDER UNDER THE FCC TRIGGERS?

A. Yes. A key requirement under the FCC triggers is that the wholesale service must be widely and generally available. Carriers occasionally will provide service to other carriers on an individual case basis or based on unique circumstances. These types of individual arrangements cannot qualify for the wholesale trigger unless it can be demonstrated that the service at the specific location meets the FCC requirements that the service be widely available, and that requesting carriers have nondiscriminatory access to such arrangements.

Q. BASED UPON YOUR REVIEW OF THE INFORMATION, HAVE YOU BEEN ABLE TO DETERMINE WHETHER ANY OF THE ROUTES INDICATED BY SBC MEET THE WHOLESALE TRIGGERS?

A. SBC has not provided information to support that wholesale transport is being offered on any of the routes consistent with the requirements of the TRO. Further information would need to be gathered and evaluated as to whether any of the CLECs are actually operationally ready to provide a dedicated transport service along the routes listed. Then,

a determination would need to be made to determine whether such CLECs are "immediately capable and willing" to provide wholesale dedicated transport to each carrier on each route at the relevant capacity levels before such a determination could be made.

VII. POTENTIAL DEPLOYMENT ANALYSIS FOR HIGH-CAPACITY LOOPS AND DEDICATED TRANSPORT.

Q. PLEASE DESCRIBE WHAT IS MEANT BY POTENTIAL DEPLOYMENT.

A. Under the self-provisioning trigger, the FCC provides that SBC may attempt to demonstrate that no impairment exists for loop locations or transport routes even though the self-provisioning trigger has not been satisfied. See, e.g., TRO ¶ 335.

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. Id.

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. Id.

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

A. SBC 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. SBC must therefore demonstrate that the competitive providers would earn sufficient revenues relative to the 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 SBC 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." The TRO then lists the following factors:

- Evidence of alternative loop deployment at that particular customer location;
- Local engineering costs of building and utilizing 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 SBC 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 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 CLECs' ability to deploy the facilities in question.

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

A. Any evidence an ILEC presents on potential deployment will necessarily have to address the limitations on the availability of UNEs that are *already built in* to the FCC's new unbundling rules. Thus, with respect to loops, SBC'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, SBC'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. DO YOU THINK IT IS 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 has already 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. These lower revenues are highly unlikely to cover the high fixed and sunk costs of facilities deployment, *id.*, and 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 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 *Triennial Review Order*, the ILEC would have to show – for each particular building or transport route -- that the revenues available to a CLEC at that location and at the relevant capacity level 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 would also 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. And the

pervasive but location-specific 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.

VIII. CRITIQUE OF SBC MISSOURI'S POTENTIAL DEPLOYMENT ANALYSIS.

A. HIGH CAPACITY LOOPS

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

A. Yes, I have reviewed the testimony of J. Gary Smith Regarding High-Capacity Loops at beginning on Page 24 of his testimony, as well as the testimony of Gary O. Smith and Joseph H. Ramatowski.

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

A. SBC has asserted that 321 customer loop locations satisfy the potential deployment analysis for high capacity loops. These 321 buildings were all located in two geographic areas: (1) downtown St. Louis and (2) downtown Kansas City. The specific customer locations are listed on Schedule JGS-10LHC to J. Gary Smith's loop testimony.

Q. DO YOU BELIEVE IT IS CREDIBLE THAT THERE ARE MORE BUILDINGS THAT SBC CLAIMS QUALIFY FOR POTENTIAL DEPLOYMENT THAN SBC IDENTIFIED FOR SELF-PROVISIONING?

A. No, particularly when one considers that the 321 buildings are all located within two fairly discrete geographic areas, not throughout the entire state. The current scope of CLEC networks represent 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 was 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) are either 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, the current financial environment is such that competitive carriers do not have the same level of financing available 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 SBC for the sole purpose of provisioning only one or two DS3s of capacity or providing dark fiber, let alone an additional number exceeding the number of buildings to which they have actually deployed facilities.

