

**BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION
SUITE 350
121 SEVENTH PLACE EAST
ST. PAUL, MINNESOTA 55101-2147**

Nancy Lange	Chair
Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
Katie Sieben	Commissioner
John Tuma	Commissioner

In the Matter of the Petition of CenturyLink QC
to be Regulated Pursuant to Minnesota Statute §
237.025; Competitive Market Regulation

DOCKET No. P-421/AM-16-496
DOCKET No. P-421/AM-16-547(HSTS)

PROPOSED FINDINGS OF THE DEPARTMENT OF COMMERCE

The Department provides the attached findings for the Commission's use. These findings are drawn from the Department's Initial Brief, and the Department retains headings for the convenience of the Commission.

Dated: March 10, 2016

Respectfully submitted

/s/ Linda S. Jensen

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I. INTRODUCTION

1. On June 30, 2016, CenturyLink QC (CenturyLink) filed a petition seeking to be regulated pursuant to Minn. Stat. § 237.025, subd. 4 (1) (2016). CenturyLink petitioned for relief in 108 exchanges (later revised to 109) exchanges¹ of its 115 exchanges in Minnesota.² In 32 of the 109 exchanges, CenturyLink sought to demonstrate that wireless providers satisfied the statutory criteria requiring a qualifying competitive service provider. In the remaining 77 exchanges, CenturyLink based its analysis on the availability of cable or other wireline broadband providers.
2. CenturyLink provided evidence for the Minnesota Public Utilities Commission's (Commission's) consideration in the form of the affidavits, including an affidavit of Robert Brigham, and two each from Messrs. Al Lubeck and Adam Nelson.³ The Department of Commerce (Department) provided evidence for consideration in the form of the Affidavit of Ms. Joy Gullikson and the Affidavit of Mr. Wes Legursky, and submits this Initial Brief.

II. ARGUMENT

- A. CENTURYLINK BEARS THE BURDEN OF PROVING TO THE COMMISSION'S SATISFACTION THAT THE STATUTORY CRITERIA HAVE BEEN MET.**
3. The burden to show that the competitive criteria of Minn. Stat. 237.025 subd. 4 have been met is on the petitioning local exchange carrier. Minn. Stat. 237.025 subd. 5.

¹ In some of these 109 exchanges, there is more than one wire center. The Petition sought relief in 154 wire centers.

² CenturyLink Witnesses, Messrs. Brigham and Lubeck, in their Affidavits, each stated that all CenturyLink QC exchange service areas in Minnesota meet the criteria set forth in Minn. Stat. § 237.025, subd. 4 (1)" (Brigham Aff. ¶ 2, Lubeck Aff. ¶ 2) but CenturyLink did not request market based regulation in the following six wire centers/exchanges where the central office is located in another state and the customers served by that central office are in Minnesota:

- Estherville, served by a central office in Iowa
- Moorhead, served by a central office in North Dakota
- East Grand Forks, served by a central office in North Dakota
- Lake Park, served by a central office in Iowa
- Spirit Lake, served by a central office in Iowa
- Breckenridge, served by a central office in North Dakota.

Gullikson Aff. fn. 7 and Attach. 1

³ Mr. Lubeck explained, "Robert Brigham filed affidavits in support of this petition on June 30, 2016 and August 29, 2016" and Mr. Lubeck's Affidavit did not replace, but was "...intended to supplement those [Brigham's] filings but, for ease of reference will repeat and add to the information filed at that time." Lubeck Aff. ¶ 2.

4. Placing the burden on CenturyLink in this proceeding comports with the well-established rule that the telephone utility has the burden of proof “with respect to all issues of material fact” and proof is required by a “preponderance of the evidence.”⁴
5. A regulated utility does not enjoy at any point in a Commission proceeding, a rebuttable presumption of reasonableness that other parties must overcome.⁵ The fact that the Department may not recommend complete disallowance of a petitioner’s requests, even though a petitioner did not show its entitlement to its entire request, does not mean that at any point in this proceeding the burden of proof shifts to the Department.⁶
6. Minn. Stat. § 237.025 allows a “local exchange carrier,”⁷ (LEC), in exchange service areas (exchanges) where it has received Commission approval to do so, to be regulated as a “telecommunications carrier”⁸ under Minn. Stat. § 237.035, and as a “competitive local exchange carrier” (CLEC) under Minn. Rules 7811.2210 and 7812.2210.⁹
7. To obtain Commission approval in an exchange, a petitioner needs to demonstrate that a sufficient number of households can choose voice service from a facilities-based provider in that exchange. Specifically, a petitioner bears the burden of demonstrating, to the Commission’s satisfaction, that for each exchange included in its petition:
 - The local exchange carrier serves fewer than 50 percent of the households; and
 - At least 60 percent of households in that exchange can choose voice service from at least one unaffiliated competitive service provider.

⁴ *In re AT&T Communications of the Midwest, Inc.’s Petition for Arbitration with Contel of Minnesota, Inc. d/b/a GTE Minnesota under Section 252(b) of the Federal Telecommunications Act of 1996*, Order Resolving Arbitration Issues and Opening Cost Proceeding, MPUC Docket P-442, 407/M-96-939, p. 5 (December 12, 1996) (“1996 GTE Arbitration Order”).

⁵ *In re Northern States Power Co.*, 416 N.W.2d 719, 725-726 (Minn. 1987).

⁶ In its 1985 rate case, *In re Northern States Power Co.*, 416 N.W.2d 719, 725-726 (Minn. 1987.)Xcel argued that once it produced evidence on a particular issue, it had created a “rebuttable presumption of reasonableness” that could only be overcome by competent evidence in rebuttal.” The Commission “rejected that contention” because “the company had at all times the burden of proving the proposed rate change.” The Supreme Court agreed with the Commission. In Minnesota, a utility does not create a presumption of recovery merely by producing evidence.

⁷ A “local exchange carrier” is a telephone company or telecommunications carrier providing local exchange service. Minn. Stat. § 237.01, subd. 8. In this Petition, CenturyLink is the local exchange carrier.

⁸ A “telecommunications carrier” is a person, firm, association, or corporation authorized to furnish one or more of the following telephone services to the public, but not otherwise authorized to furnish local exchange service: (1) interexchange telephone service; (2) local telephone service pursuant to a certificate. Minn. Stat. § 237.01 subd. 6.

⁹ Minn. Stat. § 237.025, subd. 6.

Minn. Stat. § 237.025, subd. 4(1).

8. To be deemed a “competitive service provider” (CSP) within the meaning of the statute, the competitor must be either a wireless provider or, alternatively, a cable or other wireline provider that has two principal attributes: the cable/wireline provider must *own last mile facilities* and *serve more than half* of the households in an exchange. Specifically, a CSP must be: “(1) a wireless voice service provider; or (2) any other provider of local voice service who owns a substantial proportion of the last-mile or loop facilities delivering service to a majority of households in an exchange service area, without regard to the technology used to deliver the service.” Minn. Stat. § 237.025 subd.1 (a).
9. A satellite company, affiliate of the petitioner, or other seller that lacks loop facilities and provides only resold, UNE-P, virtual,¹⁰ or “over-the-top” (OTT) voice services cannot qualify as a CSP even if it serves a majority of households in an exchange. Minn. Stat. § 237.025 subd. 1 (a) (2) (i-v).
10. When evaluating a petition, Minn. Stat. § 237.025 is not to “be construed to provide or imply that a local exchange carrier regulated under this section is exempted from Minnesota Statutes and Minnesota Rules applying to competitive local exchange carriers,” such as Minn. Rules, Ch. 7810, which sets out service quality rules for telephone utilities.¹¹
11. Accordingly, except as expressly exempted by Minn. Stat. § 237.025, a petitioner remains subject to the laws applicable to all telecommunications carriers and CLECs, and bears the burden of demonstrating, that for each exchange included in the petition, that granting the petition as to any exchange will not obstruct compliance with the applicable Minnesota laws and rules. These laws and rules include not only Minn. Rules chapter 7810, regarding service quality, but also the statutory requirements that define the public interest the Commission protects.
12. Minn. Stat. § 237.011 provides the following public interests goals to be considered by the Commission in its oversight of telecommunications:
 - A. Supporting universal service;
 - B. Maintaining just and reasonable rates;

¹⁰ Wireless providers that resell voice services purchased at wholesale are mobile “virtual” network operators (MVNOs). https://en.wikipedia.org/wiki/Mobile_virtual_network_operator

¹¹ The statute states that such laws and rules as include but are not limited to:

- Sections 237.50 to 237.56 (regarding the telecommunications relay services , telecommunications access fund);
- Sections 237.66, 237.661, 237.663, and 237.665 (regarding notices to local service customers and prohibitions against unauthorized charges);
- Sections 237.69 to 237.71 (regarding the telephone assistance plan); and
- Minnesota Rules, chapter 7810 (including all service quality rules).

- C. Encouraging economically efficient deployment of infrastructure for higher speed telecommunication services and greater capacity for voice, video, and data transmission;
- D. Maintaining or improving quality of service;
- E. Promoting customers choice;
- F. Ensuring consumer protections are maintained in the transition to a competitive market for local telecommunications service.

13. In weighing a petition, public interests required by law and rule to be protected include, at minimum, maintaining the existing quality of service¹² and consumer protections such as preserving the state's commitment to universal service (Minn. Stat. §§ 237.16 subd. 1 (a) (2); 237.16 subd. 8 (a) (8)) at affordable rates (Minn. Stat. §§ 237.16 subd. 1 (b) and subd. 8 (a) (8)) including access to voice-grade service, 911 emergency service¹³ and the telecommunications relay service (Minn. Stat. § 237.025 subd. 8 (a)).

14. The Department states that the Commission may choose not to grant a petition if a petitioner fails to meet its burden of demonstrating, to the Commission's satisfaction, that for each exchange included in the petition, households continue to receive the benefit of Minnesota's laws.

15. The Legislature has further detailed that the telecommunications services to be protected as part of "universal service" include, "*at a minimum, single-party service..., line quality capable of carrying facsimile and data transmissions; equal access; emergency services number capability; statewide telecommunications relay service [TRS] for people with hearing loss¹⁴; and blocking of long-distance toll services.*" Minn. Stat. § 237.16 subd. 9.

16. TRS allow an individual with a communication disability¹⁵ to use telecommunications services in a manner that is functionally equivalent to the ability of an individual who does not have a communication disability. Minn. Stat. § 237.50 subd. 11.

17. The Department states that the Commission may choose not to grant a petition if a petitioner fails to meet its burden of demonstrating, to the Commission's satisfaction, that for each

¹² See also Minn. Stat. § 237.16 subd. 8(a) (9) (requires Commission to prescribe standards for quality of service) and Minn. Rule 7810.5500 (requires telephone utilities to "provide satisfactory transmission ... at adequate volume levels and free of excessive distortion" and "noise and cross talk" that do not "impair communications.")

¹³ See also Minn. Stats. Ch. 403 and § 237.16 subd. 8(a) (10) (Commission must provide for the "continued provision of local emergency telephone services under chapter 403").

