STATE OF MINNESOTA

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

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

CENTURYLINK PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

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PROCEDURAL HISTORY

- 1. On June 30, 2016, Qwest Corporation d/b/a CenturyLink QC ("CenturyLink" or "Company") filed a petition to be regulated under newly enacted legislation, Minn. Stat. § 237.025 ("Petition"). The Petition included a request for deregulation in each of the Company's 109 Minnesota exchange service areas, stating that in each area, CenturyLink serves fewer than 50 percent of households, and unaffiliated competitors offer voice service to at least 60 percent of households.
- 2. On November 2, 2016, the Minnesota Public Utilities Commission ("Commission") issued its Order Requiring Further Filings And Initiating Expedited Proceeding ("Order"), requiring CenturyLink to file additional information to make its application complete.
- 3. The Order required CenturyLink to file: (1) number portability data to address the requirements of subdivision 2(b)(5) of the statute regarding loss of customers to unaffiliated competitive service providers and (2) data to address subdivision 2(b)(6) regarding evidence of competition, including the percentage of households served by CenturyLink in each exchange service area and the percentage of households in each exchange that can choose service from unaffiliated competitive service providers.
- 4. On November 14, 2016, the Office of the Attorney General Residential Utilities and Antitrust Division ("OAG") filed comments recommending that the Commission ask that an Administrative Law Judge ("ALJ") be assigned to the case to resolve discovery disputes and related motions. The OAG also recommended that the Commission require CenturyLink to hold public hearings on its Petition throughout its service territory and that the Company be required to give notice to customers of its Petition and of public hearings.
- 5. On November 21, 2016, CenturyLink filed supplemental information in response to the Commission's Order ("Supplemental Filing"). The Supplemental Filing included Affidavits of Al Lubeck and Adam Nelson and incorporated the materials filed with the Petition. The Company also responded to the OAG's recommendations, stating that it is unopposed to referring discovery matters to an ALJ but did not recommend public hearings. CenturyLink also included in its comments a proposed process schedule for Commission consideration.
- 6. On November 22, 2016, the Department of Commerce ("Department") filed comments concurring with the OAG in recommending that the Commission ask an ALJ to resolve discovery disputes. The Department also recommended that an ALJ conduct hearings and handle interlocutory motions, and provide the Commission with a recommendation on whether to approve the Petition. In addition, the Department included a proposed process schedule.

- 7. The Commission met on December 21, 2016 to consider the completeness of the Petition in light of the Supplemental Filing and to set forth the process for handling the remainder of this matter.
- 8. On January 27, 2017, the Commission issued its Order Finding Petition Complete, Requiring Notice And Setting Process Schedule ("Second Order"), finding CenturyLink's Petition complete as of the Company's November 21, 2016. The Second Order required CenturyLink to work with the Executive Secretary on the form and content of a customer notice and set the following schedule:
 - Day 0: November 21, 2016 Filing Complete
 - Day 30: December 21, 2016 Agenda Meeting
 - Day 72: February 9, 2017 Intervenors Direct, with Exhibits
 - Day 87: February 23, 2017 Rebuttal Testimony, with Exhibits
 - Day 102: March 9, 2017 Initial Briefs and Proposed Findings and Conclusions
 - Day 114: March 23, 2107 Reply Briefs and Amended Findings and Conclusions
 - Day 136: April 13 and 28 (later amended to April 13 and 20), 2017 Commission Oral Argument and Deliberations
 - Day 180: May 22, 2017 Statutory Deadline
- 9. On February 8, 2017, the Commission issued its Approval Of Customer Notice, stating: "CenturyLink worked with Commission staff to develop a customer notice. CenturyLink's customer notice, as attached and captioned 'What's New On Your Bill', is approved for distribution."
- 10. CenturyLink provided the approved customer notice with bills sent in February, 2017.
- 11. On February 9, 2017, the Department filed affidavits from Joy Gullikson and Wes Legursky. The OAG did not file affidavits and no other party intervened in this proceeding.
- 12. On February 23, 2017, CenturyLink filed rebuttal exhibits from Al Lubeck and Adam Nelson.