Q. PLEASE DESCRIBE THE PROCESS SBC USED TO DETERMINE THAT 321 BUILDINGS SATISFIED THE POTENTIAL DEPLOYMENT ANALYSIS FOR HIGH CAPACITY LOOPS

A. First, SBC made maps for the two wire centers showing where CLECs had deployed fiber rings. SBC then used these maps to identify buildings that it believed were within 300 feet of one of these competitive provider's fiber facilities. To develop this list, SBC

used a variety of third party sources, including reports from GeoResults and GeoTel, Inc. From this list of buildings, SBC attempted to identify those buildings that had an annual "telecommunications spend" of $50,000 or more. To obtain an estimate of building spending levels, SBC used data it obtained from Dun and Bradstreet and TNS Telecoms, two other third party market research firms. SBC then simply *assumed* – *w*ithout any analysis of building-specific factors for potential deployment – that *every one* of the 321 buildings meeting these criteria satisfied the potential deployment criteria.

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

A. No. In fact, I think this is almost exactly the opposite of what the FCC provided for 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 meant to be conducted on a building-by-building basis in order to identify those <u>limited</u> instances in which multiple alternative loop deployment was possible even though it had not yet taken place. SBC, however, has attempted to "de-granularize" this analysis by instead developing a list of generic criteria that it then applied 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. SBC's testimony does not evaluate these factors for even a single building on its potential deployment list.

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

A. I have several specific criticisms. First, SBC's entire analysis is predicated on the implausible notion that, if one competing provider has fiber "near" a building, other competing providers could then provide access to the building. Second, SBC's use of the 300-foot distance measure as a proxy for potential deployment is flawed and unreasonable. Third, SBC does not analyze any of the building-specific factors specified in the TRO for any of the buildings it has identified. Fourth, the revenue figures SBC uses in its potential deployment are flawed and cannot be used as a substitute for a building-by-building application of the TRO factors, and in all events they are not the appropriate measure of revenues to apply.

Q. PLEASE EXPLAIN WHY YOU BELIEVE THE PRESENCE OF SOME FIBER NEAR A BUILDING IS NOT SUFFICIENT TO SHOW POTENTIAL DEPLOYMENT.

A. The buildings that SBC identifies are ones that are within 300 feet of *any* CLEC's fiber in the applicable wire centers. However, the fact that one CLEC may have fiber in the area does not mean that *multiple* CLECs could build customer laterals to all of these building locations using fiber facilities. For example, suppose that carrier X has fiber running near customer location Y. Even accepting all of SBC's other assumptions, this would mean only that carrier X might be able to build a customer lateral to building Y. It does *not* mean that any other CLEC could build a similar customer lateral. Thus, at most, SBC's argument would prove that *one single* CLEC could potentially deploy facilities to a building (which is not correct anyway, for reasons I will discuss below). One competing provider is not enough to satisfy either the self-provisioning or wholesale triggers; it cannot be a sufficient basis to short-circuit the potential deployment analysis. The focus of the potential deployment test is whether *CLECs in general* could overcome the

obvious operational and economic barriers to loop construction such that there could be multiple competitive supply of loop facilities.

Again, SBC's approach to potential deployment is the opposite of what the TRO provided for because SBC's approach simply turns locations that fail the self-provisioning trigger into locations that qualify for non-impairment determinations based on potential deployment. SBC's "methodology" simply ignores the requirements and criteria for potential deployment that are established in the TRO.

Q. PLEASE EXPLAIN WHY YOU DO NOT BELIEVE IT IS REASONABLE TO DETERMINE POTENTIAL DEPLOYMENT BASED UPON THE 300-FOOT DISTANCE FACTOR BETWEEN CLEC FACILITIES AND SPECIFIC BUILDINGS?

A. Despite SBC witness J. Gary Smith's view that 300 feet is a relatively small distance, using distance as the sole gating factor is flawed in that it does not take into consideration the location-specific obstacles that might be located between the CLEC's facilities and the building, especially in large cities such as St. Louis or Kansas City. 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. While this is obviously 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 will constructing facilities over longer distances in rural areas.

Q. ARE THERE OTHER FLAWS RELATED TO THE USE OF A DISTANCE MEASUREMENT, SUCH AS THE 300 FOOT APPROACH USED BY SBC?

A. Yes. First, it does not appear that SBC's analysis made a determination as to whether the point on the CLEC's network that is 300 feet from the building would provide a point from which a lateral facility could be extended. If an accessible splicing point, such as a manhole, is not available, the true distance would have to be extended to the nearest splice point. Second, the 300 foot analysis criterion does not take into account whether any type of reasonable access is available between the splicing point and the building. It is not appropriate to presume the availability of necessary conduit without an actual building-specific evaluation for each specific building for which SBC seeks a finding of non-impairment due to potential deployment. Third, even if a building is within 300 feet of a splicing point, SBC's analysis does not provide any information about the availability of building access, which is a critical issue for CLECs seeking to deploy loop facilities to a building.