¹⁴ Protected telecommunications relay services (TRS) are the telecommunications transmission services required under Federal Communications Commission (FCC) regulations at 47 CFR pts. 64.604 to 64.606.

¹⁵ "Communication disability" refers to a hearing loss, speech disability, or physical disability that makes it difficult or impossible to use telecommunications services and equipment. Minn. Stat. § 237.50 subd. 3.

exchange included in the petition, households continue to receive Minnesota's statutory minimums for universal service.

18. The minimal call quality, for all calls, requires "satisfactory transmission of communications between customers in their service areas. Transmission shall be at adequate volume levels and free of excessive distortion. Levels of noise and cross talk shall be such as not to impair communications." Minn. Rule 7810.5500.

19. The Department states that the Commission may choose not to grant a petition if a petitioner fails to meet its burden of demonstrating, to the Commission's satisfaction, that for each exchange included in the petition, the purported CSP is capable of providing this minimum satisfactory call quality.

B. CENTURYLINK HAS NOT SATISFIED THE "FIFTY PERCENT TEST" IN ALL EXCHANGES BY DEMONSTRATING THAT IT SERVES FEWER THAN 50 PERCENT OF THE HOUSEHOLDS.

1. The Fifty Percent Numerator: In All Exchanges CenturyLink Understated the Number of Wireline Households CenturyLink Serves.

20. For the Commission to grant a petition under Minn. Stat. § 237.025 the petitioner must demonstrate to the Commission's satisfaction that in each exchange service area (exchange), the petitioner serves fewer than 50 percent (50/100ths) of the households. Gullikson Aff. ¶ 23. To calculate the ratio of CenturyLink-served households to total households, the numerator of the ratio is the number of households CenturyLink serves in a wire center and the denominator is the total number of households in a wire center:

$$\frac{\text{Households served by CenturyLink}}{\text{Total households}}$$

Gullikson Aff. ¶ 25.

21. The Department demonstrated that CenturyLink's Petition has both understated the numerator and overstated the denominator of this ratio. .

A. When Counting the Number of Access Lines It Sells to Households, CenturyLink Failed to Count Access Lines CenturyLink Sells to Farmers and Other Household Business Operators Who Subscribe Only to a Business Line.

22. To determine the numerator of the ratio of CenturyLink-served households to all households in an exchange, one needs to know how many households are served by CenturyLink. A

household is “served” when CenturyLink supplies the facilities, or “access line,” to the household to enable the household to receive voice service¹⁶. Gullikson Aff. ¶ 30.

23. The Department stated that CenturyLink failed to account for CenturyLink’s provision of service to households from which a small business is operated and the household chooses to subscribe to a business line, and not to subscribe to a second, residential line. Farmers, day care operators, plumbers and tax filing businesses are typical examples of end users who may subscribe to a business line in order to receive a business listing in the telephone directory and a listing in the a yellow pages, as well as access to yellow pages advertising, and have no need to separately subscribe to residence service. Gullikson Aff. ¶ 33.
24. The Department stated that, although this is a reasonable, ordinary practice, CenturyLink did not identify determine or estimate the number of households that purchase only a business line and no separate residence line. The CenturyLink Petition understated the count of households CenturyLink serves in each wire center by failing to count these households. Gullikson Aff. ¶ 33.
25. Mr. Lubeck suggested that the burden of proof should be shifted to the Department to prove the count of these lines: “Ms. Gullikson does not provide support for her apparent contention that such customers will exist in sufficient numbers in particular wire centers to make a difference in the outcome of this analysis.” Lubeck Second Aff. ¶ 22.
26. Such a shift of the burden of proof is not consistent with Minn. Stat. § 237.025, subd. 5, which states “[t]he burden of proof to show that the competitive criteria of subdivision 4 have been met shall be on the petitioning local exchange carrier.”
27. The Department stated that, in the limited time available for the Department to analyze and respond to CenturyLink’s Petition, the Department was unable provide a reliable estimate of the number of home-based businesses that subscribe to business lines in each of the CenturyLink exchanges at issue in the Petition, or to reflect in the Gullikson Affidavit an adjustment for those home-based businesses to the CenturyLink numbers.¹⁷
28. The Commission finds that because CenturyLink failed to include *any* home-based business lines, however, the Department correctly concluded that CenturyLink understated the number of households to which it provides service in all wire centers. Gullikson Aff. ¶ 34.

¹⁶ Sometimes, a household may subscribe to more than one line. In the case where multiple lines serve a household, the Commission need only count the first, or “primary access” line. Gullikson Aff. ¶ 30.

¹⁷ CenturyLink Resp. to DOC IR No. 43 stated “. . . If the household only has a business line, then CenturyLink does not provide residential service at the location and would not include this location as a residential household with service from CenturyLink.” The Company provided no other information from which a reliable estimate could be made.

B. When Counting the Number of Access Lines It Serves to Households, CenturyLink Failed to Count Any of the UNE-P or Resale Lines It Provides.

29. UNE-P lines¹⁸ are finished services that CenturyLink sells at wholesale to CLECs, for the CLECs to market and sell to end user customers.¹⁹ Resale lines are finished services sold to wholesalers who resell them to end users in a manner similar to UNE-P lines.²⁰
30. These UNE-P and discounted resale services exist because CenturyLink is required by law²¹ to sell its “last mile” telephone plant to other phone companies, which in turn provide marketing, sales and service, and billing to the end user households.
31. CenturyLink’s Petition omitted resale and UNE-P lines in its counts of the number of households it serves.
32. The Department stated that, to accurately count the number of households that CenturyLink serves in each wire center required CenturyLink to include in its count the UNE-P and resale lines it sells in the wire center.

¹⁸ UNE-P lines are also known as CenturyLink Local Service Platform (CLSP) products.

¹⁹ CenturyLink™ Local Services Platform (CLSP™) products provide local exchange telecommunications services to end-users on behalf of Competitive Local Exchange Carriers (CLECs) at competitive wholesale commercial rates. Functionally equivalent to comparable CenturyLink retail products, CLSP are finished services that require neither CLEC collocation nor other network involvement and are combinations of the following network elements:

- An Unbundled Local Loop (UBL); A facility or transmission path between the Distribution Frame or equivalent in the CenturyLink Central Office (CO) and the Demarcation Point at the end-user premises;
- A Local Switching Network Element Line Side or Trunk Side facility (switch port) including without limitation the basic switching function, plus the features, functions, and all vertical features that are loaded in CenturyLink's End Office Switch; and,
- The Shared Transport Network Element: The collective interoffice local transmission facilities between End Office Switches, between End Office Switches and Tandem Switches, and between Tandem Switches. CLEC traffic will be carried on the same facilities that CenturyLink uses for its own traffic.

From: <http://www.centurylink.com/wholesale/pcat/localservicesplatform.html>.

²⁰ Resale - Non-Facility Based Competitive Local Exchange Carrier (CLEC) products and services include nearly all of CenturyLink's retail telecommunications offerings provided in the Wholesale channel, generally with a Wholesale discount, for resale to your business and residential end-user customers. Resale products and services are provided in our CenturyLink QC to certified CLECs and Resellers under terms and conditions and rates of an Interconnection Agreement (ICA) or Commercial Agreement.

From: <http://www.centurylink.com/wholesale/pcat/resale.html>.

²¹ 47 U.S.C. § 271.

33. In its Response to Department Information Request (IR) No. 28, CenturyLink disclosed that in the various wire centers that are part of the Petition, a material percent of its lines are UNE-P and resold lines. Gullikson Aff, HSTS Errata Attach. 13 (CenturyLink Resp. to IR No. 28A and B) and HSTS Attach. 6, cols. E and F.
34. Because CenturyLink has the burden of proof, Ms. Gullikson concluded that, if CenturyLink's rebuttal continued to fail to distinguish between business and residential UNE-P lines, then the lines should be treated by the Commission as residential lines. Gullikson Aff. ¶ 35.
35. CenturyLink, in its rebuttal, did not provide data to distinguish between business and residential UNE-P lines.
36. Through discovery, however, Department obtained data to show that the resale lines identified in Gullikson Affidavit HSTS Attachment 6 are entirely residential; Gullikson Affidavit Errata Attach 13 (CenturyLink Resp. to DOC IR No. 28A) indicates that CenturyLink maintains, a universal service ordering code (USOC) for resold lines that distinguishes sales to residential customers from sales to business customers.
37. Gullikson Affidavit HSTS Attachment 6 includes only these residential resale lines. The Department concluded that the Commission should add these resale lines to the count of CenturyLink-served residential lines in each exchange.
38. Ms. Gullikson also concluded that it is reasonable to add these UNE-P and resale lines to the "lines for households with CenturyLink Service," because the voice service received by the household is provided by CenturyLink. Gullikson Aff. ¶ 36.
39. CenturyLink's rebuttal disputed Ms. Gullikson's conclusion, arguing that for resold and UNE-P lines, CenturyLink is the facilities provider, not the seller of the end user customer's actual phone service, so these residential lines should not be treated as lines provided by CenturyLink, but as lines provided by a competitor. Lubeck Aff. ¶ 23.
40. The Department responded that CenturyLink's reasoning is incorrect for two reasons. First, the Department said, the statute specifically prohibits CenturyLink's proposed classification of UNE-P and resold lines as those of a CSP: Minn. Stat. § 237.025, subd. 1 (2) (iii) shows that the legislature did not consider these types of providers, who lack facilities, to be capable of providing meaningful competition, by specifying that "'competitive service provider' does not include... a competitive local exchange carrier... who does *not own a substantial proportion of the last-mile or loop facilities* over which they provide local voice service."
41. Second, Minn. Stat. § 237.025 requires the petitioner to prove that it "*serves* fewer than 50 percent of the households;" the statute does not distinguish sellers from re-sellers of the service. The Department explained that, in the case of UNE-P and resold lines, the actual telecommunication service is provided entirely by CenturyLink, with the intermediary UNE-P or resale company providing only the ancillary marketing, sales and billing functions, not

the actual service. Lacking facilities, UNE-P and re-sellers are incapable of providing actual service.

42. The Commission should reject CenturyLink's rebuttal argument that it should be deemed not to serve UNE-P and resold services.
43. The Commission finds that Department Witness Ms. Gullikson correctly concluded that the Commission should include UNE-P and resale lines when counting the number of households served by CenturyLink lines. Gullikson Aff. ¶ 35.

C. The Complication of Unexplained Differences Between Messrs. Brigham and Lubeck's Count of Lines Served by CenturyLink.

