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Witness: Joseph Gillan

Sponsoring Party: CLEC Coalition

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Case No.: TO-2006-0360

REBUTTAL TESTIMONY OF

JOSEPH GILLAN

ON BEHALF OF THE CLEC COALITION

TO-2006-0360

April 27, 2007

CLEC Exhibit No. 3
Case No(s) TO-2006-0360
Date 5-16-07 Rptr XF

Case No. TO-2006-0360

Rebuttal Testimony: Joseph Gillan

On Behalf of CLEC Coalition

April 27, 2007

STATE OF MONTANA)
)
COUNTY OF Missoula) SS.

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

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

AFFIDAVIT OF JOSEPH GILLAN

COMES NOW Joseph Gillan, of lawful age, sound of mind and being first duly sworn,
deposes and states:

1. My name is Joseph Gillan. I am the consultant for CLEC Coalition.
2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony in the above-referenced case.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Joseph Gillan
Joseph Gillan

SUBSCRIBED AND SWORN to before me, a Notary Public, this 27th day of
April, 2007.

James P. Denton
Notary Public

My Commission Expires: 6-27-2009
(SEAL)



JAMES P. DENTON
NOTARY PUBLIC-MONTANA
Residing at Missoula, Montana
My Comm. Expires June 27, 2009

**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**
)
)

April 27, 2007

I.	Introduction	1
II.	Calculating Business Lines	3
	A. AT&T's Implied Endorsement of the Simple Option	3
	B. The Administrative Convenience Defense	6
	C. Other Issues	12
III.	Counting the Number of Fiber-Based Collocators	16
	A. Cross-Connected Carriers Cannot Be Counted	16
	B. Comparable Transmission Facility	21
IV.	Analysis of AT&T Data Response	26
V.	Recommendations	28

1

2

3 **Q. Please state your name and the party sponsoring your rebuttal testimony.**

4

5 A. My name is Joseph Gillan. I am testifying on behalf of McLeodUSA
6 Telecommunications Service, Inc. (“McLeodUSA”), NuVox Communications of
7 Missouri, Inc. (“NuVox”), and XO Communications Services, Inc. (“XO”)

¹ Members of the CLEC Coalition are McLeodUSA Telecommunications Services, Inc., NuVox Communications of Missouri, Inc., and XO Communications Services, Inc.

1 (collectively, the "CLEC Coalition"). I previously filed direct testimony in this
2 proceeding.

3
4 **Q. What is the purpose of your rebuttal testimony?**

5
6 A. The purpose of my rebuttal testimony is to address AT&T Missouri's claim that
7 the methodology it used to count business lines and fiber-based collocators
8 complies with the *Triennial Review Remand Order* ("TRRO").² As I explain
9 below, AT&T Missouri has not correctly applied the FCC's definition of
10 "Business Line" or "Fiber-Based Collocator," and has instead adopted
11 interpretations that were consistently designed to inflate the count of each.³

12
13 AT&T Missouri attempts to portray my testimony (or, rather, what they claimed
14 *would be* my testimony) as recommending interpretations of the FCC's TRRO that
15 would impose administratively costly steps.⁴ As I explain below, none of my
16 recommendations are administratively complex – indeed, for business lines, my
17 primary recommendation is to simply use the exact same business line count as

² In the Matter of Unbundled Access to Network Elements, WC Docket No. 04-313, Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 1-338 (rel. Feb. 4, 2005) ("TRRO").

³ I focus my testimony on the testimony filed by AT&T Missouri. To the extent that Mr. Scheperle adopts AT&T Missouri's positions, however, the rebuttal points apply equally to staff.

⁴ See, for instance, Direct Testimony of Carol Chapman (Chapman Direct) at 7:
AT&T Missouri expects that the NuVox will propose an interpretation of the Business Line and/or Fiber Based Collocator Definition that relies upon data that are not objective, readily available to AT&T Missouri or simple to apply.

1 AT&T provided the FCC during its deliberations underlying the *TRRO*, while my
2 recommendation for counting fiber-based collocators would eliminate a step
3 grafted onto the process (and definition) by AT&T Missouri (*i.e.*, the counting of
4 cross-connected carriers that are not themselves legitimate fiber-based carriers).

5
6 **II. CALCULATING BUSINESS LINES**

7
8 **A. AT&T's Implicit Endorsement of the Simple Option**

9
10 **Q. What is the "simple option" that you recommended in your direct testimony?**

11
12 **A.** The simple option described in my direct testimony is that the Commission use
13 the 2003 business line count that AT&T Missouri provided to the FCC, and upon
14 which the FCC relied in establishing its non-impairment thresholds. This would
15 be the business line data provided by AT&T (then known as SBC) in its
16 December 7, 2004 ex parte letter (cited by the FCC in the *TRRO* at ¶ 105, n. 322).

17
18 **Q. Does AT&T recommend that the Commission rely on 2003 data?**

19
20 **A.** Yes. Although AT&T is committed to 2003-vintage data *generally*,⁵ AT&T

⁵ Inexplicably, AT&T is also asking the Commission to use this same 2003 data in support of wire center designations effective December 16, 2005 and December 29, 2006. *See* Chapman Direct at 10. I address this aspect of AT&T's testimony – *i.e.*, that the Commission should adopt

1 opposes using the *specific* 2003 data that AT&T provided to the FCC, even
2 though this was the business line count that the FCC explicitly relied upon.
3 Consequently, AT&T takes the odd position that 2003 is the right year, so long as
4 the data differs from the data provided the FCC.

5
6 **Q. Does AT&T Missouri agree that the data it provided the FCC (and which the**
7 **FCC relied upon) was based on the same business line definition that the**
8 **FCC adopted?**

9
10 **A.** Yes. AT&T Missouri's own testimony is that the FCC's business line definition
11 conforms to the data that it analyzed:

12 In this way, Paragraph 105 of the *TRRO* makes clear that FCC's
13 business line definition is the same as the definition used for the
14 data the FCC analyzed.⁶
15

16 If the FCC's adopted business line definition is the same as the definition used for
17 the data that AT&T provided the FCC, then the Commission cannot run afoul of
18 the FCC's definition by using the very data analyzed by the FCC in the *TRRO*.

19
20 **Q. Does AT&T Missouri's testimony show that it agrees that the 2003 data it**
21 **filed in December 2004 is the data that the FCC relied upon?**

22

three separate wire center lists, all relying on the same old data – in Section II(C) of my rebuttal testimony.

⁶ Chapman Direct at 20 (emphasis added).

1 A. Yes. Ms. Chapman cites the specific paragraph in the *TRRO* in which the FCC
2 indicated it was relying on AT&T Missouri's data (alongside similar data
3 provided by the other RBOCs) and even italicized the relevant clause:

4 Accordingly, we [the FCC] *base our analysis in this Order on the*
5 *BOC data received in December.*⁷
6

7 Moreover, as I explained in my direct testimony, AT&T has taken the position
8 that the FCC expected the states to use the exact same calculation as the FCC
9 used in the *TRRO*:

10 To make the matter even more clear, the FCC performed a “dry
11 run” of the rule in the proceedings that led to the TRO Remand
12 Order. It directed the incumbents to provide business line counts
13 ... [t]he incumbents complied, the FCC deemed the data sufficient
14 to assess non-impairment, and it told the world that it expected the
15 same calculations in practice.⁸
16

17 Using the same exact data as was used at the FCC would simplify the
18 Commission's analysis and achieve the “apples-to-apples” consistency that
19 AT&T has (otherwise) been so concerned with.⁹ AT&T's own testimony is that
20 the FCC's business line definition is the same as the definition used for the data

⁷ *Ibid* at 21. Emphasis added by AT&T Missouri.

⁸ Reply Brief of SBC Illinois, *Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 with Illinois Bell Telephone Company d/b/a SBC Illinois to Amend Existing Interconnection Agreements to Incorporate the Triennial Review Order and Triennial Review Remand Order*, Illinois Commerce Commission Docket No. 05-0442 (filed September 2, 2005) at 16-17 (emphasis added).

⁹ As I explained in my direct testimony (Gillan Direct at 19), the data suggests that “business lines” are in decline. Consequently, future line counts are likely to be lower than those used here and it is unlikely that wire centers that have not already achieved the necessary thresholds will do so in the future. By using the same data as the FCC, the Commission may find that it need not return to these issues again.

1 the FCC analyzed. Indeed, AT&T claims that it is continuing to rely upon the
2 same data that it provided to the FCC:

3 Moreover, it [AT&T's position] relies upon the same data as that
4 provided the FCC (upon which the FCC relied when making its
5 impairment determinations).¹⁰
6

7 There is no more simple and direct path to establishing the initial wire center list –
8 and no *other* way for the Commission's impairment determinations to match
9 those of the FCC – than to rely on the same data that the FCC reviewed.¹¹
10

11 **B. The Administrative Convenience Defense**
12

13 **Q. If the Commission does not use the same data that the FCC relied upon, then**
14 **what is the principal methodological issue it must resolve?**
15

16 **A.** The principal methodological dispute between AT&T and the CLECs concerns
17 whether each line must satisfy *every* sentence of the FCC's Business Line Rule, or
18 instead can a line be counted (particularly a line that is part of a high capacity
19 UNE loop) if it satisfies only *one* of the requirements in the rule. It is the CLEC
20 view that the full definition must be complied with (specifically, that each line
21 that is counted must provide switched service to a business customer), while

¹⁰ Chapman Direct at 24.

¹¹ AT&T Missouri goes on to claim that the FCC adopted a business line definition "that is consistent with the data that it analyzed (the data provided by the ILECs)" (Chapman Direct at 22). It is impossible to reconcile these statements with a position that the Missouri Commission should not use the exact same data that the FCC used.

1 AT&T Missouri argues that a line may be counted merely because the capacity
2 exists (even if it is not used to provide any service at all).

3

4 **Q. What is AT&T Missouri's principal defense against fully complying with the**
5 **FCC's business line definition by making sure that it only counts lines that**
6 **provide switched service to business customers?¹²**

7

8 **A.** AT&T Missouri's principal defense against applying the full business line
9 definition is its claim that the FCC's overarching criterion was that its rules would
10 rely on data that was readily available and simple to apply:

11 ... the FCC intended that its rules ... be administratively simple by
12 requiring evaluations of impairment to be based on "objective and
13 readily identifiable facts" which the FCC identified.¹³

14

15

16

17

18

19

20

21

22

23

Specifically, the FCC noted that the criteria it chose for the
impairment tests:

- are objective;
- rely on data possessed by and readily available to the ILECs, and
- are simple to apply.¹⁴

24 **Q. Do you disagree that the FCC favored the use of data that was simple to**
25 **develop?**

26

¹² I fully explained how each sentence of the FCC's Business Line definition must be honored in my direct testimony and will not repeat that discussion here.

¹³ Chapman Direct at 3. Footnotes omitted.

¹⁴ *Ibid* at 6. Footnotes omitted.

1 A. No. My disagreement with AT&T Missouri is not that the FCC favored
2 administrative convenience, but rather AT&T Missouri's claim that the only
3 administratively convenient way to interpret and apply the FCC's definition of a
4 business line is to ignore the full requirements of the FCC rule.