- 13. The Company, Department and OAG filed Initial Briefs and Proposed Findings of Fact and Conclusions of Law on March 9, 2017 and Reply Briefs and Amended Findings and Conclusions on March 23, 2017.
- 14. As of March 9, 2017 the Commission had received only one public comment through its Speak Up! web site, stating concerns with supplemental fees related to internet and television services.
- 15. The Commission heard Oral Argument on April 13, 2017 and held deliberations on April 20, 2017.

FINDINGS OF FACT

I. APPLICABLE LAW

- 16. The Competitive Market Regulation Statute ("Statute"), Minn. Stat. § 237.025, controls the Commission's handling of the Petition.
- 17. The Statute sets forth two alternate tests for declaring a wire center competitive and therefore eligible for competitive market regulation, requiring that the Commission shall approve the Company's Petition for each exchange service area in which the Company has demonstrated either that:
 - (1) it serves fewer than 50 percent of the households in an exchange service area, and at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider ("Track 1"); or
 - (2) it serves more than 50 percent of the households in an exchange service area, and:
 - (i) at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider;
 - (ii) no significant economic, technological, or other barriers to market entry and exit exist;
 - (iii) no single provider has the ability to maintain prices above competitive levels for a significant period of time or otherwise deter competition; and

- (iv) the petitioning local exchange carrier will continue to offer basic local service, as defined in subdivision 8, consistent with its tariffs in effect at the time of its petition ("Track 2").
- 18. The Company bears the burden of demonstrating that its exchange service areas meet either the Track 1 or Track 2 test.²
- 19. The Statute provides that CenturyLink will be regulated subject to Minn. Stat. § 230.035 and the Commission's competitive local exchange carrier ("CLEC") Rules (Minn. R. 7811.2210 and 7812. 2210, as applicable) in each exchange service area for which it meets either the Track 1 or Track 2 test.³
- 20. The Statute and CLEC Rules provide certain core consumer protections for those exchange service areas qualifying for competitive market regulation, including:
 - Basic local service rates may not be increased until January 1, 2018, with restrictions on the ability to increase rates after that date;⁴
 - A provider must maintain uniform prices throughout an exchange area and is subject to the CLEC Rules non-discrimination provisions;⁵
 - Nothing affects the obligation of the provider to provide service to customers, when requested, in accordance with Chapter 237, Commission Rules, and the provider's duly authorized tariffs;⁶ and
 - Providers remain subject to complaint jurisdiction.⁷

II. PARTY POSITIONS

- 21. CenturyLink states that it meets the criteria set forth in Minn. Stat. § 237.025, subd. 4(1) (Track 1). Relying on its Petition and the Affidavits of Mr. Lubeck and Mr. Nelson, the Company states that all 109 exchange service areas meet the Track 1 test, in that CenturyLink:
 - Serves less than 50 percent of the households in each exchange service area; and

³ *Id.*, subd. 6.

¹ Minn. Stat. § 237.025, subd. 4.

² *Id.*, subd. 5.

⁴ *Id.*, subd. 8 (b).

⁵ *Id.*, subd. 8 (c) and Minn. R. 7812.2100, subp. 5.

⁶ Minn. Stat. § 237.025, subd. 9.

⁷ Minn. R. 7812.2100, subps. 8 and 17.

- At least 60 percent of the households in each exchange service area can choose voice service from at least one unaffiliated competitive service provider.
- 22. The Department acknowledged that at least 96 of the 109 exchanges meet the Track 1 test. Ms. Gullikson's Affidavit concluded that "[t]here appears to be sufficient evidence that CenturyLink's petition for market regulation to be approved for most of the petitioned exchanges, but, in light of the flaws identified, there is not sufficient evidence as to exchanges that fail or only marginally appear to satisfy the statutory criteria." Ms. Gullikson identified 13 exchanges that had "questionable results" and concluded that those exchange service areas had not been demonstrated to meet the Track 1 test. 9
 - 23. The OAG filed no evidence in the record.