Q. YOU ALSO MENTIONED THAT SBC'S ANALYSIS IS DEFECTIVE BECAUSE SBC DID NOT PERFORM A BUILDING-SPECIFIC ANALYSIS FOR ANY OF THE 321 BUILDINGS CONSISTENT WITH THE FACTORS THAT ARE SPECIFIED IN THE TRIENNIAL REVIEW ORDER. CAN YOU PLEASE EXPLAIN THIS POINT?

A. The testimony of SBC witness Gary O. Smith indicates that SBC analyzed the buildings as a group instead of individually. In his testimony, Mr. Smith discusses SBC's rationale as to how each of the FCC's requirements for potential deployment have been satisfied. As SBC did not perform a building-specific analysis, and collected no information about any of the buildings, Mr. Smith is reduced in each case to simply asserting that no obstacles or barriers exist for every building. For example, when asked about building access, Mr. Smith acknowledges that "Over the past several years, building owners have become more prone to ask for a formal access arrangement with carriers, including SBC Missouri." (p. 24, lines 502-03). In spite of this acknowledgement, Mr. Smith apparently

just assumes that there are no building access issues in any of the 321 buildings, even though he just acknowledged that even SBC has been forced to enter into formal arrangements with building owners.

Q. WHAT TYPE OF COST EVIDENCE DID SBC PROVIDE TO SUPPORT ITS POTENTIAL DEPLOYMENT CLAIMS?

A. SBC relied upon a cost study developed by the Cambridge Strategic Management Group that was filed with the FCC by the United States Telecommunications Association, and came up with a minimum annual revenue threshold as a proxy for building-specific costs. SBC witness Ramatowski also provided some information related to the Missouri TELRIC costs for DS3s and dark fiber, although it appears that this information is used only as a check on the Cambridge Study.

Q. IS IT APPROPRIATE FOR SBC TO USE THIS "CAMBRIDGE STUDY" TO DETERMINE BUILDING COSTS IN MISSOURI?

A. No. The Cambridge study does not purport to examine the costs associated with constructing facilities to individual buildings. Instead, it appears that the study is based upon some general assumptions about CLEC costs, which were not disclosed in the study. Those assumptions were then adjusted for differences between cities based primarily upon wage data.

Q. DOES THE CAMBRIDGE STUDY ANALYZE ANY MISSOURI-SPECIFIC DATA?

A. No. The "Cambridge Study" purports to perform a statistical analysis on 6 cities -- Greenville, South Carolina, Dayton, Ohio, St. Paul, Minnesota, Tucson, Arizona, Cleveland, Ohio, and Seattle, Washington -- it appears that only minor adjustments were made between each city primarily to adjust for wage differences, without a meaningful analysis of construction costs.

Q. DID THE CAMBRIDGE STUDY INCLUDE ANY BUILDING SPECIFIC COSTS AT ALL?

A. No.

Q. DID THE CAMBRIDGE STUDY PURPORT TO ANALYZE ANY OF THE NINE FACTORS REQUIRED BY THE FCC?

A. No. The "Cambridge Study" merely acknowledges that a CLEC will incur incremental capital and operating expenses when extending its network, but it provides no quantification or estimation of these costs, and it does not provide information that addresses any others of the nine factors specified by the *Triennial Review Order* for the potential deployment analysis.

Q. EVEN IF IT WERE A LEGITIMATE STUDY, DOES THE CAMBRIDGE STUDY PROVIDE EVIDENCE THAT CLECS CAN SELF-DEPLOY DS3 LOOPS TO LOCATIONS THAT REQUIRE LESS THAN AN OC(N) LEVEL OF CAPACITY?

A. No. The Cambridge study concludes that CLECs need at least 3 DS3s of demand to achieve enough revenue to recover the CLEC cost of construction, which is consistent with the FCC's impairment analysis. If anything, the Cambridge study is evidence that CLECs cannot justify building to locations to provision one or two DS3s.

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

A. No. Mr. Ramatowski provided cost information that I understand was used in developing TELRIC rates in Missouri. 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, who do not have SBC's scale, access to buildings, and access to rights-of-way.