5
6 AT&T's position is demonstrably wrong. My direct testimony recommended an
7 administratively simple method that respects the full requirements of the FCC
8 rule – including the requirement that only lines used to provide switched services
9 to business customers are to be counted – and I applied that methodology to the
10 2003 data provided by AT&T to propose a FCC-compliant list (Confidential
11 Exhibit JPG-4).¹⁵

12
13 It is not “administrative convenience” that drives AT&T's position, it is merely
14 the desire to inflate the business line count in hope of superseding thresholds
15 established after the FCC reviewed a far lower business line count.¹⁶

16
17 **Q. Has AT&T been candid with the Commission concerning the effort required**
18 **to compile the business line count that it is sponsoring?**

¹⁵ The wire center list provided in Confidential Exhibit JPG-4 was marked as preliminary because it is based on 2003 data. At the time that my direct testimony was filed, AT&T was refusing to provide data for 2004. AT&T has since provided this information in response to an Order Granting CLECs' Motion to Compel and I have prepared an analysis of the updated data. See Section IV below.

¹⁶ As I explain in Section IV below, AT&T's post-*TRRO* methodology increases its 2003 business line count by 23% compared to the data that it provided the FCC. See Confidential Exhibit JPG-7.

1

2 A. No. As I discussed above, AT&T places great emphasis on its claim that the FCC
3 expected that the data needed to develop business line counts would be readily
4 available. AT&T never explains, however, whether the data that its methodology
5 uses meets this expectation.

6

7 For instance, AT&T points out in its testimony that the FCC expected the ILECs
8 to rely on data that is already reported, specifically citing ¶ 105 of the *TRRO* and
9 adding emphasis to the FCC's words as shown in the quote below:

10 [A]s we define them, business line counts are an objective set of
11 data *that incumbent LECs already have created* for other
12 regulatory purposes.¹⁷
13

14 Later, in that same paragraph, the FCC specifically indicated its business line
15 definition relied on UNE figures that were already being reported:

16 [B]y basing our definition in an ARMIS filing required of
17 incumbent LECs, and adding UNE figures, which must also be
18 reported, we can be confident in the accuracy of the thresholds,
19 and a simplified ability to obtain the necessary information.¹⁸
20

21 AT&T summarized the simplicity of the FCC's basic approach, noting:

22 [The FCC] created a business line definition that depended upon
23 data already created by the ILECs – ARMIS 43-08 business line
24 data, UNE-P business line counts, and UNE Loop counts.¹⁹
25

¹⁷ Chapman Direct at 20, citing *TRRO* ¶ 105 (emphasis added by AT&T).

¹⁸ *TRRO* ¶ 105 (emphasis added).

¹⁹ Chapman Direct at 22. Emphasis added.

1 **Q. Does AT&T's methodology count UNE loops in the same manner as the UNE**
2 **Loop figures that it already reports?**

3
4 A. No. Despite its constant references to the fact that the FCC expected the ILECs
5 to use data that they already report, nowhere does AT&T explain that it does not
6 report UNE Loop figures in the way that it is proposing to count such capacity
7 here (where all high capacity UNE loops are converted to their maximum
8 potential voice grade capacity).²⁰ Rather, AT&T Missouri reports the number of
9 UNE loops directly (*i.e.*, without conversion).²¹ Consequently, if the most
10 important standard in judging whether a proposed methodology conforms to the
11 FCC's definition is whether the data is *already* reported in the form being used,
12 then the methodology of AT&T Missouri fails that test.

13
14 **Q. If the Commission seeks to use data that is already reported -- and which**
15 **produces the same impairment determinations as those of the FCC -- then**
16 **what data must it use?**

²⁰ Moreover, NuVox/XO requested the same data used to compile AT&T's claimed business line count (vintage 2003), for the years 2004 and 2005. Among other objections, AT&T argued that:

 The information, even if it could be assembled in the format in which the information responsive to DR 3 was formatted, would not be available for approximately ten to fourteen days.

 See AT&T Missouri's Response to NuVox/XO's Supplemental Motion to Compel Responses to Discovery Requests, April 16, 2007 at 2. Obviously, if AT&T's methodology relied upon data that was already reported, there should be no delay in providing that data for 2004 and 2005.

²¹ See, *e.g.*, instructions for Form 477 (FCC Local Competition Report), Part C-II, where ILECs report the number of UNE loop arrangements. Attached as Exhibit JPG-5.

1

2 A. There is only one set of data that satisfies these requirements, and that is the data
3 AT&T *already reported* to the FCC in the *TRRO* proceeding on December 7,
4 2004. This is the only data that is readily available and can be expected to
5 produce the same impairment determinations that the FCC reached. At the very
6 least, the Commission should compare the results from alternative interpretations
7 of the FCC's rules to this data, to determine which interpretation produces results
8 that best approximates the business line data reviewed by the FCC. [I provide this
9 comparison in Section IV of my rebuttal testimony, which analyzes data provided
10 by AT&T in response to the Order Granting Motion to Compel Discovery
11 Requests.²²]

12

13 **Q. AT&T's testimony indicates that it informed the FCC that it substantially**
14 **changed its business line count (from that which the FCC relied upon) and**
15 **the FCC has taken no action.²³ Should the Commission interpret FCC**
16 **inaction as a "silent endorsement" of AT&T's position in this case?**

17

18 A. No. It is not unusual for the FCC to be silent on controversial aspects of its
19 Orders, particularly where a state process is available for parties to resolve
20 differences of interpretation. The FCC specifically indicated that it expected

²² See Order Granting Motion to Compel Discovery Requests, April 18, 2007 ("Order Granting Motion to Compel"). In accordance with the process adopted in that Order, I have isolated any testimony produced as a result of that Order to Section IV below.

²³ Chapman Direct at 21.

1 issues involving the implementation of the *TRRO* would be resolved before State
2 Commissions, either in accordance with Section 252 or dispute resolution
3 procedures:

4 We expect that incumbent LECs and competing carriers will
5 implement the Commission's findings as directed by section 252
6 of the Act. Thus, carriers must implement changes to their
7 interconnection agreements consistent with our conclusions in this
8 Order.²⁴
9

10 ***
11

12 To the extent that an incumbent LEC seeks to challenge any such
13 UNEs, it subsequently can raise that issue through the dispute
14 resolution procedures provided for in its interconnection
15 agreements. In other words, the incumbent LEC must provision
16 the UNE and subsequently bring any dispute regarding access to
17 that UNE before a state commission or other appropriate
18 authority.²⁵
19
20

21
22 **C. Other Issues**
23

24 **Q. What vintage data should be used in establishing the number of business**
25 **lines at a wire center?**
26

27 **A.** If the Commission adopts my primary recommendation – *i.e.*, that it use the same
28 data that the FCC relied upon in the *TRRO* – then the data would be from 2003.

²⁴ *TRRO* ¶ 233 (footnotes omitted).

²⁵ *TRRO* ¶ 234 (footnotes omitted).

1 This is the vintage data that AT&T Missouri recommends,²⁶ although it claims
2 that a different count should be used than the count that the FCC reviewed.

3
4 If the Commission decides to recalculate the number of business lines (as AT&T
5 Missouri is proposing), however, then there is no reason to use old data. Indeed,
6 the *TRRO* indicates that the FCC expected that 2004 data would be used in those
7 instances where new data was reviewed.

8
9 **Q. Why do you state that the FCC expected that 2004 data would be used to**
10 **establish wire center lists?**

11
12 A. In ¶ 105 of the *TRRO* (which indicates that ARMIS 43-08 data should be used to
13 determine the ILECs retail business lines), the FCC specifically referenced the
14 2004 ARMIS instructions, not the 2003 reports.²⁷ Had the FCC intended that
15 2003 data should be used, it could have easily cited the existing 2003 ARMIS
16 files. The fact that the FCC pointed to the 2004 ARMIS instructions indicates
17 that it expected the impairment findings to reflect the more current data that was
18 due to be filed within three weeks of the *TRRO*.²⁸

19

²⁶ Chapman Direct at 15.

²⁷ See *TRRO* fn. 303, ¶105.

²⁸ Indeed, all of BellSouth's proposed wire center lists were prepared based on 2004 ARMIS data.

1 In addition, the non-impairment criteria for loop unbundling require application of
2 a two-pronged test that considers both the number of fiber-based collocators and
3 the number of business lines. Obviously, both standards must be measured at the
4 same point-in-time for the conjunctive tests for DS1 and DS3 UNE loops (*i.e.*, the
5 wire center must exceed the requisite number of business lines and the required
6 number of fiber-based collocators) to be satisfied. AT&T Missouri seeks to use
7 business line counts as of December 2003, but then analyzes fiber-based
8 collocator data from 2005.²⁹ It is inappropriate to reach impairment findings by
9 combining data from two totally different time periods. Relying on December
10 2004 business line data reduces this discrepancy (although it does not correct it
11 completely).

12
13 **Q. AT&T Missouri has now eliminated UNE-P, which is one of the components**
14 **of its business line count. Should AT&T be permitted to include lines served**
15 **under its so-called commercial agreements (if any) in the business line count?**
16

17 **A. No.** There is nothing in the FCC rule that references, much less permits, AT&T
18 Missouri to count lines leased to CLECs under its so-called commercial
19 agreements. Although AT&T asserts (in a footnote) that the FCC's rules permit it
20 to count its so-called commercial UNE-P replacement offer, it cites no provision

²⁹ AT&T Missouri indicated that its collocation data was developed from inspections that continued throughout 2005, with some inspections occurring in December 2005 (two years after the business line data that it is proposing to use). See Nevels Direct at 6. AT&T does not indicate, however, which inspections were conducted in early 2005 compared to December of that year.

1 of the rule that does so.³⁰ Indeed, the basic structure of the rule suggests that
2 such lines should not be counted. The typical “replacement offer” for a DS1 UNE
3 where non-impairment takes effect is a DS1 special access line. While the DS1
4 UNE loop may be counted as a business line (and, indeed, AT&T would always
5 count such loop at its maximum potential capacity), the FCC’s rules make clear
6 that after its conversion to special access it would no longer be counted at all.³¹
7 The comparable treatment of UNE-P replacement lines would be that they too
8 should not be counted. If AT&T Missouri wants to include commercial
9 replacement lines in the business line count, then AT&T should petition the FCC
10 to modify its rule to permit this treatment.
11

12 **Q. AT&T has asked this Commission to approve three separate wire center lists,**
13 **all relying on the same data (2003), but with differing effective dates (March**
14 **11, 2005, December 16, 2005 and December 29, 2006).³² Do you agree?**
15

16 **A.** No. This docket should adopt a single wire center list that is effective as of
17 March 11, 2005. The fact that AT&T agreed to conditions that prohibited it from
18 counting itself as a competitor should apply to this initial wire center list. There is
19 nothing in the FCC Merger Order that implies that the SBC’s agreement to
20 exclude AT&T from its list of claimed fiber-based collocators did not apply to

³⁰ Chapman Direct at 12 (footnote 25).

