

FILED³
JUN 8 2007
Missouri Public
Service Commission

Exhibit No.:

Issue:

Witness: Marvin Nevels

Type of Exhibit: Rebuttal Testimony

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

AT&T Exhibit No. 14
Case No(s) TO-2006-0360
Date 5-16-07 Rptr KF

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

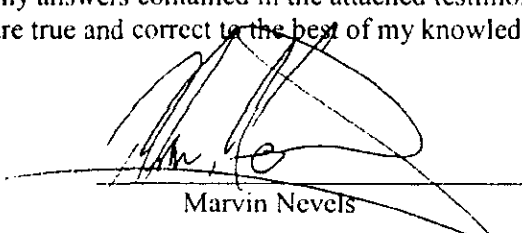
In the Matter of the Application of NuVox)
Communications of Missouri, Inc., for an Investigation) Case No. TO-2006-0360.
into the Wire Centers that AT&T Missouri Asserts are)
Non-Impaired Under the)
TRRO.

AFFIDAVIT OF MARVIN NEVELS


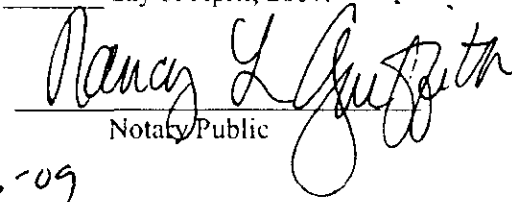
STATE OF TEXAS)
) SS
COUNTY OF DALLAS)

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.

 
Notary Public

My Commission Expires: 1-26-09

REBUTTAL TESTIMONY OF MARVIN NEVELS

Table of Contents

	<u>Page</u>
I. Introduction.....	1
II. Purpose of Testimony	1
III. Discussion.....	3
IV. Conclusion	12

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

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

3
4 **Q. PLEASE FIRST OUTLINE THE PRINCIPAL ARGUMENTS MADE BY**
5 **MR. GILLAN.**

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

12
13 Mr. Gillan rests his claim on two theories. First, he contends that a DS-3 facility
14 that connects such collocators is not "comparable" to a fiber transmission facility
15 because only facilities with at least three DS-3s of capacity qualify as
16 "comparable" to fiber. (Gillan Direct, p. 27). Second, he contends that AT&T
17 Missouri cannot count more than one collocator because only one of the two
18 "operates" a fiber transmission facility that "terminates" in and "leaves" the wire
19 center. (Gillan Direct, p. 27). As my Rebuttal Testimony demonstrates, Mr.
20 Gillan's arguments are incorrect from a network perspective and should be
21 rejected.

1 **III. DISCUSSION**

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

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

5

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

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

12

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

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

19

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?

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

3 A. Yes. Attachment MN-1 to this Rebuttal Testimony shows a collo-to-collo
4 arrangement. Collocator #1 in the diagram owns fiber transport facilities that
5 leave the wire center. Collocator #2 in the diagram has a coaxial cross connection
6 between itself and Collocator #1 and uses the combination of that cross
7 connection and the fiber transport facility to send and receive traffic. The cross
8 connection has DS-3 or greater capacity. The question here is whether Collocator
9 #2 should be counted as an FBC under the FCC's rules. I will refer to this
10 diagram to illustrate points later in this Rebuttal Testimony.

11

12 **ISSUE 1 - COMPARABLE TRANSMISSION FACILITIES**

13 *What facilities qualify as "comparable transmission facilities" pursuant to FCC*
14 *Rule 51.5 regarding FBCs?*
15

16 **Q. WHAT IS THE DISPUTE REGARDING THIS ISSUE?**

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

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

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

15

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

19 A. It is important to understand that 3 DS-3's equals an OC-3, and an OC-3 is always
20 fiber. Thus, using a "3 DS-3's" standard would completely eliminate the FCC's
21 category of "comparable" transmission facilities, since the only thing that would
22 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.

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

4
5 **Q. MR. GILLAN CONTENDS THAT HE IS UNAWARE OF ANY**
6 **INTEROFFICE FACILITIES THAT OPERATE BELOW AN OC-3**
7 **LEVEL. IS THAT RELEVANT?**

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

14
15 **ISSUE 2 – COLLO-TO-COLLO CROSS-CONNECTIONS**

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

18
19 **Q. WHAT IS THE DISPUTE REGARDING THIS ISSUE?**

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

1 **Q. PLEASE EXPLAIN HOW A CROSS-CONNECTED CARRIER**
2 **“OPERATES” A FIBER-OPTIC CABLE OR COMPARABLE**
3 **TRANSMISSION FACILITY.**

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

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

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

16

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

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

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

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

14

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

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

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

5

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

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

18

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

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

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

9
10 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY SAYING THAT MR.**
11 **GILLAN FAILS TO VIEW THE TRANSMISSION FACILITY AS A**
12 **WHOLE.**

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

17
18 **Q. PLEASE EXPLAIN WHICH PORTIONS OF THE NETWORK**
19 **REPRESENTED IN ATTACHMENT MN-1 MAKE UP A COMPARABLE**
20 **TRANSMISSION FACILITY FOR PURPOSES OF THE FCC'S FBA**
21 **RULE.**

22 A. All of the cabling and equipment, from points A through J in Attachment MN-1,
23 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.

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

4
5 **IV. CONCLUSION**

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

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

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

21
22 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESIMONY?**

23 **A.** Yes.

ATTACHMENT MN-1