Q. DID MR. RAMATOWSKI'S ANALYSIS ASSUME THE APPROPRIATE CAPACITY LEVEL?

A. No. Mr. Ramatowski's analysis assumes the deployment of an OC(3) system. The relevant capacity levels for potential deployment are DS3 and dark fiber. Obviously, the larger the OC(n) system, the greater the economies of scale for an individual DS3 circuit, so assuming costs related to an OC(3) will significantly understate the cost of constructing a single DS3.

Q. FROM A PRACTICAL PERSPECTIVE, DOES THE COST INFORMATION PROVIDED BY MR. RAMATOWSKI MAKE SENSE IN THE CONTEXT OF POTENTIAL DEPLOYMENT?

A. No. Mr. Ramatowski's analysis assumes that the total cost of extending fiber optic facilities into a building is under **_____** (Schedule JHR - 1 (HC)). This obviously assumes no construction costs whatsoever. Gary O. Smith's testimony provides a more realistic description of the numerous preliminary activities that a CLEC would have to perform to construct a fiber extension even when there is available conduit into a building. The activities that Mr. Smith described include obtaining permits, setting up traffic control, testing the manhole environment for earth gases, pumping out water from the manhole, ventilating the manhole, setting up equipment for pulling cable, setting up equipment in the building to pull the fiber, and placing innerduct into the existing conduit system if necessary. None of these costs are reflected in Mr. Ramatowski's testimony, nor is there any discussion or analysis for buildings in which there is no available existing conduit, for which the CLEC would have to perform a much more significant construction task.

Q. IS SBC'S USE OF A BUILDING'S ESTIMATED TOTAL TELECOMMUNICATIONS SPENDING, IN THIS INSTANCE $50,000, 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) could easily surpass the $50,000 threshold without having any demand whatsoever for DS3 or dark fiber loops. SBC 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 $50,000 threshold.

Q. IS IT APPROPRIATE TO USE THE $50,000 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 an individual DS3 or dark fiber loop. 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. And 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, because a requesting carrier may only obtain up to 2 DS3s at UNE rates for any 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 would certainly contain revenues other than those for the specific one or two DS3 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

improperly skews such analysis.[2] 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.

Because 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 DC3s 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 by whether the cost to provision its own loop is less than the cost of purchasing the special access line.

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 Schedule GJB-5. 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

[2] In all events, if the total revenues for such services were to be included in a potential deployment analysis, without access to specific revenues available from specific uncommitted customers in a location, the Commission can only anticipate that they would generate average revenues for services provided over such facilities. SBC 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. SBC fails to provide this

determining whether to extend a typical CLEC network into a new building than the analysis used by SBC 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 DS3's 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 SBC'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 SBC claims potential deployment must be treated as a unique exception, which must be supported by a full, building-specific analysis.

Q. DID SBC PROVIDE EVIDENCE OF ALTERNATIVE LOOP DEPLOYMENT FOR THE 321 BUILDINGS ON ITS LIST?

A. Based upon a review of SBC exhibit JGS-10L (HC), it appears that SBC has only identified alternative loops for **___** of the 321 locations through discovery. By default, the remaining buildings are represented as merely being within 300 feet of competitive facilities and do not actually have any "evidence of alternative loop deployment". Obviously, SBC's "corridor" approach vastly expands the list of locations for which it claims potential deployment is satisfied; it does so entirely by presumption, however, not on the basis of a factual showing – much less a showing specific to each location.

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evidence as well.

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

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

Q. HOW SHOULD SBC HAVE DONE ITS POTENTIAL DEPLOYMENT ANALYSIS?

A. SBC should have performed an individual discounted cash flow analysis for each building that would reflect the appropriate costs and revenues associated with the provision of not more than two DS3 loops or dark fiber loops, meaning that the cost of constructing loop facilities into the building must be less than the revenue expected for the provision of two DS3s or dark fiber loops. The analysis would review characteristics specific to the individual building, including the FCC's nine factors. Additionally, the analysis would evaluate whether potential customers actually exist in the building and are available for competitive provision, or whether those customers are locked into long term existing contracts (and therefore would not represent potential customers or revenues for the CLEC, at least for a number of years). Also, SBC must establish that there are enough customers in each building to support multiple self-providers.