³¹ Rule § 51.5 (the definition of a “business line”) prohibits an ILEC from counting any special access lines in its business line count.

³² Chapman Direct at 10.

1 these initial wire center lists. Nor has AT&T undertaken *any* effort to update its
2 information for any time period other than the period for which the initial list will
3 be set. The Commission should hold AT&T to its commitment to exclude itself
4 as a fiber-based collocator, establish this initial list, and move on.

5
6 **III. COUNTING THE NUMBER OF FIBER-BASED COLLOCATORS**

7
8 **A. Cross-Connected Carriers Cannot Be Counted**

9
10 **Q. What is the principal issue in dispute with respect to how Fiber-Based**
11 **Collocators should be counted?**

12
13 A. The principal issue is that AT&T Missouri claims that it may count any carrier
14 that is cross-connected to a legitimate fiber-based collocator, merely because the
15 second (cross-connected) carrier is obtaining a service from the first (the carrier
16 that actually operates the fiber network).³³ The FCC's definition of fiber-based
17 collocator (and relevant text) makes clear, however, that only carriers operating
18 networks should be counted, not carriers obtaining services.³⁴

19

³³ Nevels Direct at 10.

³⁴ When a carrier obtains a service, its capacity is multiplexed with the capacity of other
carriers into the overall system capacity of the network. In contrast, when a carrier leases dark
fiber and lights it with its own optronics, that carrier is defining the system capacity by the type of
optronics being installed.

1 **Q. AT&T implies that the source of the dispute over the treatment of a cross-**
2 **connected carrier is a disagreement about whether “ownership” is a**
3 **requirement for a Fiber Based Collocator.³⁵ Is that a valid characterization**
4 **of the CLEC position?**

5
6 A. No, not at all. Indeed, the basis for Mr. Nevels’ characterization of the issue in
7 this manner is a mystery. The dispute has *nothing* to do with ownership; rather,
8 the issue involves counting as fiber-based collocators only those carriers that
9 operate a fiber-optic cable (or comparable facility) that leaves the wire center.
10 AT&T claims that it may count carriers that are cross-connected to another
11 carrier’s network, even though the “cross-connected CLEC” does not operate any
12 fiber cable that leaves the wire center, while the CLECs believe this approach
13 violates the FCC rule.

14
15 **Q. Do you have a schematic that helps illustrate this issue?**

16
17 A. Yes. Exhibit JPG-6 illustrates the various ways in which CLECs may collocate in
18 a wire center and interconnect. In Exhibit JPG-6, CLEC A is leasing dark fiber
19 (from CLEC B) and lighting it with its own optronics. As I explained in my
20 direct testimony,³⁶ in the unique event that a CLEC leases dark fiber under an

³⁵ Nevels Direct at 12.

³⁶ Gillan Direct at 24.

1 IRU and then lights that fiber with its own optronics, it may be considered a fiber-
2 based collocator.

3
4 In comparison, CLEC C is obtaining a service from CLEC B, with its capacity
5 multiplexed onto the network alongside capacity used by CLEC B. As the
6 schematic clearly shows, CLEC C only has a service-level cross-connect to CLEC
7 B. When a carrier obtains a service – irrespective of the capacity of that service
8 or the technology used to connect to it³⁷ – it cannot be said to “operate” the fiber
9 that leaves the wire center (which terminates at CLEC B’s collocation cage).

10
11 The status of CLEC C represents the core of the dispute with AT&T – AT&T
12 claims that it may count CLEC C even though the CLEC does not operate any
13 fiber network that leaves the wire center.

14
15 **Q. What is AT&T Missouri’s explanation for its claim that it may count any**
16 **carrier that is cross-connected to a fiber-based collocator as another fiber-**
17 **based collocator?**

18

³⁷ Typically, cross-connect arrangements use coaxial cable because of the short distances involved. In some situations, the cross-connect is a fiber cable, but that the cross-connect cable does not “leave the wire center” as required by federal rules. Whether the cross-connect transmission medium is fiber or coax, however, makes no difference because in neither event does the configuration involve the termination of a fiber network (or comparable transmission medium) that leaves the wire center.

1 A. AT&T Missouri argues that a reference in the *TRRO* (§ 102) -- addressing a
2 collocation product that AT&T Missouri does not even offer -- provides the
3 justification for its position:

4 We find that the collocation arrangement may be obtained by the
5 competing carrier either pursuant to contract, tariff or, where
6 appropriate, section 251(c)(6) of the Act, including less traditional
7 collocation arrangements such as Verizon's CATT fiber
8 termination arrangements.³⁸
9

10 First, as the full citation makes clear, the FCC was not addressing the type of
11 carrier that could be considered a fiber-based collocater (as the term is used in the
12 *TRRO*), it was only addressing the different types of collocations that might
13 qualify. More importantly, the citation never suggests that it would be
14 appropriate to count both the CATT arrangement and every carrier that is cross-
15 connected to each other, which is effectively what AT&T Missouri asserts.³⁹
16

17 Second, and more importantly, the CATT arrangement discussed by the FCC is
18 limited to instances where individual dark fiber strands are being spliced for
19 distribution to different collocation arrangements. The arrangement is only
20 applicable for the unique circumstance where a second carrier has obtained dark
21 fiber and has "lit" that fiber using its own optronics. Therefore, the specific type
22 of shared arrangement addressed by the CATT offering is the type of shared
23 arrangement that I acknowledge *might* be counted -- i.e., a carrier leasing dark

³⁸ *TRRO* § 102.

³⁹ Indeed, the citation does not even say that the CATT arrangement *necessarily* satisfies
the requirements of FBC rule, only that it *may*.

1 fiber under an IRU. AT&T Missouri's position that this unique circumstance
2 supports a general conclusion that *any* cross-connected carrier should be counted
3 is a complete fabrication and violates the FCC's rules.

4
5 **Q. How does AT&T Missouri's approach violate the federal definition?**

6
7 A. AT&T Missouri's approach violates the federal definition because it attempts to
8 count the *same* fiber network multiple times. This interpretation is implausible,
9 for it would mean that multiple carriers were each operating the same network
10 and terminating the same network multiple times. Even had the FCC not made
11 clear that a dark fiber IRU was the *only* way that a second carrier could be
12 counted using the same fiber cable (but different strands), the FCC's requirement
13 that the fiber-based carrier *operate* the network, and terminate a fiber that is
14 *leaving* the wire center means that only *one* Fiber-Based Carrier per network may
15 be counted.⁴⁰

⁴⁰ AT&T Missouri may argue (on rebuttal) that it is difficult to confirm that a second carrier has a dark fiber IRU. There is nothing in the *TRRO* that requires AT&T Missouri to conduct more of a review that it wants to; it can, after all, choose to not explore these relationships and not attempt to count multiple carriers using the same fiber cable. AT&T can visually observe a single fiber-optic cable entering its wire center (which means that the fiber leaves it) and can trace it to a collocation, permitting it count one fiber based collocater. AT&T Missouri can gather additional facts from any future collocation through the collocation-application process if it believes that additional collocations are supporting fiber-based collocaters and it could easily have verified the facts for this wire center list (as Staff did).

B. Comparable Transmission Facility

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Q. Is AT&T Missouri's interpretation of "comparable transmission facility" reasonable?

A. No. The sole criteria that AT&T Missouri uses to judge whether a transmission facility is comparable to fiber is whether it can support a single DS-3.⁴¹ This criterion is deficient in two material respects: (1) the required *level* of capacity is inadequate; and (2) there is no reference to a transmission facility's ability to support the level of capacity at any reasonable *distance*. AT&T Missouri claims that coaxial cable can be "comparable" to a fiber-optic transmission line,⁴² even though AT&T Missouri itself acknowledges that it would not use this type of facility for interoffice transmission. As AT&T (in the form of SBC-Texas) explained:

SBC Texas would use coax cross-connections for DS-3 inter/intra-equipment, intra-building connections. For speed requirements higher than DS-3, multiple DS-3 requirements, or connections longer than 900 feet, SBC Texas would typically place optical equipment and a fiber cross-connection.⁴³

⁴¹ Nevels Direct at 9.

⁴² In the two instances where AT&T Missouri counted cross-connected carriers, the observed connection was coaxial cable. Nevels Direct at 15.

⁴³ See AT&T Missouri Response to NUVOX-XO Communications Request No. 1, RFI No. 1-1 (asking that AT&T Missouri indicate whether it concurred in full with the cited response by SBC Texas).

1 AT&T Missouri confirmed that this statement was true for it as well. Any
2 “theory” that counts a facility as “comparable” to a fiber-based interoffice
3 network when that type of facility is not even used for inter-office applications, is
4 clearly flawed.

5
6 **Q. Is it reasonable to define a transmission facility as being comparable to fiber,**
7 **even though it is capable of carrying only a fraction of a fiber network’s**
8 **capacity and, even then, only for short distances?**

9
10 A. No. It is absurd to define a transmission facility as “comparable” to fiber based
11 on the facility being able to carry the *minimum* capacity that could be supported
12 by a fiber network, and even then only for a minimal distance. Comparability
13 must be based on what level of capacity is *typically* associated with fiber capacity.

14
15 **Q. Is AT&T’s “single DS3 standard” consistent with its own description of the**
16 **typical fiber-optic cable?**

17
18 A. No. AT&T Missouri itself describes the typical fiber optic network leaving an
19 AT&T wire center as follows:

20 A single fiber optic cable leaving an AT&T Missouri wire center
21 will contain several hundred fiber strands which can easily support
22 up to 20 carriers. These 20 carriers can all have four fiber strands
23 dedicated to their use. The four strands could support an OC-192
24 system which could in turn support multiple collocated carriers.⁴⁴

⁴⁴ Nevels Direct at 14.