III. COMMISSION ANALYSIS

- 24. The Company provided uncontested evidence that it meets the Track 1 test in 96 of the exchange service areas included in its Petition. Therefore, the Commission grants relief in those exchange service areas.
- 25. The Department has raised questions regarding the remaining 13 exchange service areas, requiring further Commission analysis of those exchange service areas concerning both prongs of the Track 1 test. This analysis requires the Commission to determine: (a) whether the Company has shown that "it serves fewer than 50 percent of the households in the exchange service area;" (the "50% Standard") and (b) whether the Company has shown that "at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider" (the "Competitive Choice Standard").

A. 50% Standard

- 26. Applying the 50% Standard requires that the Commission consider two issues:
 - What constitutes CenturyLink "serving" a household?
 - What constitutes a "household"?

⁸ Affidavit of Joy Gullikson ("Gullikson Affidavit"), ¶ 82 (Feb. 9, 2017).

⁹ Gullikson Affidavit, ¶¶ 79, 81.

1. "Serving" A Household

- 27. CenturyLink maintained that, for purposes of the Statute, it "serves" a household when it provides a residential primary line to that household.¹⁰
- 28. The Department maintained that the Commission should adopt a more expansive definition. The Department first argues that CenturyLink continues to "serve" a household when it provides a wholesale facility (such as a resold line or a combination of network elements once known as UNE-P and now known as CLSP) to another provider that in turn provides voice service to the household.¹¹
- 29. The Commission finds that in situations where CenturyLink provides wholesale service, the Company is providing service to another carrier and is not providing service to a household. Federal rules related to resale state that they govern "the terms and conditions under which LECs offer telecommunications services to requesting telecommunications carriers for resale." CenturyLink is prohibited from contacting the customer and, to the extent operator services, call completion or directory assistance is a part of the service, CenturyLink is required to comply with customer requests that it rebrand the service as coming from the reseller. ¹³
- 30. Minn. Stat. § 237.025 supports the Commission's finding on this issue by dividing providers into three categories: (1) the local exchange carrier filing the petition; ¹⁴ (2) "competitive service provider[s]" such as wireless and facilities based wireline providers; ¹⁵ and (3) other providers that do not count as competitive service providers, such as providers using satellite technology, wireless resellers and over the top voice over internet protocol providers ("VoIP"). Wireline resellers are specifically included in this third category:

"Competitive service provider" does not include:

(i) a provider using satellite technology;

¹⁰ See November 18, 2016 Lubeck Affidavit ("First Lubeck Affidavit"), ¶ 6.

¹¹ Gullikson Affidavit, ¶ 35.

 $^{^{12}}$ 47 C.F.R. § 51.601 (2017); see also February 23, 2017 Lubeck Affidavit ("Lubeck Second Affidavit"), ¶ 23.

¹³ 47 C.F.R. § 51.613(c) states: "(c) *Branding*. Where operator, call completion, or directory assistance service is part of the service or service package an incumbent LEC offers for resale, failure by an incumbent LEC to comply with reseller unbranding or rebranding requests shall constitute a restriction on resale." *See also* Lubeck Second Affidavit, ¶ 23.

¹⁴ Minn. Stat. § 237.025, subd. 1, sub. 2, sub. 4.

¹⁵ Minn. Stat. § 237.025, subd. 1, sub. 4.

¹⁶ Minn. Stat. § 237.025, subd. 1.

- (ii) a wireless voice service provider who resells voice services purchased at wholesale;
- (iii) a competitive local exchange carrier, as defined in Minnesota Rules, parts 7811.0100, subpart 12, and 7812.0100, subpart 12, who does not own a substantial proportion of the last-mile or loop facilities over which *they* provide local voice service.¹⁷

Thus, the Statute itself recognizes that in the case of CenturyLink providing wholesale service, the *competitive local exchange carrier* provides service to the end user not CenturyLink.

