Exhibit No.:
Issue:
Witness: Marvin Nevels
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Sponsoring Party: Southwestern Bell Telephone, L.P. d/b/a AT&T Missouri
Case No.: TO-2006-0360
Date Testimony Prepared: April 27, 2007

SOUTHWESTERN BELL TELEPHONE, L.P. d/b/a
AT&T MISSOURI

CASE NO. TO-2006-0360

REBUTTAL TESTIMONY

OF

MARVIN NEVELS

Dallas, Texas

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of NuVox Communications of Missouri, Inc., for an Investigation into the Wire Centers that AT&T Missouri Asserts are Non-Impaired Under the TRRO.	) Case No. TO-2006-0360.

AFFIDAVIT OF MARVIN NEVELS

STATE OF TEXAS)
) SS
COUNTY OF DALLAS)

I, Marvin Nevels, of lawful age, being duly sworn, depose and state:

1. My name is Marvin Nevels. I am presently an Area Manager – Network Regulatory for Southwestern Bell Telephone, L.P.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
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.

Marvin Nevels

Subscribed and sworn to before this 19 day of April, 2007.

NANCY L. GRIFFITH
Notary Public, State of Texas
My Commission Expires 01-26-09

Notary Public

My Commission Expires: 1-26-09

REBUTTAL TESTIMONY OF MARVIN NEVELS

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REBUTTAL TESTIMONY OF MARVIN NEVELS

ON BEHALF OF AT&T MISSOURI

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Marvin Nevels. My work address is 308 S. Akard Street, Dallas, Texas 75202.

Q. ARE YOU THE SAME MARVIN NEVELS THAT SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING ON MARCH 30TH, 2007?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my Rebuttal Testimony is to address the fiber-based collocation issues raised in the Direct Testimony of CLEC witness Mr. Gillan.

Q. PLEASE IDENTIFY THE SPECIFIC AREAS RELATING TO FIBER-BASED COLLOCATION THAT YOU ADDRESS IN YOUR REBUTTAL TESTIMONY.

A. My Rebuttal Testimony focuses on the "Comparable Transmission Facilities" aspect of the FCC's fiber-based collocation rules, specifically, the appropriate

treatment of what is generally referred to as "Collocation-to-Collocation Cross-Connections" (or "collo-to-collo arrangements").

Q. PLEASE FIRST OUTLINE THE PRINCIPAL ARGUMENTS MADE BY MR. GILLAN.

A. In his Direct Testimony, Mr. Gillan asserts that, in a collo-to-collo arrangement, only one of the CLECs (at most) can be counted as a fiber-based collocator ("FBC") under the FCC's rules for determining non-impairment of a wire center. Stated another way, he asserts that the carrier utilizing a collo-to-collo arrangement is not employing either a traditional or less traditional collocation arrangement for purposes of qualifying as an FBC under the FCC's rules.

Mr. Gillan rests his claim on two theories. First, he contends that a DS-3 facility that connects such collocators is not "comparable" to a fiber transmission facility because only facilities with at least three DS-3s of capacity qualify as "comparable" to fiber. (Gillan Direct, p. 27). Second, he contends that AT&T Missouri cannot count more than one collocator because only one of the two "operates" a fiber transmission facility that "terminates" in and "leaves" the wire center. (Gillan Direct, p. 27). As my Rebuttal Testimony demonstrates, Mr. Gillan's arguments are incorrect from a network perspective and should be rejected.

III. DISCUSSION

Q. PLEASE SUMMARIZE THE ISSUES RAISED BY MR. GILLAN'S DIRECT TESTIMONY.

A. Mr. Gillan raises essentially two issues, as follows:

ISSUE 1 -- *What facilities qualify as "comparable transmission facilities" pursuant to FCC Rule 51.5 regarding FBCs?*[1]

Mr. Gillan contends that a "comparable transmission facility" cannot include a cross connected collocation arrangement, on the theory that the cross connect itself does not leave the wire center. I will explain why Mr. Gillan's contention is flawed.

ISSUE 2 -- *Should a carrier that is cross-connected to another collocator be counted as an FBC?*[2]

Mr. Gillan argues that a carrier must possess optronics in order to "operate" a fiber-optic cable and thus qualify the arrangement as a comparable transmission facility. I demonstrate below why this is likewise incorrect from a network engineering perspective.

[1] See Rebuttal Testimony of Carol Chapman, pp.55-58, Fiber-based Collocator Dispute 2 – How should the term "comparable transmission facility" be defined?