1
2 Thus, while AT&T Missouri's witness Mr. Nevels claims that any transmission
3 medium capable of supporting a single DS-3 should be considered "comparable"
4 to a fiber-optic cable, he later -- in the very same testimony -- describes a fiber-
5 optic cable leaving its wire center as having the capability to supply 3,840 DS-3s
6 of capacity (*i.e.*, 20 carriers, each with 192 DS-3s of capacity). Obviously,
7 against this description, even the standard that I recommend -- that is, that the
8 transmission medium be capable of at least three DS-3s -- is exceedingly
9 conservative, while AT&T Missouri's "single DS-3" standard is plainly absurd.
10

11 **Q. Has the FCC provided guidance as to the levels of capacity that should be**
12 **expected from a fiber optic transport facility?**
13

14 **A.** Yes. The FCC determined that a carrier should be able to deploy its own
15 transport facility when its transport needs reached 12 DS3s of capacity from a
16 wire center and, therefore, placed a cap on the number of DS3 transport UNEs a
17 carrier could lease on any route:

18 On those routes for which we find impairment for DS3s, we limit
19 the availability of DS3 transport. Although we find that sufficient
20 revenue opportunities generally are not available to justify the
21 deployment of competitive transport facilities on these routes, we
22 nevertheless establish a safeguard to limit access to a carrier that
23 has attained a significant scale on such a route indicating that more
24 than sufficient potential revenues exist to justify deployment, we
25 find no impairment. We give effect to this distinction, as we did in

1 the *Triennial Review Order*, by establishing a limitation of 12
2 DS3s per carrier for any route on which carriers are not impaired.⁴⁵
3

4 The corollary to the FCC's finding that a carrier would no longer be impaired
5 once it reached the 12 DS3 (OC-12) level is that the Commission should not
6 expect fiber optic transport facilities to be deployed below the OC-12 levels of
7 capacity. This is certainly the case in my experience – carriers simply do not
8 deploy single DS-3 transport networks.
9

10 **Q. Has the FCC already rejected the claim that transport facilities can be**
11 **deployed at the level of a single DS3?**
12

13 **A.** Yes. In the *TRO*, the FCC specifically rejected the argument that a carrier could
14 reasonably deploy a transport facility operating at the level of a single DS3:

15 The potential revenue stream associated with a single DS3 is far
16 less than the revenue stream associated with aggregating traffic
17 that requires an OCn circuit, yet the cost to deploy the facilities can
18 be practically the same. *See* AT&T Oct. 4, 2002 *Ex Parte* Letter,
19 Attach. at 12 (stating that transmission electronics generally do not
20 scale with demand). Accordingly, it takes a longer period of time
21 for a competitive LEC to recover its costs of deploying a single
22 DS3 transmission facility.⁴⁶
23

⁴⁵ *TRRO* ¶ 131.

⁴⁶ *TRO* fn. 1195.

1 **Q. You have recommended that a transport facility be capable of at least 3 DS3s**
2 **of capacity before it is considered “comparable” to a fiber optic cable.⁴⁷ Is**
3 **this a *conservative* recommendation?**

4
5 **A. Yes. In the *TRO*, the FCC indicated that the *lower* boundary for when a**
6 **competitive transport facility would be deployed would be 3 DS3s:**

7 Consistent with our analysis of dark fiber transport, we find that as
8 a carrier develops traffic along a route consisting of multiple DS3s
9 worth of capacity, it can overcome barriers to entry including sunk
10 costs and economies of scale such that it can prepare to self-deploy
11 transmission facilities or optronic equipment to activate dark
12 fiber.... Based on the predominance of record evidence, we
13 establish a maximum number of twelve unbundled DS3 transport
14 circuits that a competing carrier or its affiliates may obtain along a
15 single route. *In making this decision, we considered a wide range*
16 *of evidence in the record. For instance, BellSouth states that one-*
17 *third of its end offices require only three DS3 transport circuits or*
18 *less. Meanwhile, competitive LECs assert that it is not economic*
19 *for them to deploy transport facilities with less than ten to eighteen*
20 *DS3 circuits on a route. Moreover, the record shows that carriers*
21 *have deployed transmission facilities at the twelve DS3 level and*
22 *above to serve enterprise customers, in areas across the country,*
23 *and to provide wholesale transmission services and facilities to*
24 *carriers. In limiting the unbundling obligation on a route to twelve*
25 *DS3 circuits per carrier, we recognize that we are engaging in an*
26 *act of line-drawing.⁴⁸*
27

28 There is simply no basis to conclude that a fiber optic transport facility would
29 operate at the exceedingly low levels of capacity (a single DS3) asserted by
30 AT&T Missouri. As the FCC’s analysis indicates, the *lowest* plausible capacity
31 would be three DS3s, with 12 DS3s (or greater) far more common.

⁴⁷ Gillan Direct at 27.

⁴⁸ *TRO* ¶ 388 (footnotes omitted)(emphasis added).

IV. ANALYSIS OF AT&T DATA RESPONSE

Q. What is the purpose of this section of your testimony?

A. The purpose of this section of my testimony is to quantify the recommendations in my direct testimony that could not (at the time my direct testimony was filed) be analyzed because AT&T had refused to provide answers to relevant discovery questions. Since that direct testimony was filed, AT&T has been ordered to respond and I now have the data needed to quantify the recommendations in my direct testimony.⁴⁹ Specifically, I provide analysis quantifying the recommendations in my direct testimony addressing (a) the importance of the 2003 business line count data that AT&T provided the FCC during its deliberations in the *TRRO* proceeding⁵⁰ and, to the extent that the Commission does not rely on the same data the FCC reviewed, (b) the need to develop a rule-compliant business line count for 2004.⁵¹

Q. How did you recommend that the Commission use the 2003 business line data that AT&T provided the FCC?

⁴⁹ Order Granting Motion to Compel Discovery Requests, April 18, 2007 ("Order to Compel").

⁵⁰ Gillan Direct at 8.

⁵¹ Gillan Direct at 17.

1 A. As I explained in my direct testimony, the Commission could use this data in two
2 ways:

3 First, the business line count data that AT&T-Missouri provided
4 the FCC could be used directly to reach impairment/non-
5 impairment findings for this, the initial wire center list.

6 ***
7

8
9 Alternatively, the business line data provided to the FCC can be
10 used indirectly to judge the reasonableness of alternative
11 interpretations of the business line definition.... The closer the
12 result is to the calculation relied upon by the FCC, the more
13 closely the Commission's impairment findings will track those of
14 the FCC.⁵²
15

16 Confidential Exhibit JPG-7 provides the wire center list based on the 2003 data
17 provided by AT&T to the FCC.⁵³ Confidential Exhibit JPG-8 compares the 2003
18 data provided by AT&T to the FCC to (a) the 2003 business line count calculated
19 using the methodology AT&T Missouri is recommending here and (b) to the 2003
20 business line count calculated using the methodology recommended by the
21 CLECs and described in my direct testimony. Confidential Exhibit JPG-8
22 demonstrates that the CLEC methodology produces results significantly closer to
23 the data reviewed by the FCC (and which the FCC relied upon to establish its
24 non-impairment thresholds) than the methodology AT&T Missouri recommends.
25

⁵² Gillan Direct at 8 -9.

⁵³ Using the business line count provided by AT&T to the FCC changes two wire center designations (compared to AT&T Missouri's claims here). SPFDMOTU becomes a Tier 3 wire center (transport) and DS3 UNE Loops would remain available at STLMO21.

1 **Q. What other analysis have you performed using the data provided by AT&T**
2 **in response to the Order to Compel?**

3
4 A. My direct testimony also explained that, should the Commission decide not to use
5 the same 2003 data that the FCC relied upon, the Commission should use 2004
6 data which is the year the FCC's language in the *TRRO* specifically references.⁵⁴
7 Confidential Exhibit JPG-9 provides the non-impaired wire center list that results
8 when business lines are calculated based on 2004 data.⁵⁵ This data is for the year
9 referenced by FCC in the *TRRO* and is for a point-in-time much closer to the
10 dates in which AT&T collected information on Fiber-Based Collocators
11 (February 2005 to December 2005).⁵⁶

12

13 **V. RECOMMENDATION**

14

15 **Q. What is your recommendation?**

16

17 A. My primary recommendation is that the Commission adopt the wire center list in
18 Confidential Exhibit JPG-7 (which is based on the same wire center data as the

⁵⁴ Gillan Direct at 18, noting the *TRRO*'s reference directed parties to the 2004 ARMIS instructions, not the 2003 data.

⁵⁵ Wire center designations using the 2004 data and the CLEC methodology are the same as the wire center designations based on the business line count provided by AT&T to the FCC. These designations (compared to the wire center designations claimed by AT&T Missouri) differ for two wire centers: SPFDMOTU becomes a Tier 3 wire center (transport) and DS3 UNE Loops would remain available at STLMO21.

⁵⁶ Nevels Direct at 6.

1 FCC relied upon). Alternatively, the Commission should adopt the CLEC
2 methodology and the wire center list in Confidential Exhibit JPG-9 (2004).
3 Although the methodologies and time period differ, adopting either
4 recommendation produces the same initial wire center list.⁵⁷
5

6 **Q. Does this conclude your rebuttal testimony?**
7

8 **A. Yes.**

⁵⁷ As I explained earlier, the fact that the CLEC methodology produces results that are consistent with the data reviewed by the FCC – and, therefore, produces impairment determinations consistent with those adopted by the FCC – demonstrates that the CLEC methodology is a better interpretation of FCC rules than the methodology proposed by AT&T Missouri.

Instructions for Local Telephone Competition and Broadband Reporting Form (FCC Form 477)

I. PURPOSE

FCC Form 477 collects information about broadband connections to end user locations, and about wired and wireless local telephone services, in individual states. The term "state" includes the District of Columbia and the "Territories and possessions" (see 47 U.S.C. § 153(40)). Data obtained from this form will be used to describe the deployment of broadband infrastructure and competition to provide local telecommunications services. See *Local Telephone Competition and Broadband Reporting*, Report and Order, FCC 04-266 (rel. Nov. 12, 2004) for additional information about this data collection.

II. WHO MUST FILE THIS FORM?

Three types of entities must file this form. For purposes of this information collection, the term "entity" (and synonyms used in these instructions) includes all **commonly-controlled or commonly-owned affiliates**. (See 47 U.S.C. § 153(1) (establishing a 10 percent equity interest, or the equivalent thereof, as indicia of ownership.))

• Facilities-based Providers of Broadband Connections to End User Locations:

Entities that are facilities-based providers of **broadband connections** – which, for purposes of this information collection, are wired "lines" or wireless "channels" that enable the end user to receive information from and/or send information to the Internet at information transfer rates **exceeding 200 kbps in at least one direction** – must complete and file the applicable portions of this form for **each state** in which the entity provides **one or more** such connections to **end user locations**.

For the purposes of Form 477, an entity is a "**facilities-based**" **provider** of broadband connections to **end user locations** if it **owns** the portion of the physical facility that terminates at the end user location, if it obtains unbundled network elements (UNEs), special access lines, or other leased facilities that terminate at the end user location and **provisions/equips** them as broadband, or if it **provisions/equips** a broadband wireless channel to the end user location over licensed or unlicensed spectrum.

Such entities include incumbent and competitive local exchange carriers (LECs), cable system operators, fixed wireless service providers (including "wireless ISPs"), terrestrial and satellite mobile wireless service providers, MMDS providers, electric utilities, municipalities, and other entities. (Such entities do not include equipment suppliers unless the equipment supplier uses the equipment to provision a broadband connection that it offers to the public for sale. Such entities also do not include providers of fixed wireless services (e.g., "Wi-Fi" and other wireless ethernet, or wireless local area network, applications) that only enable local distribution and sharing of a premises broadband facility.) For such entities, the applicable portions of the form are: 1) the Cover Page; 2) Part I; 3) Part IV (if necessary); and the relevant portion(s) of Part V.

- **Providers of Wired or Fixed Wireless Local Telephone Services:**

Incumbent and competitive LECs must complete and file the applicable portions of the form for **each state** in which they provide local exchange service to **one or more** end user customers (which may include "dial-up" ISPs). For such entities, the applicable portions of the form are: 1) the Cover Page; 2) Part II; 3) Part IV (if necessary); and column (j) of Part V.