31. The Commission finds that in the case of CenturyLink providing wholesale services: (1) CenturyLink by definition provides service to another carrier, not to a household, (2) CenturyLink has no relationship with the end user, (3) CenturyLink is obligated to brand operator services as coming from another telecommunications carrier, (4) CenturyLink is required to make its facilities available to other carriers at discounted rates, and (5) Minn. Stat. § 237.025 recognizes that a competitive local exchange carrier "provide[s] local service" even when it does not own the facilities. Given these facts, CenturyLink does not "serve" a household in situations where it is solely the wholesale provider to another carrier that serves that household.

2. Business Line Only Households

- 32. The Department also stated that CenturyLink might provide service to households *exclusively* over business lines, rather than through a residential line, and that such situations should be included in the number of households served by CenturyLink. ¹⁸
- 33. Ms. Gullikson acknowledged that "the Department could not estimate the number of home based businesses that would subscribe to business lines in each of the CenturyLink exchanges." ¹⁹
- 34. CenturyLink stated that its systems cannot identify businesses that operate out of a residential location and where the Company does not also provide residential service.²⁰
- 35. The Commission finds no evidence in this record that demonstrates the existence of "households" that purchase only business lines over which they receive

¹⁷ Minn. Stat. § 237.025, subd. 1 (emphasis added).

¹⁸ Gullikson Affidavit, ¶¶ 33-34.

¹⁹ Gullikson Affidavit, ¶ 34.

²⁰ Lubeck Second Affidavit, ¶ 22.

service from CenturyLink, much less that any such instances exist in sufficient quantity to change the Commission's overall analysis of the Petition. Therefore, the Commission declines to speculate on the existence of such situations.

36. For purposes of determining whether CenturyLink "serves" a household in a particular exchange service area, the Commission finds it is reasonable to use the number of primary residential lines provided by the Company in that exchange service area.

3. The Definition Of "Household"

- 37. In addition to determining what it means to "serve" a household, the Commission must determine the definition of the term "household."
- 38. Under Minnesota law, "words and phrases are construed according to rules of grammar and according to their common and approved usage; but technical words and phrases and such others as have acquired a special meaning ... are construed according to such special meaning or their definition." Both CenturyLink and the Department of Commerce stated that the term should be interpreted in the same fashion as the United States Census Bureau defines the term:

A household includes all the people who occupy a housing unit (such as a house or apartment) as their usual place of residence. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters. There are two major categories of households, "family" and "nonfamily. Household is a standard item in Census Bureau population tables." See: https://www.census.gov/glossary/. Households do not include vacant housing units. 22

39. A household is distinct from the term "housing unit" which is defined as follows:

A house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through

²¹ Minn. Stat. § 645.08 (1).

²² First Lubeck Affidavit, ¶ 6, n4.

- a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible." See https://www.census.gov/glossary/.²³
- 40. In most exchange service areas, the difference between these definitions is inconsequential. The record demonstrates that 94 percent of the housing units in Minnesota are also households.²⁴ However, the difference can become significant in exchange service areas with a substantial number of vacation homes, where the percentage of "housing units" that are also "households" can be significantly smaller than the Statewide average. Of note in this docket, in the Cook (45%), Grand Marais (52%) and Tofte (28%) exchange service areas, a small percentage of housing units are actually households.²⁵
- 41. The Commission accepts the United States Census Bureau definition of the term "household" as suggested by CenturyLink and the Department.

4. Applying The 50% Standard

42. To determine if CenturyLink has met the first part of the "Track 1" test, the Commission must calculate the following ratio for each exchange service area:

(Number of Households Served/Total Number of Households x 100%).

- 43. As shown in Confidential Exhibit AL-2 to Mr. Lubeck's First Affidavit, a straightforward application of this formula, using Primary Residential Line counts to determine the number of households served, demonstrates that CenturyLink serves less than 50 percent of the households in each of the exchange service areas included in the Petition with the exception of the Cook, Grand Marais and Tofte exchange service areas.
- 44. The Commission also finds that Exhibit AL-2 overstated CenturyLink's residential market share in areas where significant numbers of vacation homes exist. The statute asks the Commission to determine whether CenturyLink "serves fewer than 50 percent of the households" in each exchange service area. As Mr. Lubeck noted, CenturyLink provides primary residential service to customers who order such service

²⁵ *Id*.