[2] See Rebuttal Testimony of Carol Chapman, pp. 47-55, Fiber-based Collocator Dispute 1 – Does the definition of Fiber-based Collocator include collo-to-collo arrangements in which the connecting carrier establishes service without providing optronics for fiber that leaves the wire center?

Q. HAVE YOU PROVIDED A DIAGRAM TO ASSIST IN YOUR DISCUSSION OF THESE ISSUES?

A. Yes. Attachment MN-1 to this Rebuttal Testimony shows a collo-to-collo arrangement. Collocator #1 in the diagram owns fiber transport facilities that leave the wire center. Collocator #2 in the diagram has a coaxial cross connection between itself and Collocator #1 and uses the combination of that cross connection and the fiber transport facility to send and receive traffic. The cross connection has DS-3 or greater capacity. The question here is whether Collocator #2 should be counted as an FBC under the FCC's rules. I will refer to this diagram to illustrate points later in this Rebuttal Testimony.

ISSUE 1 - COMPARABLE TRANSMISSION FACILITIES

What facilities qualify as "comparable transmission facilities" pursuant to FCC Rule 51.5 regarding FBCs?

Q. WHAT IS THE DISPUTE REGARDING THIS ISSUE?

A. As explained in my Direct Testimony and Ms. Chapman's Direct Testimony, AT&T Missouri's position is that a collocator that is cross connected at a DS-3 (or higher capacity) level to a fiber facility that leaves the wire center counts as an FBC for purposes of the FCC's Rule 51.5 (leaving aside the AT&T-BellSouth merger commitment). Mr. Gillan, by contrast, claims that any facility with less than 3 DS-3's of capacity cannot be treated as "comparable" to fiber. (Gillan Direct, p. 27).

Q. WHAT IS A DS-3 LEVEL OF TRANSMISSION CAPACITY?

A. As discussed in my Direct Testimony (Nevels Direct, p. 11)**,** a DS-3 level of capacity enables simultaneous transmission of 672 voice-grade equivalent telephone calls. With appropriate equipment, however, the 672 voice-grade equivalent lines leaving the central office can be used to serve many times more than that. For example, most digital loop carriers ("DLCs")[3] deployed today will allow concentrations of 4:1 or higher. This equipment allows many subscribers to share the same trunk facilities, similar to what switches have done for decades. With a 4:1 concentration ratio, 672 trunks leaving the office could support 2,688 subscriber lines to serve end-users from that central office. This substantial amount of capacity supports treating a DS-3 as comparable to fiber. Moreover, the FCC treated fixed wireless arrangements as "comparable" to fiber transport, and fixed wireless arrangements can begin at a DS-3 level of capacity. The same logic should apply to a DS-3 coaxial cable arrangement. (Nevels, Direct, p. 11).

Q. WHY WOULD MR. GILLAN'S PROPOSAL OF ONLY COUNTING COMPARABLE TRANSIMISSION FACILITIES THAT START AT THE LEVEL OF 3 DS-3's BE INAPPROPRIATE?

A. It is important to understand that 3 DS-3's equals an OC-3, and an OC-3 is always fiber. Thus, using a "3 DS-3's" standard would completely eliminate the FCC's category of "comparable" transmission facilities, since the only thing that would be "comparable" to fiber would be an OC-3 or above. This would be inconsistent

[3] A digital loop carrier derives multiple channels from a single distribution cable running from a central office to a remote site.

with the FCC's intent. Moreover, the FCC stated that fixed wireless arrangements are "comparable" to fiber transmission facilities, and such arrangements can begin at a DS-3 level of capacity.

Q. MR. GILLAN CONTENDS THAT HE IS UNAWARE OF ANY INTEROFFICE FACILITIES THAT OPERATE BELOW AN OC-3 LEVEL. IS THAT RELEVANT?

A. No. Mr. Gillan leaves out the fact that an *intraoffice* DS-3 level coaxial cable can be used in conjunction with interoffice fiber facilities of another carrier to create a facility that terminates in a collocation arrangement and leaves the wire center, thus enabling interoffice transport. As explained in the Direct Testimony of Carol Chapman, classifying a CLEC that uses such a facility as an FBC is consistent with the FCC's definition of an FBC.

ISSUE 2 – COLLO-TO-COLLO CROSS-CONNECTIONS

Should a carrier that is cross-connected to another collocator be counted as an FBC?

Q. WHAT IS THE DISPUTE REGARDING THIS ISSUE?

A. Mr. Gillan argues that a cross-connected CLEC does not "operate" the transmission facility that "terminates" within the wire center and "leaves" the wire center, and therefore, cannot qualify as an FBC. (Gillan Direct, p. 27). AT&T Missouri disagrees.