44. Messrs. Brigham (in his Exhibit RHB-3) and Lubeck (in his Exhibit AL-2) provided two different sets of CenturyLink access line counts regarding the numbers of households served by CenturyLink in each exchange.
45. The Gullikson Affidavit Attachment 6, Column B shows the counts of CenturyLink primary access lines to households as reported by Mr. Brigham in his Exhibit RHB-3. The CenturyLink primary access line counts to households as reported by Mr. Lubeck are shown in Column K of HSTS Attachment 6. Gullikson Aff. ¶ 32.
46. In response to Department discovery, CenturyLink stated: "the residential primary access lines shown in Confidential Exhibit RHB-3 are in error. CenturyLink is filing a corrected version of this exhibit." Gullikson Aff. ¶ 30, Attach. 5 (CenturyLink Resp. to DOC IR No. 4).
47. CenturyLink thereafter did not provide any corrected version of Exhibit RHB-3, has not disclosed what the claimed "error" is, nor otherwise disclosed what the count/miscount was based on. Gullikson Aff. ¶ 31
48. Mr. Lubeck's subsequent Affidavit dated November 18, 2016 did not address the issue, but it provided a second count of CenturyLink access lines to households in each exchange. Gullikson Aff. ¶ 31.²² Mr. Lubeck's Second Affidavit did not file a corrected version of Exhibit RHB-3, did not disclose what the claimed "error" was, or otherwise disclose what the count/miscount was based on. Instead, it purported to shift to the Department the burden of establishing the CenturyLink primary line access count, chiding the Department for drawing

²² To further complicate its proffered evidence, CenturyLink Exhibits RHB-2, RHB-3, RHB-6 contain inconsistent counts of CenturyLink access lines, described in slightly different terms. RHB-2 calls its count "Residential Primary Access Lines"; RHB-3 calls its count, "Residence Household with CenturyLink Voice Service (Primary Access Lines); and RHB-6 calls its count, "Primary Res Access Lines."

to the Commission's attention "the inaccurate primary line counts from Exhibit RHB-3" used to determine whether each exchange service area met the 50 percent test.²³

49. The Department, stated that, in light of the above, it was unable to determine whether the counts of primary access lines of Messrs. Lubeck and Brigham were accurate or reliable; it continued to question what caused CenturyLink's line counts to differ so greatly between Messrs. Brigham and Lubeck and why CenturyLink continued not to disclose the reason for the claimed error after it had been repeatedly questioned. Gullikson Aff. ¶ 31.

D. Summary: The Numerator of the "50 Percent Test" Should Include the UNE-P, Resale, and Business Lines In Each Exchange.

50. The Gullikson Affidavit HSTS Attachment 6, Columns G and H (Brigham's counts) and M and N (Lubeck's counts) summarized the count of UNE-P and resale lines by wire center as well as the impact their inclusion has on whether CenturyLink meets the statutory criteria for market regulation in several exchanges. Gullikson Aff, HSTS Errata Attach. 13 (CenturyLink Resp. to DOC IR No. 28A and B) and Attach. 6, cols. E and F.
51. The Department stated that, if the Commission accepts Mr. Brigham's counts of lines served by CenturyLink, but adds UNE-P lines and resale lines, there are fourteen wire centers (eleven exchanges),²⁴ where CenturyLink serves more than 50 percent of the households. Gullikson Aff. ¶ 37, HSTS Attach. 6, Col. H. (These are Cook, Tofte, Grand Marais, Swanville, Island Lake, Biwabik, Silver Bay, Pike Lake, Finland, Pine City, Coleraine, Comstock, Carlton, and Mora.)
52. The Department stated that if the Commission accepts Mr. Lubeck's count of Primary Access lines, when UNE-P and resale lines are included, there are five wire centers/exchanges where CenturyLink serves more than 50 percent of the households. Gullikson Aff. ¶ 37, HSTS Attach. 6, Col. N. (Cook, Tofte, Grand Marais, Swanville, and Island Lake.)
53. The Commission finds that CenturyLink failed to disclose in its Petition, and subsequently continued to understate the number of households it serves by failing to include UNE-P and resale lines that provide voice service to households.
54. The Commission will include the UNE-P and resale lines when determining the number of households served by CenturyLink. Gullikson Aff. ¶ 38.
55. The Department stated that the Commission should consider whether CenturyLink has satisfied 50 percent statutory test in additional exchanges, where CenturyLink has only marginally satisfied the "50 percent test," in light of CenturyLink's failure to provide an

²³ Lubeck Second Aff. at ¶ 21

²⁴ The wire centers of Island Lake and Pike Lake are part of the larger Duluth exchange which serves, in aggregate, fewer than 50 percent of the households in the exchange. The wire centers of Silver Bay and Finland are two wire centers that constitute one exchange (Silver Bay).

accounting -- or even an estimate -- of households that purchase only CenturyLink business lines. Gullikson Aff. ¶ 39.

56. The exchanges that only marginally satisfy the 50 percent test are identified in **Table 2**, of the Department's Initial Brief.
57. The Commission agrees that, in light of CenturyLink's failure to provide an accounting -- or even an estimate -- of households that purchase only CenturyLink business lines, CenturyLink has not satisfied 50 percent statutory test in additional exchanges identified in **Table 2**.

2. The Fifty Percent Denominator: CenturyLink's Count of Households Is Overstated In Four Wire Centers.

58. The Petitioner must demonstrate to the Commission's satisfaction that it serves fewer than 50 percent of the households in each exchange. Gullikson Aff. ¶ 23. To determine the percentage of households in an exchange that are served by CenturyLink, one calculates the ratio of CenturyLink-served households to total households. Gullikson Aff. ¶ 25. The numerator of the ratio is the number of households CenturyLink serves and the denominator is the total number of households in a wire center:

$$\frac{\text{Households served by CenturyLink}}{\text{Total households}}$$

59. The Department identified four wire centers where CenturyLink's evidence and argument inflated the denominator of this ratio to reduce the percentage of households served by CenturyLink to less than 50 percent.
60. To set the denominator of the ratio, the Commission must determine the number of households in a wire center.
61. Minn. Stat. § 237.025 does not define the term "household." (Gullikson Aff. ¶ 26).
62. CenturyLink and the Department agreed that the term "household" should have the 1 meaning, as used by the federal Census Bureau. That definition of household refers to *people* who occupy a usual place of residence²⁵ That is, "households" consist of people, not vacant properties. Lubeck Aff. fn. 4; Gullikson Aff. ¶ 26-27, 29.

²⁵ A household includes all the people who occupy a housing unit *as their usual place of residence*. A household includes the related family members and all the unrelated people, if any, who share the housing unit. *The count of households excludes group quarters.* <https://www.census.gov/glossary/>. *Households do not include vacant housing units.* Lubeck Aff., p. 4, fn. 4.

63. In four wire centers, Cook, Grand Marais, Tofte and Island Lake, CenturyLink serves the majority of households, and, as the dominant provider, does not meet the 50 percent test.²⁶
64. CenturyLink proposes in these wire centers that the term “household” in Minn. Stat. 237.025 subd. 4 should be construed to mean “housing unit,” also as used by the Census. Gullikson Aff. ¶ 27 (*citing* Lubeck Aff. ¶¶ 9-10).
65. The Department disagreed. The Department stated that the term “housing unit” refers not to people living together, but to the buildings or other “living quarters” “where people live, stay, or *could* live...[including] structures intended for nonresidential use as well as tents, vans, shelters for people without housing...and so forth...”²⁷
66. The Department noted that, as applied in northern Minnesota, where the four affected wire centers are located, the term “housing unit” would include not only the second homes and Minnesota “snowbird” summer residences, but also includes the rustic and off-grid cabins, tent camp grounds, mobile homes and pop-up trailers, seasonal hunting and fishing shacks, and other such places where people live or “could live” in temporary “living quarters” the term refers to both occupied and vacant real estate.²⁸
67. The Department disagreed that the term “household” can or should be construed to mean non-household-occupied “housing units”. Such a construction would not comport with ordinary rules of statutory construction and would result in an inappropriate inflation -- without evidentiary support for the inflation -- of the denominator of the ratio of CenturyLink-served households to all households in the four wire centers.

A. Statutory Interpretation of the Term “Household” to Mean “Housing Unit” is Inappropriate.

68. Minn. Stat. § 237.025 states that a petitioning local exchange carrier must demonstrate to the commission's satisfaction that: “it serves fewer than 50 percent of the households...and at least 60 percent of households...can choose voice service from at least one additional...provider.”
69. When attempting to apply a law, the decision-maker attributes to words their common and ordinary meaning²⁹ and construes a statute to give effect to all its provisions.³⁰

²⁶ Gullikson Aff. HSTS Attach. 6, cols. H (Mr. Brigham’s count of lines) and N (Mr. Lubeck’s count).

²⁷ <https://www.census.gov/glossary/> (emphasis added.)

²⁸ A housing unit is a “vacant housing unit” if no one is living in it at the time of enumeration, which is April 1 of each year when the census is taken. <https://www.census.gov/glossary/>.

²⁹ Minn. Stat. § 645.08 (1) states that, “words and phrases are construed according to rules of grammar and according to their common and approved usage....”

³⁰ *Tuma v. Comm'r of Econ. Sec.*, 386 N.W.2d 702, 706 (Minn. 1986); Minn. Stat. § 645.16 (1996).

70. CenturyLink offered no argument or evidence to support its claim that the legislature meant its directive in Minn. Stat. § 237.025, that “households” be able to “choose voice service,” to refer, in selected geographic locations, not to people in a household making choices, but to unoccupied living quarters.
71. The Department stated that ordinary statutory interpretation is contrary to CenturyLink’s argument.³¹
72. The Department stated that the meaning to which CenturyLink agreed as to other exchanges, the census definition of “household,” is reasonable because the census definitions are used not only by the federal government, but are also widely and commonly used in Minnesota, by the Minnesota State Demographer, who in turn makes census data, and Minnesota projections based on census data, widely available to other Minnesota agencies and political subdivisions,³² and, according to the State Demographer, to generally, “inform policy-making and planning efforts at the State Capitol, state agencies and beyond.”³³
73. CenturyLink’s own witness Mr. Lubeck agreed that census definition of “household” is appropriate for purposes of Minn. Stat. § 237.025,

because the definition fits neatly with the test set forth by the legislature in Minn. Stat. § 237.025 Subd. 4 . . . Census Bureau definitions are consistent with the approach dictated by the legislation. Census Bureau data on household units is publicly available and is widely used and generally accepted for academic, government and industry purposes. The Census Bureau is independent third party data that is also granular enough to be largely matched to CenturyLink’s exchange boundaries.

Gullikson Aff. ¶ 28, Attach. 4 (CenturyLink Resp. to DOC IR No. 30).

74. The Commission finds that the term “households” in Minn. Stat. § 237.025, when referring to these four wire centers, means “households” as used by the census, and does not mean “housing unit as used by the census.”

³¹ Minn. Stat. § 645.08 (1) states that, “words and phrases are construed according to rules of grammar and according to their common and approved usage....”

³² The annual population and “household estimates” are “used by Minnesota counties, cities and townships” and to “direct the flow of various state dollars, such as the Local Government Aid program.” <http://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/>

³³ <http://mn.gov/admin/demography/about/our-work/>

B. Use of the Term “Housing Unit” as Proposed By CenturyLink Would Understate the Percentage of CenturyLink-served Households By Unreasonably Inflating the Denominator of the Ratio, Without Evidence to Support the Inflation.