- **Providers of Mobile Telephony Services:**

Facilities-based providers of mobile telephony services (*see* 47 C.F.R. § 20.15(b)(1)) must complete and file the applicable portions of this form for **each state** in which they serve **one or more** mobile telephony subscribers. A **mobile telephony service** is a real-time, two-way switched voice service that is interconnected with the public switched network using an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless handoff of subscriber calls.

A mobile telephony service provider is considered "**facilities-based**" if it serves a subscriber using spectrum for which the entity holds a license, that it manages, or for which it has obtained the right to use via lease or other arrangement with a Band Manager. For such entities, the applicable portions of this form. The applicable portions of the form are: 1) the Cover Page; 2) Part III; 3) Part IV (if necessary).

III. LINE-BY-LINE INSTRUCTIONS FOR COMPLETING FCC FORM 477

(NOTE: Key terms that appear in this section are summarized in VI. Glossary of Selected Terms Appearing on FCC Form 477.)

A. COVER PAGE – Name and Contact Information (All Filers Must Complete the Cover Page)

Line 1: Provide the name of the company or operations whose data are reported in this form.

(If the filer has a holding company or other controlling entity with a different name, that controlling entity's name must be reported in Line 3 of the Cover Page.)

Line 2: Use the drop-down box to indicate whether the data in this form are for incumbent LEC (ILEC) operations or for non-ILEC operations. (Data for affiliated operations in a single state may be combined in a single form, except that filers **may not** combine data for ILEC operations with data for non-ILEC operations.)

Line 3: Use the drop-down box to select the single name, such as a holding company name, that identifies **all** commonly-owned or commonly-controlled entities that are filing Form 477. (If the appropriate name is not included in the provided list, enter the appropriate name in the space provided. If you have no holding company or other controlling entity, enter in Line 3 the same name as you entered in Line 1 of the Cover Page.)

Line 4: Use the drop-down box to select the state for which data are reported in this form. (You **may not** combine, in a single form, data for operations in more than one state. For example, the only data that may be reported in a "headquarters state" form are data for operations within that specific state.)

Line 5: Provide a contact name for the person who prepared this filing.

Line 6: Provide the telephone number and e-mail address for the contact person listed in Line 5 of the Cover Page.

Line 7: Use the drop-down box in Line 7 to indicate whether this filing is an original or a revised filing. (You must file a revised form if you discover mistakes as specified in Section IV.D. of these instructions.)

Line 8: Use the drop-down box to indicate whether you request non-disclosure of information reported in this form. You may request non-disclosure if you believe some or all of the information reported in this form is privileged and confidential and that public disclosure of such information would likely cause substantial harm to the competitive position of the filer.

B. Part I.A: BROADBAND

INCLUDE in Part I.A: In Part I.A., facilities-based providers of broadband connections to end user locations report information about those connections. See page 1 of these instructions for definitions of facilities-based provider and broadband connection. End users are residential, business, institutional and government entities who use broadband services for their own purposes and who do not resell such services to other entities or incorporate such services into retail Internet-access services that they market to end users. (Note that an Internet Service Provider is not an "end user" for purposes of Part I of FCC Form 477.) The end users of retail services delivered over the broadband connections reported in Part I.A. may be billed by the filer (including affiliates), by an agent of the filer, or by an unaffiliated entity.

In categorizing lines as "broadband," filers should consider the end user's authorized maximum information transfer rate ("speed") on that connection.

Do not convert into voice-grade equivalent measures any connections reported in Part I.A.

EXCLUDE in Part I.A: Exclude subscribership connections for cable television service and other multi-channel video programming service; video-on-demand type service unless it is bundled with Internet-type access or uses Internet-type delivery protocols; and services that do connect the end user to the Internet but restrict the end user to both transmitting data to the Internet and receiving data from the Internet at information transfer rates ("speeds") of 200 kbps or less. Exclude connections between two locations of the same business or other end user entity (such as point-to-point connections within private or semi-private data networks or corporate telephone systems). Exclude high-capacity connections between network components within the public switched telephone network or the Internet (*note that* such connections do not terminate at an end user location). Exclude in Part I.A. high-capacity dedicated connections ("special access" circuits) between end users and interexchange (telephone) carrier points of presence.

Lines in Part I.A.

Report broadband connections to end user locations on Lines A.I-1 through A.I-10 based on the technology employed by the part of the connection that actually connects to the end user location. If different technologies are used in the two directions of information transfer ("downstream" and "upstream"), report the connection in the technology category for the higher-rate direction. **Count only connections that are in service**, including connections over which you (including affiliates or agents) provide an Internet-access service to the end user and connections over which an unaffiliated entity (which is not your agent) provides an Internet-access service to the end user.

Line A.I-1: Report the number of broadband connections provided over asymmetric xDSL technologies. **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-2: Report the number of broadband connections provided over symmetric xDSL technologies. **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-3: Report the number of broadband connections provided over traditional wireline facilities, such as T-carrier. **Do not** include broadband connections provided over symmetric xDSL service, but report such connections in Line A.I-2. **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-4: Report the number of cable modem connections. **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-5: Report the number of broadband connections provided over optical carrier terminations **at the end-user premises**. (Note that broadband connections that are provisioned over optical fiber facilities used elsewhere in the network should not be reported in this category. For example, connections provisioned as "fiber to the curb" do not qualify because, by using a non-fiber "drop," they are not "fiber to the home.") **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-6: Report the number of broadband connections provided over satellite facilities. **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-7: Report the number of broadband connections provided over terrestrial fixed wireless facilities (whether provisioned/equipped over licensed spectrum or over spectrum used on an unlicensed basis). **Do not** convert these connections into a voice-grade equivalent measure. (Do not report those fixed wireless services (e.g., "Wi-Fi" and other wireless ethernet, or wireless local area network, applications) that only enable local distribution and sharing of a premises broadband facility.)

Line A.I-8: Report the number of subscribers to broadband services provided over terrestrial mobile wireless facilities (whether provisioned/equipped over licensed spectrum or over spectrum used on an unlicensed basis). Terrestrial wireless broadband providers should report the number of end users whose mobile devices, such as wireless modem laptop cards, smartphones, or handsets, are capable of sending or receiving data at speeds in excess of 200 kbps and whose billing addresses are within the areas of terrestrial mobile wireless broadband availability as reported in Part V.

Line A.I-9: Report the number of broadband connections provided over electric power lines. **Do not** convert these connections into a voice-grade equivalent measure.

Line A.I-10: Report the number of broadband connections provided over all other technologies. **Do not** convert these connections into a voice-grade equivalent measure. **Note** that the filer must **identify each specific technology** used to provide the connections reported in Line A.I-10, and the corresponding number of connections for each specific technology, in the comment section of Part IV of the form.

Columns in Part I.A.

General Note about Reporting Percentage Breakouts: Parts I, II, and III of Form 477 direct filers to provide percentage breakouts for specific counts of connections. If disaggregated counts exist for another purpose, then these must be used to calculate the requested percentage breakouts. However, filers are not

expected to calculate percentages based on exhaustive counts performed solely for this task. Rather, where disaggregated counts do not exist, filers may provide good faith estimates of percentages based on the best information available to the filer. For example, if there is a pricing distinction between services provided to residential end users, then billing information may be used to estimate the percentage of connections provided to such end users. In the absence of such information, however, filers should rely on studies done for other purposes such as marketing and business plan information, demographic data, etc. A filer should conduct limited special studies only in the event that it cannot provide **estimates of percentage breakouts that it reasonably expects to be accurate within plus or minus five percentage points.**

Column (a): Report the total number of broadband connections as described in each of Lines A.I-1 through A.I-10, above.

Column (b): Report the percentage of total connections reported in column (a) that are residential connections in the sense that these connections are used to deliver Internet-access services that are *primarily* purchased by, designed for, and/or marketed to residential end users. (Such Internet-access services may differ in price, "speed tier," and other features from Internet-access services that are primarily purchased by, designed for, and/or marketed to non-residential end users.)

Column (c): Report the percentage of total connections reported in column (a) that are provided over your **own local loop facilities, or the wireless last-mile equivalent.** Your own such facilities include wired local loop facilities that you (including affiliates) owned, wireless connections to end user locations that you (including affiliates) have provisioned/equipped over spectrum that you use on an unlicensed basis or over spectrum for which you hold a license, manage, or have obtained the right to use via lease or other arrangement with a Band Manager, and facilities you obtained the right to use from unaffiliated entities as dark fiber or satellite transponder capacity (and that you used as part of your own system). **Do not** include, in column (c), broadband connections to end users that you provided over UNEs, special access lines, and other leased lines that you obtained from an unaffiliated entity and equipped as broadband.

Column (d): Report the percentage of total connections reported in column (a) that are billed (or incorporated in a service billed) to end users by the filer (including affiliates) or its agents. Do not include in this percentage any lines reported in column (a) that are billed to an unaffiliated Internet Service Provider (ISP) that has incorporated the filer's broadband service into a premium Internet-access service marketed under the unaffiliated ISP's own name.

Note on columns (e) – (j) of Part I.A: The percentages reported in columns (e) – (j) of Part I.A refer, in each case, to connections that carry information, at the end user location, at information transfer rates **exceeding 200 kbps in both directions.** In categorizing broadband connections in this manner, filers should consider the end user's authorized maximum information transfer rate ("speed") on that connection.

Column (e): Report the percentage of total connections reported in column (a) that carry information, at the end user location, at information transfer rates exceeding 200 kbps in **both** directions **and** that are residential connections in the sense that they are used to deliver Internet-access services that are *primarily* purchased by, designed for, and/or marketed to residential end users. (As noted in the instructions for column (b), above, such Internet-access services may differ in price, "speed tier," and other features from Internet-access services that are primarily purchased by, designed for, and/or marketed to non-residential end users.)

Column (f): Report the percentage of total connections reported in column (a) that carry information, at the end user location, at information transfer rates exceeding 200 kbps in both directions **and, in the faster direction**, at rates greater than 200 kbps and less than 2.5 mbps.

Column (g): Report the percentage of total connections reported in column (a) that carry information, at the end user location, at information transfer rates exceeding 200 kbps in both directions **and, in the faster direction**, at rates greater than or equal to 2.5 mbps and less than 10 mbps.

Column (h): Report the percentage of total connections reported in column (a) that carry information, at the end user location, at information transfer rates exceeding 200 kbps in both directions **and, in the faster direction**, at rates greater than or equal to 10 mbps and less than 25 mbps.

Column (i): Report the percentage of total connections reported in column (a) that carry information, at the end user location, at information transfer rates exceeding 200 kbps in both directions **and, in the faster direction**, at rates greater than or equal to 25 mbps and less than 100 mbps.

Column (j): Report the percentage of total connections reported in column (a) that carry information, at the end user location, at information transfer rates exceeding 200 kbps in both directions **and, in the faster direction**, at rates greater than or equal to 100 mbps.

C. Part I.B: BROADBAND (continued)

Incumbent LECs that report xDSL (asymmetric or symmetric) connections in Part I.A. (or whose affiliates report such connections) must complete Line B.I-11. Cable system operators that report cable modem connections (or whose affiliates report such connections) in Part I.A. must complete Line B.I-12.