²³ First Lubeck Affidavit, ¶ 8, n6.

²⁴ First Lubeck Affidavit, ¶ 8. Note that the wire centers where a significant difference exists between the number of households and housing units. In most cases, the difference does not impact on whether CenturyLink serves 50 percent such as Brainerd (14,609 households v. 17,125 housing units), Battle Lake (1,407 v. 2,761), Detroit Lakes (7,305 v. 9,357), Eveleth (3,500 v. 4,390), Foley (308 v. 627), Hinckley (2,054 v. 3,637), Nisswa (2,047 v. 3,835) and Park Rapids (4,896 v. 8,013). First Lubeck Affidavit, Ex. AL-2.

regardless of whether or not the customer is ordering the service for a primary home or a vacation home.²⁶ Including all primary residential lines in the numerator of the market share will therefore overstate CenturyLink's market share in exchange service areas that include a substantial number of vacation homes.

- 45. The record of this proceeding demonstrates that in the Cook, Grand Marais and Tofte exchange service areas, only a relatively small percentage of housing units are actually households.²⁷ For that reason, simply comparing the number of primary residential lines (which are provided to both households and vacation homes) to the number of households (which includes only primary residences) results in an overstatement of the percentage of households that CenturyLink serves.
- 46. Mr. Lubeck therefore recommended that the Commission adjust the number of access lines by the percentage of "housing units" that are considered "households" in the Cook, Grand Marais and Tofte exchange service areas. This adjustment results in a market share for CenturyLink that is well below the 50 percent threshold in all three exchange service areas. ²⁸
- 47. The Commission finds that the calculations included in the First Lubeck Affidavit shown in Column B of Exhibit AL-31 appropriately represents CenturyLink's market share and show that CenturyLink serves less than 50 percent of the households in each exchange service area included in the Petition.

B. Competitive Choice Standard

- 48. The second prong of the Track 1 test requires the Commission to determine if "at least 60% of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider."²⁹
- 49. Because CenturyLink does not have direct knowledge of where exactly competitors offer service, it looked to several sources to estimate the availability of competitive alternatives, focusing primarily on four sets of data: (1) cable coverage data provided by the FCC based on Form 477 submissions by cable companies; (2) other wireline carrier coverage data provided by the FCC based on Form 477 submissions; (3) wireless coverage data provided by (a) the FCC based on wireless company Form 477 submissions, and (b) the State of Minnesota's Office of Broadband Development, and (4)

²⁶ First Lubeck Affidavit, ¶ 8.

²⁷ *Id*.

²⁸ *Id.*, Ex. AL-2.

²⁹ Minn. Stat. § 237.024, subd. 4 (1).

the wireless coverage data provided by Federal Engineering, Inc., as described in the Affidavits of Mr. Adam Nelson.³⁰

- 50. CenturyLink analyzed the percentage of the market served by wireline and wireless competitors separately. Given that the Statute requires that 60 percent of customers can choose service from "at least one" unaffiliated competitive service provider to meet the Track 1 test, if an exchange service area meets the criterion *either* on a wireless or wired basis, the criterion is met.
- 51. The Department stated that: (1) the Cook, Biwabik and Staples wire centers fail the criterion on both the wired and wireless basis; (2) Holdingford and Sabin "marginally" meet the criterion on the basis of wireline availability but fail based on a wireless availability analysis; and (3) Isanti, Nashwauk and Marble "marginally" meet the criterion based on wireless availability but and fail based on wireline availability.³¹
- 52. The plain language of the Statute does not require a "margin" by which an exchange service area must exceed the statutory criterion related to competitive choice. Additionally, under the Statute, as long as a wire center meets the 60 percent criterion on either a wireline or wireless basis, it has met the criterion. Therefore, the record of this proceeding establishes that Holdingford, Sabin, Isanti, Nashwauk and Marble all meet this criterion.