75. The Department stated that if the Commission used the term “housing unit” as proposed by CenturyLink in the four wire centers, the unoccupied housing quarters reported in the last census would be included in the count of “all households”, and would unreasonably reduce the percentage of CenturyLink-served households in the four wire centers.
76. In four wire centers, Mr. Lubeck’s first Affidavit proposes to redefine “household” to mean “housing unit,” and to employ a complex formula for dividing primary access lines by housing units in order to reduce the percentage of CenturyLink-served households below 50 percent.
77. Mr. Lubeck argued that if there are more housing units than households in the four wire centers, there may be too many lines in the numerator and not enough households in the denominator. Mr. Lubeck stated, “[t]his anomaly can be corrected by removing the [CenturyLink] primary access lines that are not associated with a household from the numerator.” Lubeck Aff. ¶ 9.
78. The Department agreed that it is appropriate to remove the CenturyLink primary access lines that are not associated with a household from the numerator.³⁴
79. CenturyLink did not remove the CenturyLink primary access lines that are not associated with a household from the numerator. Mr. Lubeck instead proposed an allocation formula for estimating the number of non-household-occupied “housing units” served by CenturyLink. *Id.*
80. The Department said that Mr. Lubeck’s formula is unreasonable because it erroneously assumes that in living quarters with no household – the summer homes, cabins, camping grounds, mobile homes, trailers, seasonal hunting and fishing shacks, and other such places where people “could live” temporarily-- subscriptions to CenturyLink primary access lines exist in the same proportion as “households” subscriptions to CenturyLink primary access lines. *Id.*
81. The Department provided a hypothetical, in which a wire center contained 100 households and 100 non-household-occupied seasonal living quarters in which CenturyLink sells 52 access lines; under CenturyLink’s proposal the Commission would infer that 26 access lines are in households and 26 access lines are in the summer homes, cabins, camp grounds, mobile homes, trailers, and seasonally-used shacks. CenturyLink provides no evidence to

³⁴ This would entail, generally, removing from the numerator the seasonally disconnected or suspended services.

demonstrate the reasonableness of this allocation, which, in the view of the Department didn't "pass the smell test."

82. The Department said it is transparently more reasonable to assume that residents' households would have a greater percentage of access lines than would the occasional occupants of summer homes, cabins, camp grounds, mobile homes, trailers, and seasonally-used shacks. In the above example, for instance, it may be more reasonable to infer that the substantial majority of the 52 lines serve residents' households and that relatively few access lines are purchased to serve the non-household-occupied living quarters located in "housing units."
83. The Department said Mr. Lubeck provided no quantitative data, but only loose conjecture to support his premise that a correction is needed to account for primary access lines serving "non-households," where he proffers only a hypothetical situation:

If a customer lives in Minneapolis but also has a cabin in Tofte, the Census Bureau ...will count the Minneapolis home as a household, not the Tofte home, even though the Tofte home may have CenturyLink voice service working all year.

84. Lubeck Aff. ¶ 8. The Department noted that the Lubeck Affidavit loosely characterized the situation as one in which "customers subscribe to CenturyLink voice service for many of these dwellings" not occupied by a household, but Mr. Lubeck did not quantify whether "many" is a material or significant number.
85. The Commission finds that there is no data in the record from which the Commission can reasonably estimate whether a material number of access lines are seasonally used by non-households in the four wire centers.
86. CenturyLink has the burden to demonstrate satisfaction of the 50 percent test, and has not done so. For these reasons, the Commission will not allow CenturyLink to inflate the denominator of the ratio of CenturyLink served households to all households by defining "households" to mean "housing unit" in the four wire centers.
87. The Commission rejects CenturyLink's claim that in these wire centers the term "households" in Minn. Stat. § 237.025, refers, not to people who "can choose voice service," but to housing units.
88. The Commission agrees with the Department recommendation that the Commission find that, in the four wire centers of Cook, Grand Marais, Tofte and Island Lake³⁵, CenturyLink did not satisfy the 50 percent test.

³⁵ Island Lake, as part of the Duluth exchange, does not need to be included, except that CenturyLink lists all its calculations by wire center rather than by exchange.

C. The Petition Should Not Be Granted With Respect to Exchanges Where CenturyLink Failed to Demonstrate Satisfaction of the 60 Percent Test of Minn. Stat. § 237.025.

89. The Department said that there are substantial flaws in CenturyLink’s Petition with respect to the supporting documents and the methodologies CenturyLink used to demonstrate it met the 60 percent test of Minn. Stat. § 237.025. The Department said that when these flaws are accounted for, CenturyLink failed to meet its burden to establish the statutory requirements in numerous specific additional wire centers.
90. The Department said that in other wire centers, where the precise impact of CenturyLink’s flawed methodologies is not shown and cannot be determined for lack of supporting data, it is doubtful whether the criteria are met.
91. The Department said that because of the flaws in CenturyLink’s methodologies, in wire centers where CenturyLink minimally appears to meet the statutory 60 percent test, the Commission should find that CenturyLink has failed to meet its burden of proof.

1. The Numerator of the 60 Percent Test Is Overstated In Exchanges Where CenturyLink’s Methods Inflated the Percentage of Households With Access to A Wireline Competitive Service Provider (CSP).

92. To succeed on the Petition, CenturyLink must demonstrate to the Commission’s satisfaction that more than 60 percent of the households in each of its exchanges can choose voice service from a “competitive service provider”.
93. The Department discussed the statutory definition of a competitive service provider (CSP). With respect to the wireline service discussed in this section, a CSP is defined in Minn. Stat. § 237.025 subd. 1 (a) (2) to mean: “any other provider...who owns...the last-mile or loop facilities delivering *service to a majority of households* in an exchange service area.”
94. The Department observed that CenturyLink presented no data from which the Commission can determine that any of the cable and other wireline companies to which CenturyLink points actually own facilities delivering service to more than half (i.e., “a majority”) of households in each exchange in the Petition.³⁶

³⁶ Brigham Aff., p. 8, ¶ 12 (Mr Brigham conceded that, “CenturyLink does not have data that shows the exact locations of all households that are passed by, and can order voice service from, cable providers in each exchange service area.”)

95. CenturyLink’s model for “wireline” situations uses two data inputs: (1) census data on Minnesota households and (2) the FCC’s public data on “unserved” census blocks³⁷ and a methodology for associating these two data sets to CenturyLink exchanges.
96. Mr. Lubeck used what he called the “centroid” method to assign Minnesota census blocks and their associated households to CenturyLink exchanges. When a census block straddles two or more exchanges, the centroid method assigned the block to one exchange. Lubeck Aff. ¶ 6 fn.5.
97. To establish households served by a competitor in each exchange, the model used the FCC data set listing unserved census blocks to identify each census block that was *not* unserved (i.e. “served,”) meaning that one household in that census block can receive broadband from a cable company or other wireline broadband provider.³⁸
98. Next, --and this is where the Department saw the model become problematic-- the model *assumed* that wherever one household in a census block is served by a broadband provider, all households in that census block could receive voice service from a broadband provider.³⁹
99. Finally, the model totaled these assumed-to-be-broadband-served households in each exchange, and divided that number by the total households in all census blocks assigned to the exchange, to calculate the ratio of broadband-served households to total households in the exchange.
100. From this, CenturyLink concluded that the condition, that “at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated service provider has been met in 130 of Century QC’s wire centers in Minnesota.” Lubeck Aff. ¶ 18.
101. Because CenturyLink has 154 wire centers in Minnesota, Mr. Lubeck’s math calculation means that 24 wire centers did not meet, by CenturyLink’s standards, the sixty percent statutory criterion as to wireline service. Gullikson Aff. ¶ 41.
102. The Department said that CenturyLink’s model is significantly flawed in four respects.

³⁷ Facilities-based broadband providers are required to file data with the FCC twice a year (Form 477) on where they offer Internet access service at speeds exceeding 200 kbps in at least one direction. <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>

³⁸ The Department served an IR that asked what FCC Form 477 data CenturyLink used to create the exhibits that CenturyLink states supports the households served by cable and other wireline. CenturyLink responded that the same underlying data was used for both cable and other wireline services.

³⁹ Mr. Lubeck assumed that “[i]f the FCC data shows that cable broadband service is available in a census block, all of the households in the census block are considered to have the option of ordering voice service from a cable provider.” Lubeck Aff., p. 11, fn. 14.

103. First, Minn. Stat. § 237.025 subd. 1 (a) (2) defines the CSP as, “any other provider...who owns... “a substantial proportion of the last-mile or loop facilities *delivering service to a majority of* households in an exchange service area.” The Department said that CenturyLink’s method for identifying wireline CSP-served households is inconsistent with this statutory definition, and CenturyLink has presented no data from which the Commission can determine that each of the competitors to which CenturyLink points actually owns facilities delivering service to more than half (i.e., “a majority”) of the households in each exchange at issue.
104. Second, the Department said, CenturyLink’s assumption that 60 percent of households can choose voice service is unsupported and plainly in error. The Department noted that the FCC’s Form 477 data does not, by itself, demonstrate availability of service to all households in a census block because the FCC’s public Form 477 data, which distinguishes “unserved” census blocks (where no household can receive broadband service) from “served” census blocks (where one household in the block can receive broadband service) does not support an inference that all households in a “served” census block can receive broadband internet access service from that provider. Gullikson Aff. ¶ 42-43. The Department noted that the CenturyLink model relies on the accuracy of this assumption.
105. Third, CenturyLink provided no support to show that a provider that offers broadband internet access service necessarily offers voice service. *Id.*

A. CenturyLink Did Not Identify Wireline CSP-Served Households Inconsistent With Minn. Stat. § 237.025 subd. 1 (a)(2).

106. The Department said that CenturyLink failed to show that 60 percent of households in each of its exchanges can choose voice service from a CSP, because CenturyLink appeared to have disregarded the statutory requirement that a cable or broadband provider, to be deemed a CSP under Minn. Stat. § 237.025 subd. 1 (a) (2), must own “a substantial proportion of the last-mile or loop facilities *delivering service to a majority of households* in an exchange service area.”
107. The Department observed that CenturyLink presented no data from which the Commission can determine that the competitors to which CenturyLink points actually own facilities delivering service to more than half (i.e., “a majority”) of households in each exchange in the Petition. The Department observed that CenturyLink attempted to circumvent this statutory requirement in two ways.
108. First, instead of presenting data to show that a competitor in each CenturyLink exchange is a CSP (that is, that each competitor has a network that reaches over half the households in each exchange), CenturyLink’s methodology would require the Commission to infer that all households in a “not-unserved” census block can receive service.
109. Second, to be deemed to be a CSP, the statute requires that a competitor must serve the mandatory “majority” of households in each exchange and CenturyLink’s method fails because CenturyLink *aggregated* providers to reach the 60 percent target. That is, none of

CenturyLink's data about competitors serving one household per census block identifies the competitor.

110. The Department observed that from CenturyLink's data, one can only determine that one or more of competitors serve these households. That is, it *could* be one competitor, but it could just as easily be two or ten.
111. The Department said, and the Commission agrees, that CenturyLink's Petition provides only lists of competitors per exchange, and does not identify market shares of the various aggregated competitors in each exchange.

B. The Availability of Broadband Service to One Household In a Census Block Does Not Demonstrate Availability of Broadband to All Households In That Census Block.