Line B.I-11: Of those residential end user premises in this state to which you (including affiliates) can deliver telephone service over local loop facilities that you own (or over the fixed wireless last-mile equivalent), report your best estimate of the percentage of premises to which broadband (asymmetric or symmetric) xDSL service is also available from you (or your affiliate, or an agent of you or your affiliate) over those facilities.

Line B.I-12: Of those residential end user premises in this state to which you (including affiliates) can offer cable television service over cable plant that you own, report the best estimate of the percentage of premises to which broadband cable modem service also is available from you (or your affiliate, or an agent of you or your affiliate) over that plant.

Residential end user premises include residential living units (e.g., single family dwellings and individual households in multiple dwelling units such as apartments, condominiums, mobile home parks, etc.) and also individual living units in such institutional settings as college dormitories and nursing homes. For the purposes of this data collection, residential end user premises also include other end user locations to which you (including your affiliates and agents) market broadband services that are primarily designed for residential use.

Guidance on generating a "best estimate": Rather than setting out detailed methodologies to which filers must adhere in reporting information in Part I.B., we intend to rely on current "best practices" in the local exchange and cable television industries to provide us with carefully considered estimates. Filers should note the following points. (1) The reported estimate of xDSL or cable modem service availability should **not** require degradation, outside of normal operating parameters, of the service quality of the filer's most heavily purchased type(s) of xDSL or cable modem service. (2) Filers should take into account rule-of-thumb lessons from the experience of deploying particular broadband services in similar

areas (e.g., differences between actual and theoretical availability of xDSL service to end user premises in areas in which the service already has been deployed, such as may arise due from loop conditioning factors and loop lengths).

D. Part II: WIRELINE AND FIXED WIRELESS LOCAL TELEPHONE

INCLUDE in Part II: Report lines or wireless channels (hereafter, "lines") that you (including affiliates) use to provide voice telephone service in this state. For purposes of this data collection, "**voice telephone service**" means local exchange or exchange access services that allow end users to originate and/or terminate local telephone calls on the public switched network, whether used by the end user for voice telephone calls or for other types of calls carried over the public switched network (for example, lines used for facsimile equipment or lines used occasionally or exclusively for "dial-up" connection to the Internet). See "Note for reporting channelized service," below.

EXCLUDE in Part II: Do **not** report in Part II lines not yet in service, lines used for interoffice trunking, company official lines, or lines used for special access service. Do not report in Part II any lines that connect two locations of the same end user customer, ISP, or communications carrier. Where you are already reporting the portion of a circuit between the end user and your switching center, do not separately count the portion of that circuit between your switching center and a circuit switched, Internet protocol, or ATM network, irrespective of whether you multiplexed the circuit onto a higher-capacity facility between your switching center and that network

Note for reporting channelized service: In **Part II.A** and **Part II.B**, providers must report **voice-grade equivalent lines**. Count as one voice-grade equivalent line: traditional analog POTS lines, Centrex-CO extensions, and Centrex-CU trunks. **Count lines based on how they are charged to the customer rather than how they are physically provisioned.** That is, when a customer is charged for channelized service, report the number of activated, charged-for channels rather than the theoretical capacity of the line. Examples: Count Basic Rate Integrated (BRI) Services Digital Network (ISDN) lines as two voice-grade equivalent lines. Count fully-channelized PRI circuits (including PRIs that are used exclusively to provide local connectivity to "dial-up" ISPs) as 23 voice-grade equivalent lines. But report, for example, 8 voice-grade equivalent lines if a customer is charged for 8 trunks that happen to be provisioned over a DS1 circuit. If a customer is charged for a fully-channelized DS1 circuit, however, report 24 voice-grade equivalent lines. In **Part II.C**, however, any high-capacity UNEs should **not** be reported in voice-grade equivalents. UNEs should be reported as actual circuit counts.

Note for competitive LECs providing local exchange service over hybrid fiber-coaxial cable systems: If you cannot determine the number of lines from your records, you may report the number of subscribers.

Lines in Part II.

In **Line A.II-1** (service provided to end users) and **Lines B.II-2 through B.II-3** (service provided to unaffiliated carriers for resale), report **voice-grade equivalent** lines used to provide voice telephone service. See "Note for reporting channelized service," above.

Line A.II-1: Report total voice-grade equivalent lines that you (including affiliates and agents) provided – that is, billed – directly to end users. Include lines provided to end users by your agents or under traditional marketing arrangements; for example, include lines provided to shared-tenant service providers. Note that an Internet Service Provider (ISP) may be an end user of local exchange service lines. (For example, a "dial-up" ISP may purchase channelized PRI circuits so that its customers can reach it *via* a local telephone call.)

Line B.II-2: Report total voice-grade equivalent local telephone service lines that you **provided to** unaffiliated telecommunications carriers under a Total Service Resale arrangement (*i.e.*, provided pursuant to section 251(c)(4) of the Communications Act of 1934, as amended).

Line B.II-3: Report total voice-grade equivalent local telephone service lines that you **provided to** unaffiliated telecommunications carriers under other arrangements, such as Centrex/Centron or special access service, that provide the unaffiliated carrier with a connection to the end user premises and enable the unaffiliated carrier to provide local telephone service to the end user.

In Lines C.II-4 and C.II-5, report counts of circuits. **Do not** convert circuits to voice-grade equivalent measures.

Line C.II-4: Report the number of circuits you **provided to** unaffiliated telecommunications carriers under an unbundled network element (UNE) loop arrangement, where you do **not** provide switching for that circuit. **Do not** convert any high capacity circuits provided under such UNE arrangements into voice-grade equivalent measures.

Line C.II-5: Report the number of circuits you **provided to** unaffiliated telecommunications carriers under a UNE loop arrangement, where you **also** provide switching for that circuit (*i.e.*, "UNE-Platform"). **Do not** convert any high-capacity circuits provided under such UNE arrangements into voice-grade equivalent measures.

Columns in Part II.

Column (a): For **Lines A.II-1 through B.II-3**, report voice-grade equivalent lines used to provide voice telephone service, as defined above. For **Lines C.II-4 and C.II-5**, report the number of circuits (*i.e.*, **not** the voice-grade equivalent of those circuits).

Columns (b) – (j): Complete columns (b) – (j) for Line A.II-1. *See also* "General note about reporting percentage breakouts," above.

Column (b): Report the percentage of the lines reported in column (a) that are used for residential service. Include lines provided to shared-tenant service providers in apartment buildings and similar residential settings. ILEC filers may report based on the percentage of lines reported in column (a) that are tariffed residential lines, with an appropriate adjustment for lines provided under shared-tenant service arrangements. Carriers that do not have separate residential tariffs or price lists should use marketing or other information about the demographic characteristics of the areas they serve to develop a comparable estimate, or should undertake a limited special study.

Column (c): Report the percentage of the lines reported in column (a) for which you (including affiliates) are the presubscribed interstate long distance carrier, *i.e.*, the (facilities-based or reseller) carrier to which an interstate long distance call is routed automatically, without the use of any access code by the end user.

Column (d): Report the percentage of the lines reported in column (a) that are used for residential service (as specified in the instructions for column (b), above) **and** for which you (including affiliates) are the presubscribed interstate long distance carrier (as specified in the instructions for column (c), above).

Column (e): Report the percentage of the lines reported in column (a) that are provided over your **own local loop facilities** connecting to the end user's premises. Count as your own such facilities, those wired

local loop facilities you (including affiliates) own, those facilities you obtain the right to use from unaffiliated entities as dark fiber or satellite transponder capacity (and that you use as part of your own system), those fixed-wireless connections to end user premises that are deployed over spectrum for which you hold a license, manage, or have obtained the right to use via lease or other agreement with a Band Manager, or those fixed-wireless connections that are deployed over spectrum that you use on an unlicensed basis. **Do not** include, in column (c), lines provided over UNE loops, special access lines, or other leased lines that you **obtained from** an unaffiliated carrier.

Note for competitive LECs that own telephone switches: A competitive LEC should include, in column (e), a line for which it provided its own switching **only if** it also owned (as just discussed) the local loop facilities that connect to the end user's premises.

Column (f): Report the percentage of lines reported in column (a) that are provided over UNE loops that you **obtained from** an unaffiliated carrier **without** also obtaining UNE switching from that carrier.

Column (g): Report the percentage of lines reported in column (a) that are provided over UNE-Platform (*i.e.*, the combination of loop UNE, switching UNE, and transport UNE) that you **obtained from** an unaffiliated carrier.

Column (h): Report the percentage of lines reported in column (a) that are provided by reselling a telecommunications service (such as Centrex/Centron or special access) that you **obtained from** an unaffiliated carrier, or by using facilities that you **obtained from** an unaffiliated carrier under a commercial arrangement.

Column (i): Report the percentage of lines reported in column (a) that are delivered over coaxial cable facilities used in the part of the line that connects to the end user premises ("cable telephony").

Column (j): Report the percentage of lines reported in column (a) that are delivered over fixed wireless facilities used in the part of the line that connects to the end user premises.

E. Part III: MOBILE LOCAL TELEPHONE

Line A. III-1: Report all mobile voice telephony subscribers served over your own facilities that give customers the ability to place or receive calls from the public switched telephone network. (See column (a), below, for how to count subscribers.) Include: satellite, cellular, and PCS telephone service and other terrestrial mobile services; and, units in service that combine voice telephone with other services. Report subscribers that you (including affiliates) serve using spectrum for which you hold a license, manage, or have obtained the right to use via lease or other agreement with a Band Manager. **Do not report any** subscribers that you serve by reselling an unaffiliated carrier's mobile telephone service.

Note: Exclude mobile services that customers cannot use to directly place calls to subscribers of ordinary telephone service, such as dispatch services and one-way or two-way paging services. Also exclude voice services that permit communications between only a narrow range of locations such as automobile units that permit drivers to communicate only with a specific road service.

Column (a): Report the total number of mobile voice telephony subscribers in the state that are served over your own facilities. Count as a subscriber a mobile handset, car-phone, or other revenue-generating, active, voice unit that has a unique phone number and that can place and receive calls from the public switched network. Include in column (a) subscribers that you (including affiliates) bill directly (including through agents), pre-paid subscribers, and subscribers served via unaffiliated mobile telephone service

resellers. Subscriber counts by state should be based on the **area codes** of the phone numbers provided to subscribers.

Column (b): Report the percentage of subscribers in column (a) that you bill directly (including through agents) or serve on a pre-paid basis. **Do not include** subscribers that are billed by an unaffiliated mobile telephone service reseller.

F. Part IV: EXPLANATIONS AND COMMENTS

Filers that must report: If there is a non-zero entry in column (a) of Line A.I-10 of Part I of a form, the filer **must** identify each specific technology used to provide the broadband connections reported in Line A.I-10, and the corresponding number of connections for each specific technology, in the comment section of Part IV of the form.

Other filers: Complete Part IV to furnish relevant explanatory information with your data. For example, an explanation should be provided if a percentage figure has changed noticeably from earlier filings. In Part IV, filers should identify the Part and Line to which their comment applies in the columns provided.