Q. PLEASE EXPLAIN HOW A CROSS-CONNECTED CARRIER "OPERATES" A FIBER-OPTIC CABLE OR COMPARABLE TRANSMISSION FACILITY.

A. I will discuss this issue by referring to the diagram of a collo-to-collo arrangement in Attachment MN-1. Mr. Gillan claims that Collocator #2 in Attachment MN-1 (the cross-connected carrier) does not "operate" a fiber or comparable facility because Collocator #2 may not own any optronics equipment connected to the facility. (Gillan Direct, p. 26). But a carrier need not "own" optronics in order to "operate" the relevant transmission facility. On the contrary, the control that Collocator #2 exercises over the transmission facility meets any reasonable definition of "operate." As I have depicted in Attachment MN-1, Collocator #2 has multiplexing equipment that aggregates traffic and transmits it over a coaxial cable at a DS-3 level of transmission. Collocator #2 makes engineering and market entry determinations in deciding whether and when to lease fiber-optic cable capacity, the amount of fiber-optic cable capacity needed, the type of cross-connect facility that it will use, the capacity of that cross-connect, and the type and quantity of its own facilities to place in its collocation arrangement. Collocator #2 can test its facility from its collocation arrangement to the other end of the circuit in a distant location in the same manner that Collocator #1 can test its equipment. Collocator #2 can "turn off" the system by terminating the cross-connect facility or the lease or purchase arrangement for capacity on the fiber-optic cable.

Q. IN THE EXAMPLE YOU HAVE BEEN USING, IS COLLOCATOR #2'S ABILITY TO OFFER SERVICES DIMINISHED BY NOT HAVING OPTRONICS IN ITS COLLOCATION ARRANGEMENT?

A. No, not at all. Collocator #2 controls the use of the facility with respect to the size of the signal it requires to meet the needs of its customers, whether or not the related optronics are part of its proprietary network. The effect is that the size of the signal is determined and created by equipment that is controlled and operated by Collocator #2. By placing a coaxial or fiber-optic cable between itself and Collocator #1, the signal is able to leave the central office over Collocator #1's fiber, without interruption or interference by Collocator #1. In short, a CLEC that is cross connected to another CLEC is operating, running or controlling a facility that is capable of realizing a DS-3 level of transmission from that carrier's collocation arrangement out of the wire center to the rest of its network. Thus, Mr. Gillan's emphasis on whether the collocated CLEC actually owns the optronics that connect to fiber is misplaced.

Q. DOES ANYTHING IN THE FCC'S *TRRO* INDICATE THAT BOTH CARRIERS IN A COLLO-TO-COLLO ARRANGEMENT COULD BE COUNTED AS FBCs?

A. Yes. The FCC explicitly referred to the Verizon CATT arrangement as an example of a less traditional collocation arrangement that could still count for FBC purposes. The CATT arrangement is comparable to a collo-to-collo situation. As I explained in my Direct Testimony, the Verizon CATT arrangement allows CLECs to lease fiber capacity from another carrier, thus avoiding many of the costs associated with the deployment of a fiber facility.

Q. PLEASE EXPLAIN FURTHER WHY AT&T MISSOURI'S COLLO-TO-COLLO ARRANGEMENT SHOULD BE TREATED NO DIFFERENTLY THAN VERIZON'S CATT ARRANGEMENT.

A. In discussing fiber-based collocation arrangements, the FCC expressly noted that "the collocation arrangement" could "include less traditional collocation arrangements such as Verizon's CATT fiber termination arrangements." *TRRO,* ¶ 102. As I explained in my Direct Testimony, the Verizon CATT arrangement allows all collocated carriers to connect to fiber interoffice transmission facilities brought into the central office by another carrier. The FCC determined that collocated carriers connected to a CATT arrangement *do* count as fiber-based collocators, and it made no exception to exclude them. For purposes of the FCC's discussion and as a practical matter, the kind of AT&T Missouri collo-to-collo arrangement I have discussed is no different.

Q. ARE THERE ANY OTHER PROBLEMS WITH MR. GILLAN'S EMPHASIS ON WHICH CLEC OWNS THE OPTRONICS?

A. Yes. As Ms. Chapman discusses in her Rebuttal Testimony, the FCC has emphasized that its non-impairment thresholds should rely on readily available data that ILECs already possess. When AT&T Missouri conducts a physical inspection of a central office for fiber-based collocators, it cannot tell -- standing outside the collocation cage -- whether a carrier has optronics in that cage or is connecting to optronics in another CLEC's cage. In fact, we cannot tell what goes on inside the cages at all – all we can see is the facility connecting the cages, which we can determine to be DS-3 or higher. Mr. Gillan's proposed approach

would require ILECs to seek from CLECs information (probably confidential information of the type CLECs are not likely to be inclined to provide AT&T Missouri) about their network configuration, which is precisely the kind of discovery-driven process the FCC wanted to avoid.