112. CenturyLink relied solely on Form 477 data, which identifies census blocks where wireline competitors provide broadband internet access service to one household in the census block, to support its proposed inference that the 60 percent criterion of Minn. Stat. § 237.025 is satisfied. Lubeck Aff. p. 10, fn. 13.⁴⁰
113. CenturyLink presented no evidence to show the reasonableness of this inference.⁴¹
114. In response to the Department's assessment that the CenturyLink Petition was inadequately supported (Gullikson Aff. ¶ 44-50) Mr. Lubeck's sole rejoinder was a retort that, because "the FCC determined that this data is the best data available to make decisions on how to allocate billions of dollars of CAF II support nationwide, CenturyLink determined that the FCC's data was the best source to use in determining where 60% of households had access to a competitive alternative." Lubeck 2nd Aff. ¶ 24.

1. FCC Form 477 Public Data Is Intended to Identify Unserved Census Blocks, Not, As CenturyLink Proposes, to Identify Partially-Served Census Blocks.

115. A key goal of the FCC is to accelerate the deployment of broadband to unserved areas,⁴² and Form 477 data is collected to further that goal. Established in 2000, the Form 477 program is the Commission's primary tool for collecting data about broadband and local telephone networks and services. The program was modified to focus on unserved areas in 2008, when Congress enacted the Broadband Data Improvement Act (BDIA), which required

⁴⁰ See <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477> which is the link Mr. Lubeck provides in fn. 13 on p. 10 of his Affidavit.

⁴¹ The effect of the erroneous inference is to inflate the numerator of the ratio of CSP-served households to all households.

⁴² *Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 07-38, 09-190, 10-132, 11-10; FCC 11-14, 76 Fed.Reg. 10827 to 10852, Feb. 28, 2011 at ¶ 24.

the FCC to compile “demographic information for unserved areas” and specifically required that the FCC compile lists “of geographical areas not served by any provider of advanced telecommunications capability.”⁴³

116. The FCC is highly transparent about the limitations of the Form 477 data it collects, and cautions that the data allows only limited assessments of broadband deployment and availability, because “deployment is overstated when households subscribe in one part of an area ... but service is not offered to households in other parts of the same area.”⁴⁴

117. The FCC specifically warns against using Form 477 data as CenturyLink here proposes to use it:

Fixed providers⁴⁵ file lists of census blocks in which they can or do offer service to at least one location, with additional information about the service.* *Note: A provider that reports deployment of a particular technology and bandwidth in a census block *may not necessarily offer that service everywhere in the block*. Accordingly, a list of providers deployed in a census block *does not necessarily reflect the number of choices available to any particular household or business location in that block*, and the number of such providers in the census block does not purport to measure competition.⁴⁶

118. The CAF II program resulted from the FCC’s unanimous conclusion in 2011 that extending broadband service to communities that lacked any service was one of its core reform objectives; established under the *USF/ICC Transformation Order*,⁴⁷ the CAF program provides subsidies to certain incumbent providers operating in areas *unserved* by any broadband provider.

119. Phase II of the FCC’s Connect America Fund program (“CAF II”) was designed to disburse billions of dollars in subsidies over five years to price cap incumbent local exchange

⁴³ Id. at ¶¶ 12-13.

⁴⁴ Id. at ¶ 33.

⁴⁵ The term “fixed providers” includes both cable and other wireline providers.

⁴⁶ Gullikson Aff. ¶ 44 and Attach. 7 (Fixed Broadband Deployment Data), pp. 1 and 6. *See also* <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>

⁴⁷ Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing a Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform – Mobility Fund; WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51, WT Docket No. 10-208, Report and Order and FNPR, 26 FCC Rcd 17663 (2011) (*USF/ICC Transformation Order*); *aff’d sub nom.*, In re: FCC 11-161, 753 F.3d 1015 (10th Cir. 2014).

carriers (“ILECs”) like CenturyLink that agreed to deploy broadband-capable networks to *unserved* areas the FCC identified.⁴⁸

120. “Unserved” status referred to census blocks where broadband internet access service⁴⁹ was unavailable to any household in the census block from an unsubsidized competitor.

121. The FCC specifically does not concern itself with lack of broadband access service to geographic areas below the census block level; it instructs challengers to an “unserved” designation that, where a census block is shown as served, but the existing provider only serves a portion of the census block, the FCC:

“will not consider challenges below the census block level (i.e., partial census block challenges). Given the number of census blocks involved in Phase II, the [FCC] does not have the resources to address sub-census block level challenges.”⁵⁰

122. The Department said that Mr. Lubeck’s mistaken understanding of Form 477 data appeared to be based on a common propositional fallacy known as “denying the antecedent” (if A, then B; not A, therefore not B.) It is incorrect for Mr. Lubeck to opine that the Form 477 data, which shows a census block to be unserved when no households are served, can be used to demonstrate that when one household is served, then all the households in the census block can be deemed served, and that the households in that census block can choose that CSP.

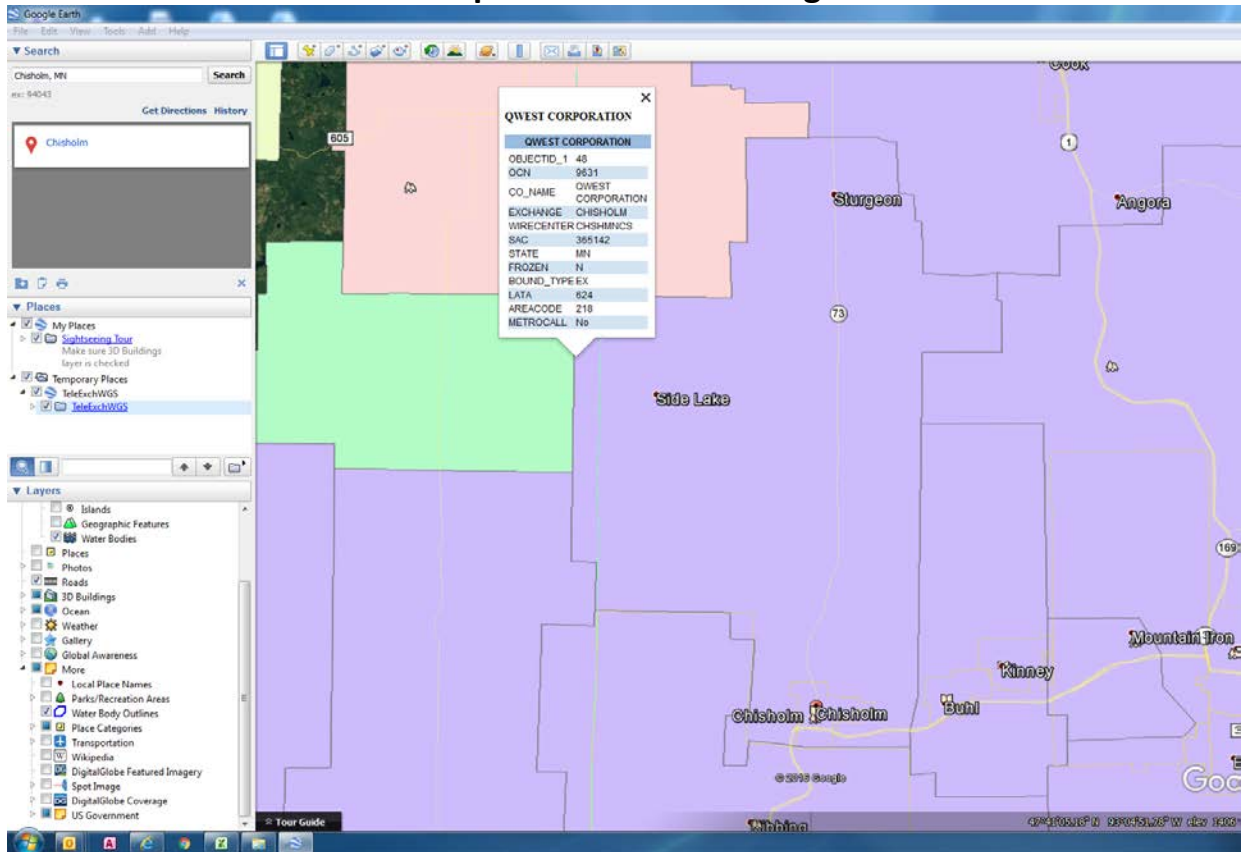
123. The Department provided an example to illustrate the effect of CenturyLink’s erroneous assumption, providing as Attachment A to its Initial Brief a copy of census data Mr. Lubeck provided for the Chisholm exchange, which CenturyLink claimed to be one in which 60 percent of households can choose a CSP, and providing a map of the Chisholm Exchange as follows:

⁴⁸ CenturyLink is eligible for substantial amounts in CAF II funds for Minnesota and received over \$54 million for Minnesota in 2015. Gullikson Aff. ¶ 61. Under terms of the subsidy program, CenturyLink must build out new wireline broadband to 114,739 homes and businesses; providing service to 40 percent of funded locations by the end 2017, 60 percent by the end of 2018, 80 percent by the end of 2019, and 100 percent by the end of 2020. *Id.*

⁴⁹ Broadband internet access service was defined at the time to require at least 4 Mbps download and 1 Mbps upload speeds.

⁵⁰ *A Basic Guide to the Connect America Phase II Challenge Process*, (rev’d July 31, 2014) p. 9, publ. at https://www.fcc.gov/wcb/tapd/Challenge_Process/ChallengeProcessGuide7-31-14.docx

Map of Chisholm Exchange



Source: CenturyLink Resp. to DOC IR. No. 82, Attach 82A (CenturyLink Map Layers)

124. The exchange is mostly rural, but there are three towns in the exchange, Sturgeon, Side Lake and Chisholm. Attachment A shows that there are 2728 households in the exchange. 2303 of the households are located in 208 “served” census blocks – that is, in a block in which one household per block can be served by a cable provider. 761 households are located in 425 “unserved” census blocks—blocks with no competitor.

125. The Department agreed that, with this data, CenturyLink demonstrated that 208 of the 2728 households in the exchange (or 7.6 percent) have access to cable. The Department observed that one cannot determine from the data whether the other 2520 households in the exchange (92.4 percent) can access any alternative voice provider, and that CenturyLink provided no information from which the Commission otherwise might infer or estimate how many of the 2520 households might be able to obtain competitive service.

126. The Department said, and the Commission agrees, it is reasonable to generally assume that homes in denser areas, nearer to a town’s center are more likely to have access, but there is no data in the Petition to help the Commission count the households in the Chisholm exchange (or any other exchange) with *actual* access to competitive voice service.

2. CenturyLink Knows It Is Proposing That the Commission Mis-Apply Form 477 Data.

127. Ms. Gullikson demonstrated in her Affidavit CenturyLink’s awareness that Form 477 data cannot be used in the manner it proposed here. Gullikson Affidavit Attachment 8 is a record of a 2015 complaint to the Department by a resident of rural Brainerd who lacked, but wanted, CenturyLink broadband internet access service, and who pointed to the broadband service area map (as re-published by the Minnesota Department of Economic Development (DEED)) as proof that CenturyLink broadband internet access service should be available to his household. CenturyLink responded to the Department’s inquiry by advising that the DEED broadband map, constructed from public Form 477 data, cannot be relied on to determine whether broadband access is available to a particular location “because the FCC broadband map counts an area as ‘served’ if at least one customer in a census block is served.”⁵¹ Gullikson Aff. ¶ 45.