G. Part V: ZIP CODE LISTINGS

Line V-1: Report, in the appropriate column, the 5-digit Zip Codes – for this state – in which you provide at least one of the broadband connections reported in Part I.A, or at least one of the voice-grade telephone service lines provided to end users reported in Part II, Line II.A-1. **Do not** report line counts or subscriber counts by Zip Code.

Column (a) – (i): If you file broadband information in Part I, you must provide, for each individual technology indicated by the column head, a list of Zip Codes in the state in which at least one of the broadband connections reported in Part I is **in service** – **except that** the Zip Codes reported in column (g) should be the Zip Codes in the state in which the mobile wireless broadband service provider's service is advertised and available to actual and potential subscribers.

Column (j): If you file local telephone service information in Part II, Line II.A-1, you must provide a list of Zip Codes in the state in which you have end user customers for your voice telephone service. (See the definition of "voice telephone service," above.) Providers of mobile telephony services that report data in Part III **should not** report this Zip Code information.

Note: Zip Code lists reported in a form should be reviewed prior to filing to eliminate any out-of-state Zip Codes (such as may appear in Zip Code lists generated directly from billing databases). If you choose to paste Zip Codes into Part V of the form, please do so by clicking on **Edit . . . Paste Special . . . Values** to avoid inadvertently changing the pre-specified cell format.

IV. GENERAL INFORMATION

A. Where and When to File

1. When to File

- **March 1st** of each year: providers must file data as of December 31 of the preceding year.
- **September 1st** of each year: providers must file data as of June 30 of the same year.

2. Where to File

All filers must deliver to the FCC a completed and signed Certification Statement. The Certification Statement is the single page that constitutes Section V of these instructions. Filers are encouraged to deliver the completed and signed Certification Statement by faxing it to (202) 418-0520 or by attaching a scanned copy to an e-mail sent to FCC477@fcc.gov. **Filers must deliver completed Form 477(s) to the FCC on electronic media. Paper copies of completed Form 477s may not be submitted.** Acceptable electronic media are spreadsheet files attached to an e-mail message, or one or more IBM format compact discs or 3.5-inch floppy diskettes containing such files. The latter should be **clearly labeled** to identify contents by (at a minimum): FCC Form 477 (12/31/05 data), name of filer, and the states for which data are included. In all cases, filers should use up-to-date virus detection software to ensure that electronic media are virus-free.

Attention: The United States Postal Service (USPS) requires all First Class, Priority, and Express Mail addressed to the Zip Code in which the FCC Headquarters is located to be irradiated (cleaned) prior to delivery. Because irradiation can damage compact discs and floppy diskettes, filers are encouraged to submit Form 477 using one of the following three alternatives – preferably e-mail. (Use **only one** filing method; do not make duplicate filings. A filer who is unable to use one of the following delivery methods should contact the Industry Analysis and Technology Division, Wireline Competition Bureau, at (202) 418-0940 or via TTY at (202) 417-0484.)

E-mail: Filers are encouraged to deliver completed Form 477(s) as attachments to one or more e-mail messages sent to FCC477@fcc.gov. Filers submitting multiple files may use a zip utility to compress them. The subject field of the e-mail should contain the phrase: **FCC Form 477 due 3/1/06**. If multiple e-mails must be sent, the subject line should so indicate; for example: FCC Form 477 due 3/1/06 (message 1 of 3). Filers submitting Form 477(s) by e-mail may fax the completed and signed Certification Statement to (202) 418-0520, may e-mail a scanned copy of it to FCC477@fcc.gov, or may deliver the signed, original paper copy of the Certification Statement by USPS first-class mail addressed to: FCC FORM 477 (ATTN: WCB/IATD, Room 6-A220), Federal Communications Commission, 445 12th Street, SW, Washington, DC 20554. (Alternatively, filers may deliver the signed, original copy of the Certification Statement by one of the following methods.)

Overnight delivery service other than USPS Express Mail or Priority Mail: Compact discs, or floppy diskettes, containing completed Form 477(s) -- accompanied by the signed, original copy of the Certification Statement -- may be delivered by *an overnight delivery service other than USPS Express Mail or Priority Mail* (e.g., UPS, DHL, Federal Express). Such deliveries must be addressed and delivered to: **FCC FORM 477 (ATTN: WCB/IATD, Room 6-A220)**, Federal Communications Commission, 9300 East Hampton Drive, Capitol Heights, MD 20743. Filers who want a confirmation of receipt may include a stamped, self-addressed envelope and a photocopy of the Certification Statement, which will be receipt-stamped and returned by mail.

Hand delivery or messenger delivery: Local hand and messenger deliveries directed to the Commission's Secretary are accepted at 236 Massachusetts Avenue, NE, Suite 110, Washington, DC 20002. All Form 477 filing materials delivered to this location must be **clearly identified to be re-directed to: FCC FORM 477 (ATTN: WCB/IATD, Room 6-A220)**.

Note: Because the specific requirements for overnight, hand, or messenger delivery may change, you may want to consult the Office of the Secretary (www.fcc.gov/osec) for the most current information.

B. How to File

1. Preparation of Data Files

You must file your local competition and broadband deployment data using the electronic version of Form 477 that is available at www.fcc.gov/formpage.html or by purchase from the FCC's duplicating contractor, Best Copy and Printing, Inc., telephone (202) 488-5300 or (800) 378-3160, fax (202) 488-5563, TTY (202) 488-5562, or e-mail to fcc@bcpiweb.com. Form 477 will be updated for each filing round, and filers must obtain the latest version for each filing period. Filers should also obtain the latest version of Instructions for Form 477.

The electronic version of Form 477 is provided in Excel 2002 format. It contains drop-down boxes and some edit checks. **Once you complete a filing, name the file in accordance with instructions provided below.**

Note: You may not move cells, insert or delete rows, or change the validation or formatting characteristics of any cell. **If the FCC cannot load your files into its databases as a result of modifications to the file, you will be required to correct and resubmit those files.** Filers must save each Form 477 as a separate spreadsheet file. Do not submit multiple Form 477 worksheets within a single Excel 2002 workbook. Filers choosing to submit Form 477(s) on a floppy diskette(s), or compact disc(s), may place multiple spreadsheet files on a single diskette or compact disc.

Each file name must adhere to the following convention:

SST#Hyearname.xls, where:

SS is the two letter post office abbreviation for the state.

I is a single character that indicates whether the file contains incumbent LEC (ILEC) data or non-ILEC data (which **must** be filed separately) and whether the file contains revised data. Select the appropriate code from the following list:

- A = original filing for non-ILEC operations
- B = original filing for ILEC operations
- C = revised filing for non-ILEC operations
- D = revised filing for ILEC operations

is a "sequence number" (i.e., 1, 2, 3, etc.) to be used to differentiate what would otherwise be identically named files when the file names are constructed according to the convention specified here. If no such redundancy of file names occurs, use the number "1" in place of the character "#".

H is the half of the year of the data being filed. Use:
"J" for data as of June 30
"D" for data as of December 31

year is the last two digits of the year of the data being filed (e.g., for the filing due March 1, 2006, reported data will be as of December 31, 2005, so 2005 = 05).

name is the company name identified on Line 1 of the Cover Page of Form 477.

Example: NCB1D05BellSouth.xls

2. Additional Directions for Filing

Filers must submit a completed and signed Certification Statement (which is the single page that constitutes Section V of these Instructions). **The Certification Statement must be signed by an officer of the filer of one of the legal entities whose data is included.** An officer is a person who occupies a position specified in the articles of incorporation (or partnership agreement), and would typically be president, vice president for operations, vice president for finance, comptroller, treasurer or a comparable position. If the filer is a sole proprietorship, the owner must sign the certification.

C. Requesting Confidentiality

Filers may submit a request that information on Form 477 not be made routinely available for public inspection by so indicating on Line 8 of the Cover Page of the form and on the Certification Statement. *See also 47 C.F.R. §§ 0.457, 0.459, 1.7001(d), 43.11(c); Examination of the Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission, FCC 98-184 (rel. Aug. 4, 1998).*

D. Obligation to File Revisions

Filers must submit a revised form if the filer discovers a significant error in the data. For counts, a difference amounting to 5 percent of the filed number must be re-filed. For percentages, a difference of 5 percentage points is significant and must be re-filed. Revisions should consist of a certification statement and one or more electronic files. Carriers should re-file all data for a state if one or more data element must be revised. A re-filed Form 477 spreadsheet should contain all appropriate data for the state, not just the corrected figures. Note that files containing revisions must be given different names from the original filings, as specified above, Section IV.B.1 of these instructions.

E. Compliance

Service providers that are required to file the Form 477 but fail to do so may be subject to enforcement action under sections 502 and 503 of the Communications Act and any other applicable law.¹

¹ See 47 U.S.C. §§ 502, 503.

V. CERTIFICATION STATEMENT

FCC Form 477 Local Telephone Competition and Broadband Reporting (ATTENTION: WCB/IATD, Room 6-A220)

CERTIFICATION STATEMENT

Check the method (use ONLY one) used to deliver completed Form 477(s) to the FCC. See Instructions, Section IV, for the proper address to use for each delivery method:

☐ E-mail ☐ Overnight service other than United States Postal Service
☐ Messenger or hand delivery ☐ Other (specify: _____)

Also see Instructions, Section IV, for separate directions on how to submit the signed, original paper copy of this Certification Statement to the FCC.

This filing is an (check one) ☐ original filing ☐ revised filing

Organization name: _____

Number of files provided for this reporting period: _____

Year (of the data): 2005 Data as of: [Check one: June 30 ☐; December 31 ☒]

I certify that I am an officer of _____; that I have examined the information contained in the data files submitted and that to the best of my knowledge, information and belief, all statements of fact contained in such files are true and that said files represent an accurate statement of the affairs of the above named respondent as of the following date:

If I have requested non-disclosure of some or all of the information in FCC Form 477 by so indicating on Line 8 of the Cover Page of the form, I certify that this information is privileged and confidential and that public disclosure of such information would likely cause substantial harm to the competitive position of the respondent.

PRINTED NAME: _____

POSITION: _____ TELEPHONE: _____

SIGNATURE: _____ E-MAIL: _____

DATE: _____

Persons making willful false statements in the report form can be punished by fine or imprisonment under the Communications Act, 47 U.S.C. 220(e).

CONTACT PERSON: _____

TELEPHONE: _____ E-MAIL: _____

FEDERAL COMMUNICATIONS COMMISSION

VI. GLOSSARY OF SELECTED TERMS APPEARING ON FCC FORM 477

The following selected terms are noted on FCC Form 477. The filer **must** interpret these terms in the specific context of the detailed reporting instructions, above. All terms are as defined for the specific purposes of this information collection.

Part I: Broadband

Broadband connections: Lines (or wireless channels) that terminate at an end user location and enable the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction.

End user: Residential, business, institutional and government entities who use services for their own purposes and who do not resell such services to other entities. For purposes of Part I of Form 477, an Internet Service Provider (ISP) is not an "end user" of a broadband connection.