B. <u>DEDICATED TRANSPORT</u>

Q. HAVE YOU REVIEWED SBC'S TESTIMONY CONCERNING THE APPLICATION OF THE POTENTIAL DEPLOYMENT ANALYSIS TO DEDICATED TRANSPORT?

A. Yes, I have reviewed the testimony of J. Gary Smith Regarding Dedicated Transport at pages 37 of his transport testimony.

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

A. SBC has asserted that the same transport routes that it claims satisfy either the self-provisioning and/or wholesale triggers should also receive non-impairment findings from the Commission on the basis of potential deployment.

Q. PLEASE DESCRIBE THE PROCESS SBC USED TO ASSERT THAT THESE SAME TRANSPORT ROUTES SATISFY THE POTENTIAL DEPLOYMENT ANALYSIS FOR DEDICATED TRANSPORT?

A. SBC took all of the routes that it claimed satisfied the wholesale trigger and simply concluded that, since it contended that there were two competing providers on each route, that potential deployment along those routes was possible. The essence of SBC's position is that if a route fails to meet the wholesale trigger because some carriers do not actually offer widely available wholesale service, SBC can circumvent the trigger through a potential deployment analysis.

Q. DO YOU BELIEVE THAT SBC'S POTENTIAL DEPLOYMENT ANALYSIS FOR DEDICATED TRANSPORT IS PROPER?

A. No. SBC's analysis for dedicated transport is not really a potential deployment analysis, but is probably more correctly thought of as a "potential trigger" analysis. SBC's potential deployment analysis for dedicated transport is predicated on the notion that a carrier with fiber based collocations in a local area is a "potential" self-provider of dedicated transport between those collocations even if those collocations are not physically connected. Because such a carrier is *not* actually self-provisioning connectivity between the ILEC offices, it is not a proper candidate for the self-provisioning trigger. SBC, however, has essentially created a separate test (nowhere mentioned in the TRO) which counts the number of potential self-deployers, and concludes that if there are two potential self-deployers, then widespread potential

deployment is possible. All that SBC is doing through this approach is using its definition of potential deployment as a way to reduce the number of carriers needed to satisfy the self-provisioning trigger.

Moreover, even if SBC's logic was sufficient to show that an *individual* carrier could potentially deploy a transport facility for its *own* use, its existence provides no evidence at all to support a conclusion that any *other* carrier "could" potentially deploy a transport facility. Thus, it also does not support a "potential deployment" claim that applies generally to others and does not show that there can multiple competitive supply of transport facilities.

Q. ARE THERE OTHER PROBLEMS WITH SBC'S POTENTIAL DEPLOYMENT ANALYSIS FOR DEDICATED TRANSPORT?

A. Yes, there several other problems. First, as I have explained above in my critique of both the self-provisioning and wholesale triggers, SBC has greatly overstated the number of existing dedicated transport routes of competing providers; this overstatement carries over into its potential deployment and results in similar overstatement. Second, as I have also explained above with respect to self-provisioning, SBC cannot satisfy the potential deployment analysis unless it can show that multiple carriers have the potential to self-provision transport at the quantities of capacity levels that would otherwise be available as UNEs. SBC cannot, for example, rely on the existence of OC(n) level transport routes to show that potential deployment is possible at lower capacity levels. A proper analysis needs to reflect the FCC's specific decision that CLECs are impaired without unbundled access to dark fiber transport, DS1 transport, and twelve or fewer DS3s of transport along any given route. *See* TRO ¶ 388.

Q. HAS SBC PRESENTED ANY DEMONSTRATION THAT THE ROUTES MEET THE FCC'S REQUIREMENTS FOR ECONOMIC VIABILITY, OR THAT IT HAS CONSIDERED THE NINE FACTORS OUTLINED BY THE FCC?

A. No. SBC has provided no analysis of any kind to support its potential deployment claims for dedicated transport. SBC witnesses Gary O. Smith and Ramatowski did not provide any supporting information or analysis for dedicated transport. On this basis alone, any potential deployment claims for these routes should be rejected.

Q. SO WHAT DO YOU CONCLUDE ABOUT SBC'S POTENTIAL DEPLOYMENT ANALYSIS FOR DEDICATED TRANSPORT?

A. I have concluded that SBC has not satisfied its burden of proving potential deployment at any capacity level for any of the routes for which it seeks such a finding.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.