128. The Department stated, and the Commission agrees, that it is unreasonable that CenturyLink relies of this attribute of the Form 477 data for its own business purposes, to demonstrate that households lack access to broadband service within the so-called “served” census blocks, while urging the Commission to rely on the same public FCC Form 477 data to determine coverage. Gullikson Aff. ¶ 46.

3. CenturyLink failed to supply work papers or other data to support its methodology.

129. The Department said that Lubeck Affidavit Exhibits AL-4, AL-5, AL-7, AL-8, AL-9 and AL-10 purport to show that 60 percent of households can choose cable or other wireline voice options, but CenturyLink provided no work papers or other support, and did not explain the methodology and assumptions to make its conclusions beyond what has been discussed above. Gullikson Aff. ¶ 47.

130. To illustrate, the Department said it served discovery on CenturyLink in an attempt to verify how CenturyLink reached its conclusions that all households in a census block receive voice service if one household in the census block receives voice service. For example, DOC IR No. 35 asked CenturyLink “[if] a cable company is offering broadband/voice service to just one household in a census block, did CenturyLink include all of the households within the census block as having voice service available from the cable company”? CenturyLink’s

⁵¹ Gullikson Aff. Attach. 8. (CenturyLink Response to Citizen Complaint) (CenturyLink stated: “CenturyLink only offers voice service to [Customer identity redacted] address. The broadband map that [Customer identity redacted] viewed shows his area as having broadband available because the FCC broadband map counts an area as ‘served’ if at least one customer in a census block is served. Customers to the South and West of the property receive broadband due to a past build made with stimulus funds. It is possible that future builds pursuant to state and federal programs might result in some level of broadband service being available at this location. However, right now, CenturyLink does not offer such service.)

response did not state whether CenturyLink did or did not include all of the households in the census block, but instead, responded: “[t]he FCC data is provided at the census block level. CenturyLink is not aware of a situation in which a cable company would offer service to a single household within a census block. CenturyLink included every census block where the cable company reported to the FCC that it was competing for services in that census block.” Gullikson Aff. ¶ 48 Attach. 9 (CenturyLink Resp. to DOC IR No. 35).

131. Similarly, in DOC IR No. 38 the Department provided the FCC’s warning advising against misuse of FCC Form 477, as published on the FCC website⁵² discussed above:

“A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block. Accordingly, a list of providers deployed in a census block does not necessarily reflect the number of choices available to any particular household or business location in that block, and the number of such providers in the census block does not purport to measure competition.”

and asked CenturyLink to admit that (a) if a provider reports it offers a particular technology or bandwidth in a census block that it may not offer that service everywhere in the census block, and to admit that (b) the number of such providers does not purport to measure competition. Gullikson Aff. ¶ 49, Attach. 10 (CenturyLink Resp. to DOC IR No. 38 A). CenturyLink denied both requests for admission, and stated: “CenturyLink contends that the FCC data is the best publicly-available data relevant to the criteria set forth in Minn. Stat. § 237.025, subd. 4. More specific information would need to be requested from the providers themselves and is not available to CenturyLink.” Gullikson Aff. ¶ 49, Attach. 10 (CenturyLink Resp. to DOC IR No. 38 C and D).

132. In DOC IR No. 38, the Department asked whether CenturyLink can provide the number and percentage of households in each census block that CenturyLink knows are subject to offers of service by a CSP. Instead of answering the request, CenturyLink asserted: “CenturyLink relies on the FCC data as the best data publically available. CenturyLink is not aware of any data source that would provide conclusive data as to offerings by competitive service provider on a household-by-household basis.” Gullikson Aff. ¶ 50.

133. The Department concluded, and the Commission agrees, that CenturyLink’s proposed assumption, that all households in a census block have broadband available if one household in the census block has broadband available, overstates the number of households that have broadband service available. Gullikson Aff. ¶ 51.

134. The Commission finds that CenturyLink has not demonstrated that more than 60 percent of the households in these exchanges can choose voice service from a CSP.

⁵² <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>

C. CenturyLink Erroneously Assumes That All Wireline Broadband Providers Offer Competitive Voice Service.

135. Mr. Lubeck's Affidavit states that the "availability of broadband services, [] can be used to measure the availability of voice services, because today, where cable companies offer broadband services, they also offer voice services utilizing broadband technologies." Lubeck Aff. ¶ 15. The Department said that this assumption is not supported by the facts. Gullikson Aff. ¶ 52.
136. The Department asked CenturyLink to provide support for this claim in DOC IR No. 36 Gullikson Aff. Attach. 11. CenturyLink responded: "...CenturyLink reviewed the website of each of the competitive providers noted in Attachment AL-8, and each offers voice services." Gullikson Aff. ¶ 53.
137. The Department said that it does not dispute that each provider listed in AL-8 likely offers voice service in some area, however, it explained, the relevant question is whether the provider is a CSP that offers voice service in each of the specific exchanges for which CenturyLink is petitioning.
138. The Department said that, because CenturyLink has the burden of proof, the Department expected CenturyLink would have verified its facts as accurate. Since CenturyLink did not do so, the Department sent a DOC IR to each of the twelve companies listed in Lubeck Exhibit AL-5 that CenturyLink claims are cable companies that meet the definition of a CSP. The DOC IRs sought to confirm the assumption proposed by Mr. Lubeck in his Affidavit, at ¶ 15. Gullikson Aff. ¶ 54. Several cable providers stated that they did offer voice contemporaneously with broadband; however, one cable provider said it did not provide voice service at any location where it provided broadband services, and two said they offered voice service in some areas but not all. Gullikson Aff. ¶ 55 and Attach. 12, (Cable Providers Resp. to DOC IR 1).⁵³
139. In his Second Affidavit, Mr. Lubeck attempted to rebut Ms. Gullikson's analysis showing that CenturyLink was incorrect in asserting that "where cable companies offer broadband services, they also offer voice services utilizing broadband technologies." He acknowledged that one company offered voice not utilizing broadband technologies. He pointed out that a second company failed to provide voice service, but noted that this occurred outside CenturyLink's service areas. Lubeck Second Aff. ¶ 27.
140. The Department found "troubling" Mr. Lubeck's statement in his Second Affidavit that the failure of three other competitors to offer voice service does not change his analysis because a third cable company was "in those wire centers." *Id.* The Department disagreed with CenturyLink's apparent opinion that a provider is a CSP if it provides service "in a wire

⁵³ Yet another responded that it offered voice service, but not through a VoIP platform, which is in conflict with Mr. Lubeck's erroneous claim that not only do cable companies always offer voice service, they do so using VoIP technology. Lubeck Aff. ¶ 15.

center” (meaning only that one household in one census block is served by a broadband provider.)

141. The Department observed that CenturyLink’s loose characterization that another company is “in the wire center,” is not quantifiable data, and is not sufficient to demonstrate that sixty percent of households in each exchange can choose voice service from a CSP.
142. The Department said that CenturyLink overstated the number of households served by alternative providers by its assumption that all households with a non-CenturyLink broadband internet access service provider can also receive voice service from that provider. Gullikson Aff. ¶ 56.
143. The Commission agrees with the Department and finds that, in light of the erroneous assumptions CenturyLink used in its effort to demonstrate that it has satisfied the 60 percent test, it is reasonable to find that in exchanges where CenturyLink data shows it narrowly meets the test based on cable and other wireline voice service, CenturyLink has not satisfied its burden of proof. Gullikson Aff. ¶ 57.

D. Some of the Identified Wireline Competitors Do Not Provide The Same Minimum Services Provided by CenturyLink.

144. Public interests goals to be considered by the Commission in its oversight of telecommunications include supporting universal service, maintaining just and reasonable rates, and ensuring consumer protections are maintained in the transition to a competitive market for local telecommunications service. Minn. Stat. § 237.011.
145. Public interests required by law and rule to be protected include, at minimum, preserving the state's commitment to universal service (Minn. Stat. §§ 237.16 subd. 1 (a) (2); 237.16 subd. 8 (a) (8)) and affordable rates (Minn. Stats. §§ 237.16 subd. 1 (b) and subd. 8 (a) (8)).
146. CenturyLink made no showing that any CSP offers TAP and Lifeline. The below Table 1 lists the companies identified in Lubeck Affidavit, Exhibit AL-5 as “cable voice” providers.
147. Three of the companies listed have no certificate of authority to provide telephone service in Minnesota.

TABLE 1

Cable Voice from Exhibit AL-5	TAP Report	# TAP Customers	ETC		
Access Media 3	no		No		
Benton Cablevision Inc.	no		No	No Certificate of Authority	
Charter Communications, Inc.	no		No		
Comcast	yes	0	No		
Hiawatha Broadband Communications	yes	82	No		
Mainstreet Communications	yes	41	No		
Mediacom Minnesota LLC	no		No		
Midcontinent Communications	yes	300	Yes		
Milaca Local Link	yes	56	No		
Savage Communications, Inc.	no		No	No Certificate of Authority	
Sjobergs Inc.	no		No	No Certificate of Authority	
Tekstar	yes	240	No		

148. The Department said that the Commission may take notice of the TAP Reports filed in MPUC Docket No. 16-1, which shows that, of the twelve companies listed in Lubeck Affidavit Exhibit AL-5, only six companies filed TAP Reports. And Comcast, which filed a TAP Report, states in its Report that it does not provide TAP to a single customer. Thus, only five of the twelve companies provide the TAP program to customers.

149. The Department said that the Commission may also take notice of its September 30, 2016 Order in MPUC Docket No. 16-8, where it certified ETCs use of federal funds. Of the twelve companies in Lubeck Affidavit Exhibit AL-5, only one company, Midcontinent Communications (Midcontinent), was certified as an eligible telecommunications carrier (ETC). Thus, of the twelve companies, only Midcontinent can provide customers with the \$9.25 monthly Lifeline credit.

150. The Department observed that CenturyLink has made no showing that any voice service that it claims constitutes a CSP offers affordable voice service. In many exchanges, prices of the CSPs are very substantially greater than CenturyLink voice service. The following is a screenshot showing that in the Chisholm exchange, for example, the price for voice service from Mediacom, is \$60 per month, which is an approximately 350 percent rate hike compared to the \$ 17 per month CenturyLink price for unlimited local service.⁵⁴

⁵⁴ In MPUC Docket No. 15-1033, Department Witness Mr. Heinen studied the Commission’s history of residential customer rate increases and its practice of mitigating “rate shock.” His August 16, 2016 Direct Testimony at pages 14-15, Table 4 reviewed all of the Commission’s electric rate cases, (save Northwest Wisconsin Electric Company) over the past 20 years. He reported that the largest percentage increase to any residential customer charge approved by the (Footnote Continued on Next Page)

This is a transcript of a chat conversation on 3/8/2017 4:00 PM(UTC).

257388 joined the conversation.

Mediacom Chat: Hello, welcome to Mediacom chat.

How can I help you?