1. CenturyLink's Market Share Figures And Porting Data

- 53. CenturyLink's market share provides one indicator that competitive service providers make service available to customers. If CenturyLink provides service to less than 40 percent of customers in an exchange service area, not only do 60 percent of customers have options for voice service available, but at least 60 percent of customers have actually chosen a different provider.
- 54. The Department objected to this analysis, stating that customers may have chosen service from an alternate provider that is not a "competitive service provider," as defined by the Statute.
- 55. While such an alternative is technically possible, porting records included in the record suggest that the percentage of numbers ported out to providers that do not qualify as "competitive service providers" is extremely low.³²
- 56. Consideration of the UNE-P and resale information provided by the Department further demonstrates the widespread availability of service from other competitive service providers throughout the CenturyLink exchanges. Specifically, if the number of UNE-P lines and Resale lines in each exchange are added to the number of

³⁰ First Lubeck Affidavit, ¶ 13.

³¹ Gullikson Affidavit ¶¶ 76-77.

³² Lubeck First Affidavit, Exs. 24-29.

CenturyLink's primary residential lines, one derives the maximum number of customers that are served by CenturyLink facilities (which would include businesses who are typically served by CLECs using UNE-P). The remaining households in each exchange service area either have no service at all (an extremely low percentage) or are receiving service from a provider using non Century-Link facilities. Such an analysis demonstrates that for the thirteen exchange service areas challenged by the Department, the minimum percentage of households actually served by facilities from other providers exceeds 50 percent in all but one exchange, as shown by CenturyLink.³³

57. Because market share numbers demonstrate where the customer *actually* purchases service, there can be no doubt that the analysis provided by CenturyLink understates the number of customers that *can choose* to receive service from a competitive service provider. Thus, the CenturyLink analysis indicates a high likelihood that 60 percent of customers have the ability to purchase services from a competitive service provider in each of these exchanges, based on market share figures and porting data alone.

2. Wireless Coverage

- 58. CenturyLink provided two types of data to address wireless coverage in Minnesota. The first set of data derives from reports filed by wireless carriers with the FCC regarding the area in which they offer wireless coverage in Form 477. Form 477 Data consists of shapefiles that depict "the coverage boundaries where, according to providers, users should expect the minimum advertised upload and download data speeds associated with a technology. . . . Providers were also required to certify the accuracy of the data submitted."³⁴
- 59. The FCC then uses wireless carriers' Form 477 Data to determine the appropriate locations for subsidies.³⁵
- 60. The record demonstrates that coverage analysis from Form 477 Data is conservative in a number of respects. First, it analyzes the area in which wireless data services are available through a 4G LTE network. While the speed available from such a network can vary, it is generally agreed that a wireless network offers many multiples of the speed required for a voice call. It stands to reason that maps depicting such coverage understate the coverage available for a voice call. Mr. Lubeck concludes that "even if we consider only wireless voice service providers, at least 60 percent of households in all 109 exchange service area[s] can choose voice service from at least one additional unaffiliated competitive service provider," with the lowest coverage in any wire center over 90 percent.³⁶

³³ CenturyLink Initial Brief, p. 19.

³⁴ First Lubeck Affidavit, Ex. AL-17, 4, ¶ 7.

³⁵ *Id*

³⁶ First Lubeck Affidavit, ¶ 21.