Facilities-based broadband provider: A provider of broadband connections to end user locations that owns the portion of the physical facility that terminates at the end user location, obtains unbundled network elements (UNEs), special access lines, or other leased facilities that terminate at end user locations and provisions/equips them as broadband, or provisions/equips broadband wireless channels to end user location over licensed spectrum or over spectrum that the provider uses on an unlicensed basis.

Local loop: For purposes of this data collection, the "last mile" facilities (either wired facilities or the wireless equivalent) between a central office and the end user premises in a telephone network, a node and the end user premises in a cable network, or the analogous portion of the facilities of other providers of telephone service or broadband connections.

Own local loop facilities: Those wired local loop facilities that the filer (including affiliates) actually owns as well as facilities that the filer obtains the right to use from unaffiliated entities as dark fiber or satellite transponder capacity (and that the filer uses as part of its own system). Also, for purposes of Part I of Form 477, broadband wireless connections to end user locations that the filer provisions/equips as broadband over licensed spectrum or over spectrum that the filer uses on an unlicensed basis. For the purposes of Part I of Form 477, this term **does not** include unbundled network elements (UNEs), special access lines, or other leased lines that the filer obtains from an unaffiliated entity and equips as broadband.

Residential broadband connection: For the purposes of Part I of Form 477, broadband connections of a type (as indicated by, e.g., price, "speed," or other features) that is primarily purchased by, designed for, and/or marketed to residential end users.

Residential end user premises: Residential living units (e.g., single family dwellings and individual households in multiple dwelling units such as apartments, condominiums, mobile home parks, etc.) and also individual living units in such institutional settings as college dormitories and nursing homes. Also includes other end user locations to which you (including affiliates and agents) market broadband services that are primarily designed for residential use.

Part II: Wireline and Fixed Wireless Local Telephone

End user: Residential, business, institutional and government entities who use services for their own purposes and who do not resell such services to other entities.

Local loop: See the definition provided for Part I, above.

Own local loop facilities: Those wired local loop facilities that the filer (including affiliates) actually owns as well as facilities that the filer obtains the right to use from unaffiliated entities as dark fiber or satellite transponder capacity (and that the filer uses as part of its own system). Also, for purposes of Part II of Form 477, fixed wireless

voice-grade channels to end user locations that the filer provisions/equips over licensed spectrum or over spectrum that the filer uses on an unlicensed basis. For the purposes of Part II of Form 477, the term **does not** include voice-grade channels to end user premises that the filer provisions over UNE loops, special access lines, or other leased lines that the filer obtains from an unaffiliated carrier.

Presubscribed interstate long distance carrier: The (facilities-based or reseller) carrier to which an interstate long distance call is routed automatically, without the use of any access code by the end user.

Residential lines: Lines provided to residential end user premises. Also includes any lines the filer provides to a shared-tenant service provider in an apartment building or similar residential setting.

UNE-Platform: The combination of unbundled network elements (UNEs) consisting of loop UNE, switching UNE, and transport UNE. (Unbundled network elements are defined in the FCC Rules. See 47 C.F.R. § 51.319.)

Voice-grade equivalent: Generally, the number of DS0 (64 kbps) lines/channels in a higher-capacity circuit. In the specific context of Part II of Form 477, see "Note for reporting channelized service" in the detailed instructions, above.

Voice telephone service: Local exchange or exchange access services that allow end users to originate and/or terminate local telephone calls on the public switched network, whether used by the end user for voice telephone calls or for other types of calls carried over the public switched network (for example, lines connected to facsimile equipment or lines used occasionally or exclusively for "dial-up" connection to the Internet).

Part III: Mobile Local Telephone

Mobile voice telephony subscribers: A mobile handset, car-phone, or other revenue-generating, active, voice unit that has a unique phone number and that can place and receive calls from the public switched network.

Own facilities: Spectrum for which the filer (including affiliates) holds a license, manages, or has obtained the right to use via lease or other agreement with a Band Manager.

VII. DISCLOSURE, PRIVACY ACT, PAPERWORK REDUCTION ACT NOTICE

The Privacy Act of 1974 and the Paperwork Reduction Act of 1995 require that when we ask you for information, we must first tell you our legal right to ask for the information, why we are asking for it, and how it will be used. We must also tell you what could happen if we do not receive it and whether your response is voluntary, required to obtain a benefit, or mandatory under the law. See Privacy Act of 1974, P.L. 93-579, December 31, 1974, 5 U.S.C. § 552a (e)(3), and the Paperwork Reduction Act of 1995, P.L. No. 104-13, 44 U.S.C. § 3501, *et seq.*

Our legal right to ask for this information is sections 1.7000-1.7002, 20.15, 43.01, 43.11 of the Federal Communications Commission's rules. 47 C.F.R. §§ 1.7000-1.7002, 20.15, 43.01, 43.11. Your response is mandatory.

This collection of information stems from the Commission's authority under sections 4(i), 201, 218-220, 251-252, 303(r), 332, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 201, 218-220, 251-252, 303(r), 332, and 403, and section 706 of the Telecommunications Act of 1996. The data in the worksheet will be used to monitor the deployment of broadband services and the development of local telephone service competition. Selected information provided in the worksheet will be made available to the public in a manner consistent with the Commission's rules and orders.

We have estimated that each response to this collection of information will take, on average, 10 hours. Note that many companies will file multiple responses and that this estimated average reflects the fact that many companies will be required to file only a single service count that should be readily available from

internal company records. Our estimate includes the time to read the instructions, look through existing records, gather and maintain the required data, enter the data in a Form 477 spreadsheet, prepare a floppy diskette or compact disc (if the filer decides to submit completed Form 477(s) by a method other than e-mail) and certification, and actually file the report. If you have any comments on this estimate, or how we can improve the collection and reduce the burden it causes you, please write the Federal Communications Commission, AMD-PERF, Washington, D.C. 20554, Paperwork Reduction Project (3060-0816). We also will accept your comments via the Internet if you send them to Judith-B.Herman@fcc.gov. DO NOT SEND COMPLETED FCC FORM 477 TO THIS ADDRESS.

Remember -- You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid Office of Management and Budget (OMB) control number. This collection has been assigned an OMB control number of 3060-0816.

The Commission is authorized under the Communications Act of 1934, as amended, to collect the personal information we request in this form. If we believe there may be a violation or potential violation of a statute or a Commission regulation, rule, or order, your filing may be referred to the Federal, state, or local agency responsible for investigating, prosecuting, enforcing, or implementing the statute, rule, regulation, or order. In certain cases, the information in your worksheet may be disclosed to the Department of Justice, court, or other adjudicative body when (a) the Commission; or (b) any employee of the Commission; or (c) the United States government, is a party to a proceeding before the body or has an interest in the proceeding.

Reporting entities failing to file Form 477 in a timely fashion may be subject to penalties under the Communications Act, including sections 502 and 503(b).

Schematic of IRU Cross Connect and Service-Based Connection

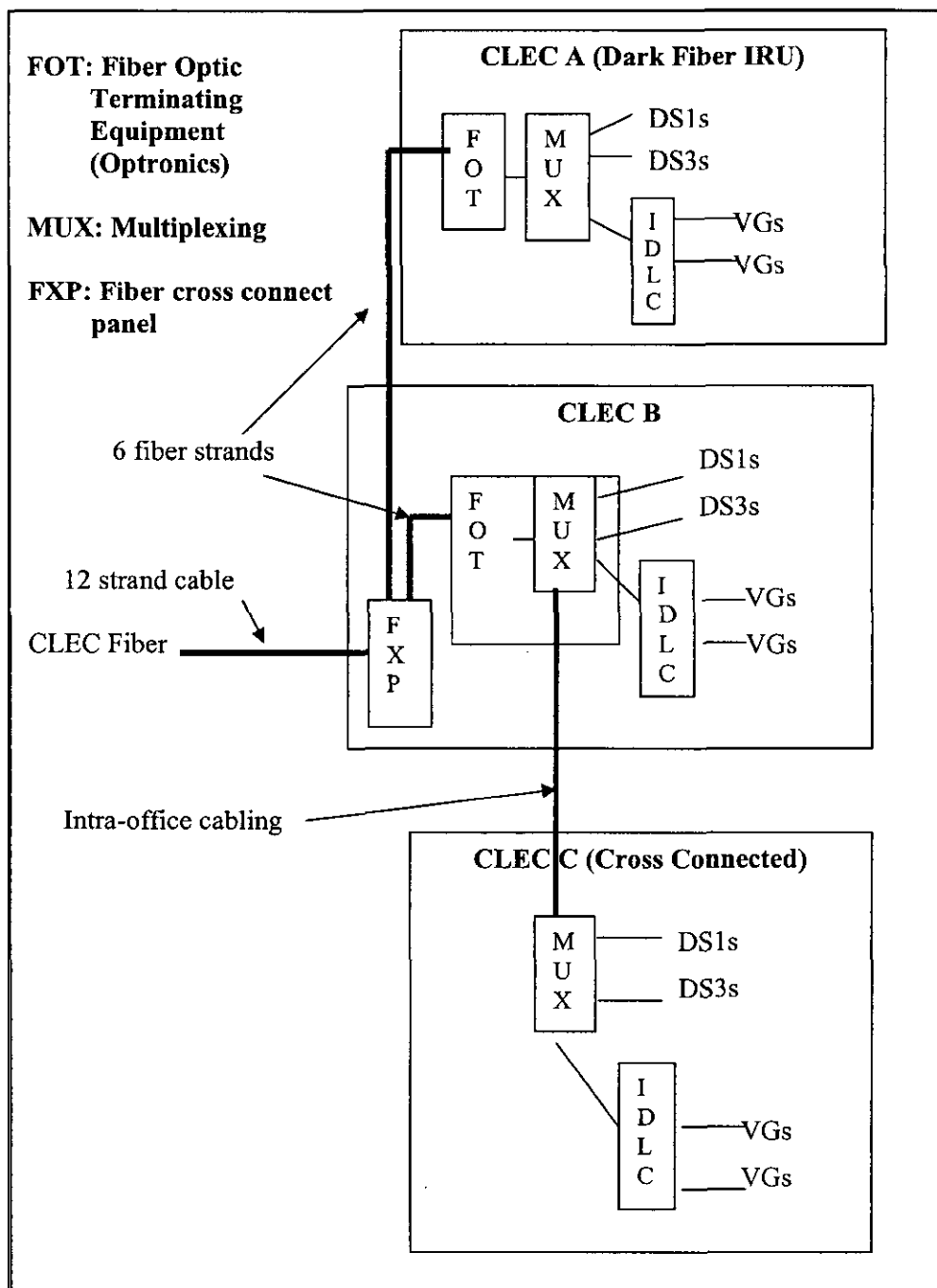


Exhibit JPG-7

Is Designated as HIGHLY CONFIDENTIAL

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Exhibit JPG-8

Is Designated as HIGHLY CONFIDENTIAL

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Exhibit JPG-9

Is Designated as HIGHLY CONFIDENTIAL

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