257388: What is the monthly cost for a phone line at 201 West Lake Street, Chisholm, Minnesota 55719?

Mediacom Chat: This link will provide you with pricing information:

<http://www.mediacomcable.com/site/order.php>

Mediacom Chat: Is there anything else I can help you with?

257388: Having the link is nice, for, right now, I am just trying to price out a phone line. I will look into the other service options later. My address is 201 West Lake Street, Chisholm, Minnesota 55719.

Mediacom Chat: I will connect you with a live agent who can help you. Please wait.

Katrina joined the conversation.

Katrina: Hello

Katrina: **49.95 + 10.00 modem rental fee + taxes**

257388: Thanks. Katrina. That prices doesn't include Internet or TV does it? Do I pay extra for long distance? Are there extra fees added in?

Katrina: That is correct that is the standard rate for service.

Katrina: We only have one phone plan that does cover unlimited local and long distance calling.

257388: Great. I will have to get back to you on this later.

Katrina: No problem, is there anything else I can do for you today?

257388: No.

Katrina: Have a great day!

(Footnote Continued from Previous Page)

Commission was the 60 percent increase approved in the 2008 Minnesota Power general rate case. That increase came after a 14 year period between rate cases. The average increase approved by the Commission for residential customers was approximately \$0.69 and average percentage increase of approximately 16.35 percent.

151. The Mediacom offering is bundled with unlimited nationwide calling, and local-only calling is unavailable. CenturyLink has presented no information to demonstrate that prices in this range constitute affordable service within the meaning of Minn. Stats. §§ 237.011 and 237.16 subd. 1 (b) and subd. 8 (a) (8)).
152. The Department observed that there are substantial flaws in CenturyLink’s Petition with respect to the supporting documents and the methodologies CenturyLink used to demonstrate it met the 60 percent test of Minn. Stat. § 237.025.
153. The Department said that although the availability of TAP and Lifeline, and the ability to purchase a competitive service at a comparable rate as a stand-alone service are not specifically listed in the criteria to determine whether CenturyLink’s petition should be granted, the Commission can ensure that CenturyLink has fully met its burden with the specified statutory criteria.
154. The Commission finds that, because of the flaws in CenturyLink’s methods, in wire centers where CenturyLink minimally appears to meet the statutory 60 percent test, CenturyLink has failed to meet its burden of proof.

2. The Numerator of the Sixty Percent Test Is Overstated in Certain Exchanges Where CenturyLink’s Wireless Study Shows Households Cannot Choose Wireless Voice Service of Minimally Adequate Quality.

A. CenturyLink Inflated the Number of Households That Can Choose Wireless Service by Including Households That Do Not Have Adequate Indoor Call Quality.

155. With reference to maps of wireless companies’ “coverage” he offered, Mr. Brigham’s Affidavit observed that it appeared that, “[a]t least two wireless carriers have complete coverage for all but a few exchange service areas in the state.” Brigham Aff. ¶ 10. The maps attached to the Brigham Affidavit appear to have been marketing maps downloaded or printed from the public internet. Gullikson Aff. ¶ 64.

156. Mr. Brigham conceded that his maps showed that the Silver Bay, Tofte, Grand Marais, Wabasha and Sandstone exchanges had only partial coverage. Brigham Aff. ¶ 10. Gullikson Aff. ¶ 65.

157. Noting the Department’s objections to reliance on wireless companies’ internet advertising maps, the Commission previously determined that:

The maps are not, on their face, sufficient to withstand an initial level of scrutiny for analyzing whether the company meets the statutory criteria. And there is no other information in the record, such as engineering testimony or other expert testimony, explaining the availability or adequacy of the wireless coverage areas shown on the maps. Furthermore, there are no Affidavits, or other sworn statements, from wireless companies identifying the percentage of households, by exchange service area, that can choose voice service from an unaffiliated competitive service provider.⁵⁵

158. On November 21, 2016, CenturyLink supplemented its Petition with the Affidavit of Adam Nelson who conducted an “Assessment of Wireless Voice Coverage in Select CenturyLink Wire Centers in the State of Minnesota” and opined about the availability of “indoor” and “outdoor” coverage. Gullikson Aff. ¶ 66.

159. Mr. Nelson’s study was examined by the Department’s engineering expert, Mr. Wes Legursky. Mr. Nelson examined 32 wire centers that were provided to him by CenturyLink. According to Mr. Lubeck, “CenturyLink retained Federal Engineering, Inc. (“FE”) to perform an independent engineering analysis of wireless voice coverage in 32 of the more rural CenturyLink QC wire centers in Minnesota. These 32 wire centers include all of the 24

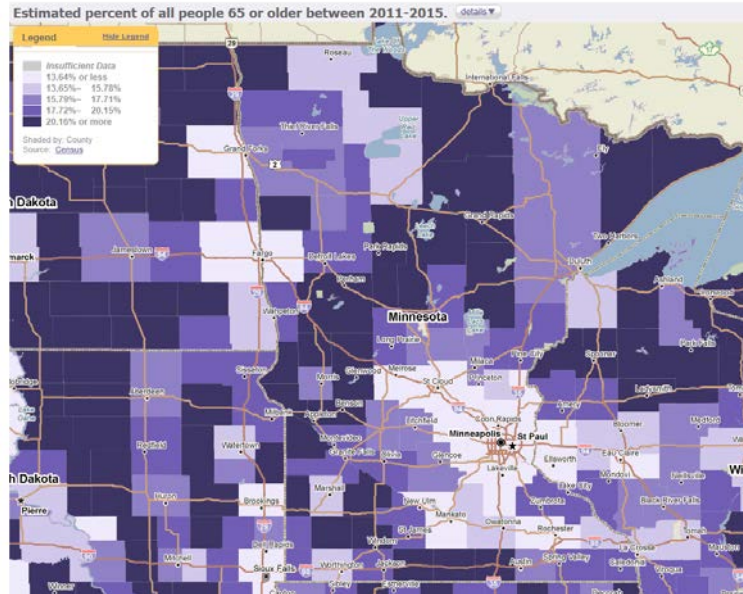
⁵⁵ *In the Matter of the Petition of CenturyLink QC to be Regulated Pursuant to Minn. Stat. § 237.025: Competitive Market Regulation*, Docket No. P-421/AM-16-496, Order Requiring Further Filings And Initiating Expedited Proceeding, (November 2, 2016).

wire centers not meeting the 60 percent criteria” as to cable and other wireline service. Lubeck Aff., p. 17, ¶ 24; Gullikson Aff. ¶ 67.

160. The Department said that, for several reasons, the Commission should conclude that *indoor* signal strength is the appropriate measure of whether a household can choose wireless as a CSP’s competitive voice service. First, as Ms. Gullikson observed, Minn. Stat. § 237.025, subd. 4 (1) on its face refers to residents of ‘households,’ being able to choose voice service; it does not refer to geographic areas adjacent to or surrounding those households. Gullikson Aff. ¶ 69.
161. Second, in weighing a petition with respect to claimed wireless CSPs, a public interest required by law and rule to be protected includes, at minimum, maintaining the existing quality of service. Minn. Stat. § 237.011. Further, Minn. Stat. § 237.025 subd. 8 (a) requires that if a petition is granted, subscribers continue to have access to “voice-grade service.” Minn. Stat. § 237.16 subd. 8(a) (9) requires Commission to prescribe standards for quality of service and Minn. Rule 7810.5500 requires telephone utilities to “provide satisfactory transmission ... at adequate volume levels and free of excessive distortion” and “noise and cross talk” that do not “impair communications.”
162. Third, the Legislature has specified that the telecommunications services to be protected as part of “universal service” include, “*at a minimum,*” access to the “statewide telecommunications relay service [TRS] for people with hearing loss⁵⁶.” Minn. Stat. § 237.16 subd. 9. TRS must allow an individual with a communication disability to use telecommunications services in a manner *that is functionally equivalent to the ability of an individual who does not have a communication disability*. Minn. Stat. § 237.50 subd. 11. CenturyLink has not demonstrated that a CSP’s service is functionally equivalent if disabled citizens are only able to place calls outside of their home.
163. Fourth, below is a map of the Minnesota State Demographer⁵⁷ that compares the percentages of residents over 65 years of age in rural areas of the State with the more urban areas (including St. Cloud, Mankato, the Twin Cities, Fargo/Moorhead and Rochester).

⁵⁶ Protected telecommunications relay services (TRS) are the telecommunications transmission services required under Federal Communications Commission (FCC) regulations at 47 CFR pts. 64.604 to 64.606.

⁵⁷ The Commission may take notice of this public data, published by the Minnesota State Demographer at <http://mn.gov/admin/demography/map-viz-gallery/map-percent-65-or-older.jsp>



From: <http://mn.gov/admin/demography/map-viz-gallery/map-percent-65-or-older.jsp>

164. These public records show that in many exchanges in greater Minnesota, household residents are disproportionately elderly, when compared to Minnesota’s more urban areas. Similar to its demonstration for disabled Minnesotans, CenturyLink has not demonstrated that elderly residents “can choose a CSP’s competitive voice service” if the only access to such service requires the resident to place and/or receive calls outside of their home.
165. The Department recommended, based upon Mr. Nelson’s testimony, as further explained by Mr. Legursky, that it is reasonable for the Commission to conclude that *indoor* signal strength is the appropriate measure of whether a household can choose wireless as a competitive service, Legursky Aff., pp. 5-6. Gullikson Aff. ¶ 68.
166. Ms. Gullikson explained, “whether a household can choose wireless as a reasonable competitive service alternative, particularly with respect to critical safety services such as 911, should not require that the customer go outside their home or climb to higher elevations to obtain service. Gullikson Aff. ¶ 69.
167. Based on Mr. Nelson’s and Mr. Legursky’s analysis of the availability of indoor coverage, the Department concluded that CenturyLink failed to demonstrate that the Cook, Holdingford, Biwabik, Sabin, and Staples exchanges satisfy the statutory requirement that 60 percent of households can choose voice service from a wireless service provider, as is detailed in the Gullikson Affidavit, Attachment 6, Column J. Gullikson Aff. ¶ 70.
168. The Department recommended and the Commission agrees that CenturyLink failed to demonstrate that consumers can choose competitive wireless service from a CSP in these exchanges.