Q. MR. GILLAN ALSO CONTENDS THAT COLLOCATOR #2 DOES NOT OPERATE A TRANSMISSION FACILITY THAT "TERMINATES" IN THE CENTRAL OFFICE. (GILLAN DIRECT, P. 23). PLEASE RESPOND.

A. Collocator #2 obviously operates a transmission facility that terminates in its collocation space – the combined DS-3 fiber facility running from its space to Collocator #1 and then out of the central office. This is straightforward, but the CLECs' claim that a fiber interoffice facility can terminate only once, *i.e.*, at Collocator #1's space. That argument again ignores the nature of a collo-to-collo arrangement. The transmission path at issue for Collocator #2 is the capacity that it obtains on Collocator #1's fiber via the DS-3 connection, and the termination point of that path is in Collocator #2's collocation arrangement.

Q. MR. GILLAN ALSO IMPLIES (GILLAN DIRECT, P. 27) THAT A COLLOCATOR MAY NOT BE COUNTED AS A FIBER-BASED COLLOCATOR IF THE FACILITY THAT CONNECTS IT TO ANOTHER COLLOCATOR DOES NOT "LEAVE" THE WIRE CENTER. PLEASE RESPOND.

A. Mr. Gillan makes the same error here as he does regarding the meaning of "terminate." When looking at a collocation-to-collocation connection, Mr. Gillan singles out the cabling between the two collocation arrangements and sees it as a

discrete transmission route that begins and ends at those two locations. He fails to acknowledge that the collo-to-collo connection is just a small segment of an uninterrupted transmission route that leaves the wire center; in other words, he fails to view the transmission facility as a whole. Attachment MN-1 shows that all of the cabling and equipment, from points A through J, make up the comparable transmission facility.[4] By tracing these points it is clear that Collocator #2 "operates" a comparable transmission facility that terminates within its arrangement (at point A) and "leaves the wire center" (at point J).

Q. PLEASE EXPLAIN WHAT YOU MEAN BY SAYING THAT MR. GILLAN FAILS TO VIEW THE TRANSMISSION FACILITY AS A WHOLE.

A. Mr. Gillan singles out the cabling between the two collocation arrangements that I have depicted in Attachment MN-1. For ease of understanding, I have identified this section of cabling as being between points C and D on Attachment MN-1. AT&T Missouri refers to this cabling as collocation-to-collocation cabling.

Q. PLEASE EXPLAIN WHICH PORTIONS OF THE NETWORK REPRESENTED IN ATTACHMENT MN-1 MAKE UP A COMPARABLE TRANSMISSION FACILITY FOR PURPOSES OF THE FCC'S FBA RULE.

A. All of the cabling and equipment, from points A through J in Attachment MN-1, make up the comparable transmission facility. By tracing these points, one can

[4] As seen in Attachment MN-1, the coaxial cable is connected to the fiber-optic terminal in Collocator #1's arrangement. Upon reaching the fiber optic terminal, the electrical DS-3 signal is converted to an optical signal and "leaves the wire center" on the fiber-optic entrance facility owned by Collocator #1.

see that Collocator #2 "operates" a comparable transmission facility that terminates within its arrangement (at point A) and "leaves the wire center" (at point J).

IV. CONCLUSION

Q PLEASE SUMMARIZE HOW THE MISSOURI COMMISSION SHOULD RULE WITH RESPECT TO THE MATTER OF COLLO-TO-COLLO CROSS CONNECT ARRANGEMENTS?

A. I have explained why AT&T Missouri's identification of collocation-to-collocation arrangements that utilize a coaxial cable to access another carrier's fiber-optic entrance facility meets the FCC's definition of a fiber-based collocator. I have shown that it is reasonable for AT&T Missouri to include these types of arrangements based on the capacity of a DS-3, which is comparable to a fiber-optic cable.

Based upon the information that I have provided in my Direct and Rebuttal Testimony, as well as Ms. Chapman's discussion of the issue, the Commission should rule in favor of AT&T Missouri and approve the counting of cross connected facilities where one collocated carrier acquires capacity from another carrier. Counting both carriers as fiber based collocators is in line with the intent of the FCC's inclusion of "comparable" transmission facilities.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESIMONY?

A. Yes.