B. The Modeling Provided By Mr. Nelson Should Be Viewed As An Upper Bound.

169. Mr. Nelson disagreed with Mr. Legursky's conclusion that the modeling done by Mr. Nelson should be viewed as an upper bound. Mr. Nelson stated that 25 dB loss variable for forestland⁵⁸, like the 10 Db loss for inside buildings, is conservative;⁵⁹ however, the Department observed that Mr. Nelson did not explain how the values were determined.
170. The Department further said that Mr. Nelson failed to explain whether this model is intended for designing a commercial wireless network, or for purposes of determining whether there is an adequate wireless service provider to the household, such that 911 service can be relied upon.
171. Mr. Nelson stated that his analysis looked solely at one of 15 frequency bands licensed by Verizon and/or AT&T in the State of Minnesota.
172. The Department said that Mr. Nelson offered no analysis for this claim or that the other frequencies are even sufficient to provide a signal.
173. Mr. Nelson observed that other companies offer service in these areas using different frequency bands as well (for example Sprint and T-Mobile).
174. The Department responded that Mr. Nelson did no analysis for any other company or frequency band to support any inference that if these companies' services were analyzed, it could have impacted his conclusions.
175. Mr. Legursky recommended that the modeling used by Mr. Nelson be viewed as an upper bound since no explanation was provided for selection of model inputs and whether the very purpose of the model is consistent with the purpose of the Commission in this proceeding has not been explained.
176. The Department said that the methods and estimates used to determine whether 60 percent of the households can choose indoor service is imperfect so it is reasonable for the Commission to find that CenturyLink has not met its burden for the four exchanges that fail the test.
177. The Department concluded, and the Commission agrees that, based on Mr. Nelson's and Mr. Legursky's analysis of the availability of indoor coverage, the exchanges of Isanti, Nashwauk, and Marble show only marginally more than 60 percent of households can choose indoor wireless service, with reported indoor coverage of 68, 63 and 63 percent respectively, as shown on Gullikson Affidavit, Attachment 6, Column J. Gullikson Aff. ¶ 70.

⁵⁸ Nelson Second Aff. ¶ 5.

⁵⁹ Nelson Aff., Exh. 2, p. 21 of 23.

178. The Department concluded and the Commission agrees that since the methods and estimates used to determine whether 60 percent of the households can choose indoor service are imperfect, it would be reasonable for the Commission to find that CenturyLink has not met its burden for these three exchanges that are *estimated* to marginally satisfy the statutory criteria.

3. The Denominator of the Sixty Percent Ratio Is Understated In the Comstock and Nashwauk Exchanges, Where CenturyLink Switched To A Different Methodology to Assign Census Blocks to Exchanges, And Inflated the Appearance of Wireless Competition in These Exchanges.

179. In support of CenturyLink’s Petition, Mr. Lubeck, Mr. Brigham, and Mr. Nelson provided Exhibits showing counts of households and housing units and the number of subscribers to CenturyLink service in each wire center, as well as charts summarizing data derived from various modelling efforts that attempt to show the potential availability of CSPs’ competitive wireless or wireline communications service to those households. Gullikson Aff. ¶ 16.

180. The Department observed that the counts of households per exchange by CenturyLink witnesses are not, in fact, “actual” counts; rather, CenturyLink used census information as its basis for determining the count of households in each wire center. The census information shows the counts of households in each census block,⁶⁰ and census block boundaries do not correspond with wire center or exchange boundaries except by happenstance. Gullikson Aff. ¶ 17.

181. CenturyLink’s three witnesses each performed a conversion methodology to convert “households per census block” to “households per exchange.” Messrs. Brigham and Lubeck used a “Centroid method” while Mr. Nelson used a “Random Distribution of Points method.”⁶¹ Lubeck Aff. ¶ 6 fn. 5; Nelson, Ex. 2 ¶ 4.1.2.1 and 4.2; Gullikson Aff. ¶ 19.

182. The centroid method and the random distribution method result in different “counts” of households in each single wire center. Gullikson Aff. ¶ 20.

183. CenturyLink’s Petition did not explain why Messrs. Lubeck and Nelson did not choose the same methodology. Gullikson Aff. ¶ 20.

⁶⁰ Census blocks” are the smallest unit in the U.S. census. They range in geographic size from less than a tenth of a square mile to many thousands of square miles. The Staples exchange, for example, has 610 census blocks in its exchange, while the Holdingford exchange has 147 census blocks. Gullikson Aff. ¶ 18.

⁶¹ Even though neither Mr. Lubeck nor Mr. Nelson used a third method, the “Actual Area Coverage method,” Mr. Lubeck touted the Federal Communication Commission’s (FCC’s) use of this Actual Area Covered method in his Affidavit. Yet, Mr. Nelson stated that he believed the Random Distribution method to be superior to both the Centroid method and the Actual Area Coverage method. Nelson, Ex. 2 ¶ 4.1.2.1; Gullikson Aff. ¶ 19.

184. In DOC IR No. 76, the Department asked CenturyLink why different methods were used for wireless and wireline. CenturyLink did not answer, but instead provided a third data set that compared the differences between the wireless and wireline methods for counting households in each exchange.
185. That third data set that compared the differences that between Lubeck's and Nelson's counts showed the difference to be material. Gullikson Aff. ¶ 20-21 and HSTS Attach. 3 (CenturyLink Resp. to DOC IR 76, HSTS Attach. 76A).
186. CenturyLink characterized these differences as 'minor.'
187. The Department stated that the differences were significant, and showed that had Mr. Nelson employed the methodology used by CenturyLink's other two witnesses, it appears probable that the Nashwauk or Comstock exchanges may not have "passed" the 60 percent test or minimally passed the test.
188. The Department said that because CenturyLink failed to provide the requested information to specify why different methods were used for wireless and wireline exchanges, it is not possible for the Department to determine with certainty that the different methods were used solely to permit the Nashwauk and Comstock into "pass" the 60 percent test, while leaving other exchange percentages unaffected.⁶² Gullikson Aff. ¶ 21-22.
189. The Department recommended that the Commission take notice of this methodological inconsistency, which appears to have changed the outcome of the 60 percent test in the Comstock and Nashwauk exchanges, and of CenturyLink's failure to provide requested information specifying why different methods were used for wireless and wireline exchanges.
190. In light of the above, the Commission concludes that CenturyLink has failed to demonstrate to the Commission's satisfaction that at least 60 percent of households in the Comstock and Nashwauk exchanges can choose voice service from at least one unaffiliated CSP.

⁶² The Department notes that the third data set that compared the differences between the wireless and wireline methods for counting households in each exchange showed that in other exchanges, the differential was less than 2 percent in all other exchanges, and averaged only 1.2 percent. Gullikson Aff. ¶ 20-21

D. CENTURYLINK DID NOT ACCOUNT FOR EXCHANGES IN WHICH IT RECEIVED SUBSIDIES FROM THE FCC’S CONNECT AMERICA FUND (CAF).

191. As Ms. Gullikson explained, and as is discussed above, the Connect America Fund (CAF) is a federal program intended to support broadband deployment in “high cost”⁶³ rural areas.
192. Through grants and a bidding process, incumbent price cap companies (like CenturyLink) are eligible to receive subsidies to assist with the rollout of high speed broadband services to specific locations. Gullikson Aff. ¶ 58.
193. In 2014, the FCC approved Phase II of the CAF and clarified the specifics of the funding process.⁶⁴ The FCC’s determination of which geographic areas are unserved and eligible for CAF Phase II support is based on data provided to the FCC on Form 477. Gullikson Aff. ¶ 59.
194. CAF Phase II subsidies are available only to locations unserved by a subsidized broadband provider. Gullikson Aff. ¶ 60.
195. The Lubeck Affidavit states that availability of broadband is a proxy for availability of voice service—that is, that access to broadband service ensures access to voice service from a CSP. Lubeck Aff. ¶ 15; Gullikson Aff. ¶ 60.
196. The Department responded that, while not impossible, one can reasonably conclude that a location with no alternative wireline broadband provider is unlikely to have a competitive facilities-based wireline provider of voice services. Gullikson Aff. ¶ 62.
197. Mr. Lubeck admitted: “it is possible that CenturyLink is receiving CAFII support in census blocks that CenturyLink has determined to be competitive in this proceeding.” Lubeck Second Aff. ¶ 31.
198. The Department said and the Commission agrees that CenturyLink’s failure to address the presence or absence of CSPs in areas for which CenturyLink has received CAF Phase II funding creates significant uncertainty regarding the Company’s support for its Petition. Gullikson Aff. ¶ 63.

III. SUMMARY OF DEPARTMENT RECOMMENDATIONS

199. The Department said and the Commission agrees that CenturyLink’s Petition contains numerous errors.

⁶³ A “high cost” area is generally one which has a monthly cost of service between \$52.50 and \$207.81 per line. *A Basic Guide to the Connect America Phase II Challenge Process*, at 2, publ. at http://www.fcc.gov/wcb/tapd/Challenge_Process/ChallengeProcessGuide7-31-14.docx

⁶⁴ https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-54A1.pdf

200. The Department recommended and the Commission agrees that, in light of the many errors, the Commission not approve the Petition in exchanges that either do not meet or marginally meet the criteria of Minn. Stat. § 237.025.

A. FIFTY PERCENT TEST

201. With respect to CenturyLink’s demonstration regarding the “50 percent” test, under which, in each exchange petitioned for, CenturyLink must show that it serves fewer than 50 percent of the households in the exchange, (Section II B of this Initial Brief) CenturyLink under-counted business lines, UNE-P lines and resold lines.

202. In addition, in four wire centers CenturyLink erroneously accounted for “housing units” when the statute requires counting households⁶⁵.

203. The Commission find that, in the exchanges identified in **Table 2 of the Department’s Initial Brief**, CenturyLink did not meet the 50 percent criterion or the 50 percent criterion was marginally met, but the margin is insufficient to overcome the defects in CenturyLink’s methodology:

B. SIXTY PERCENT TEST

204. With respect to the “60 percent” test, under which, in each exchange petitioned for, CenturyLink must show that at least 60 percent of the households in the exchange, can choose voice service from a statutory CSP (Section II C of this Initial Brief) the Department recommended, that the Petition be denied in “wireless” exchanges lacking adequate indoor service quality, as well as in the Nashwauk and Comstock exchanges, where CenturyLink’s switched methodology materially affected its reported “coverage” by a wireless CSP. The Commission agrees.

205. The Department further recommended that the Commission find that CenturyLink overstated satisfaction of the 60 percent test in the exchanges where CenturyLink’s methodology inflated the percentage of households having access to a wireline CSP. The Commission agrees.

206. In light of the record, the Department was unable to make a specific recommendation with respect to whether the Commission should approve or disapprove the Petition in any specific exchange.

207. The Department recommended that the Commission consider CenturyLink’s failure to follow the requirements of the statute in determining how much of a “margin” the

⁶⁵ One of those wire centers, Pike Lake, is a part of the Duluth exchange, and the Department accepts that the Duluth exchange meets the 50 percent test.

Commission considers when deciding whether to approve or disapprove the Petition in each such exchange.

208. The Department recommended that the Commission reject the specific exchanges identified in **Table 3 of the Department's Initial Brief** that either do not meet the 60 percent criterion, or only marginally meet the criterion and that the margin is not sufficient to overcome the defects in the CenturyLink methodology. The Commission agrees.
209. The Department recommends that for any exchange where the Commission finds that CenturyLink has met its burden to satisfy the statutory criteria to qualify for market regulation, CenturyLink should be held to what it has provided in its notice to customers on how they will be affected with such approval. Specifically, the notice to customers states: "If the Commission approves the application, CenturyLink may raise its local service rates by a maximum of \$2.00 per month after January 1, 2018, and by an additional \$2.00 per month after January 1, 2023."
210. The Department further recommends that if, however, the Commission believes the font size of the notice was too small for many customers to read the notice or otherwise finds that the notice was not effectively served upon customers, then the Commission could find that customers have not been misled if CenturyLink increases rates beyond what has been identified in the notice.