- 61. CenturyLink also submitted two affidavits from Adam Nelson of Federal Engineering that describe the availability of wireless service in the 800 MHz frequency -- just one of 15 frequencies available to provide service in Minnesota.³⁷
- 62. The analysis conducted by Mr. Nelson looked exclusively at this one wireless technology because public information about the location and size of antennas for other frequencies are not available in publicly available databases.³⁸
- 63. In addition, by limiting his analysis to the 800 MHz band, Mr. Nelson considered only Verizon and AT&T, although other carriers such as Sprint and T-Mobile provide wireless service using other frequency bands, again conservatively estimating wireless coverage.³⁹
- 64. Mr. Nelson's analysis also makes conservative assumptions regarding other potential factors, including factors associated with Minnesota terrain⁴⁰ and signal loss associated with receiving a wireless signal inside a building.⁴¹
- 65. Mr. Nelson's analysis also makes conservative assumptions about the locations of households, by randomly assigning them to locations within a census block.⁴² Mr. Nelson stated that: "[i]t is possible that [Federal Engineering's] coverage model represents a more conservative estimate than that used by commercial wireless carriers, and that the real-world coverage from these 800 MHz systems may be greater than predicted in this assessment."⁴³
- 66. Despite these limitations, Mr. Nelson concludes that wireless voice service is available to at least 60 percent of the population in 30 of 32 exchange service areas on an outdoor basis, with the exceptions being Cook and Henning.⁴⁴ He concludes that wireless services are available indoors to 60 percent of the households in 25 of the 32 wire centers, with the exceptions being Biwabik, Cook, Duluth Pike Lake (part of the Duluth exchange service area), Henning, Nashwauk, Sandstone and Staples.⁴⁵
- 67. Taken together, the FCC Form 477 Data and Mr. Nelson's affidavits independently demonstrate the availability of wireless service to more than 60 percent of the customers in all 109 exchange service areas at issue in this Petition. In every exchange

³⁷ See November 18, 2017 Nelson Affidavit ("First Nelson Affidavit"), Ex. 2, pp. 6-7, §§ 2.3 and 4.3.1 and Table 1.

³⁸ *Id.*, § 4.3.2.

³⁹ February 23, 2017 Nelson Affidavit ("Second Nelson Affidavit"), p. 2.

⁴⁰ First Nelson Affidavit, Ex. 2, §§ 3.2 and 4.4; Second Nelson Affidavit, ¶ 5.

⁴¹ First Nelson Affidavit, Ex. 2, § 3.3.

⁴² Second Nelson Affidavit, ¶ 9.

⁴³ First Nelson Affidavit, Ex. 2, p. 22.

⁴⁴ First Nelson Affidavit, Ex. 2, pp. 19-20.

⁴⁵ *Id*.

service area, providers have certified to the FCC that they offer wireless data service (and by necessity, less data intensive voice service) to at least 94 percent of the households. Data derived from publicly available tower information indicates that a separate 800 MHz system makes voice service available to at least 60 percent of households in nearly every wire center that was studied.

68. Based on this record, the Commission finds that wireless voice service is available to at least 60 percent of households in every exchange service area at issue in this proceeding.

C. Cable And Other Wireline Providers

- 69. In addition to the wireless data it filed, CenturyLink provided data regarding the availability of wireline service from competitors. This data consisted of Form 477 Data filed by cable companies and other wireline competitors.
- 70. The FCC requires all broadband service providers including cable companies to provide data regarding their deployment of fixed broadband services in each census block in the United States (including the State of Minnesota) via the completion of Form 477 twice each year. The FCC tabulates the data and makes cable coverage by census block and by provider available to the public on its website. The FCC tabulates the data and makes cable coverage by census block and by provider available to the public on its website.
- 71. While the data shows the availability of broadband services, it can be used to measure the availability of voice services because today, where cable companies offer broadband services, they also offer voice services utilizing VoIP technology.⁴⁸
- 72. Because cable companies use their own facilities to provide service, they qualify as competitive service providers per the Statute.⁴⁹
- 73. Thus, based on FCC Form 477 Data for cable and other wireline providers, the criteria in Minn. Stat. § 237.025, subd. 4(1) that "at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated

⁴⁶ The FCC requires Form 477 to be completed twice a year by: (1) Facilities-based Providers of Broadband Connections to End Users, (2) Providers of Wired or Fixed Wireless Local Exchange Telephone Service, (3) Providers of Interconnected Voice over Internet Protocol (VoIP) Service, and (4) Facilities-based Providers of Mobile Telephony (Mobile Voice) Service. *See* FCC Form 477 Instructions, included as Exhibit AL-5, and provided at: https://transition.fcc.gov/form477/477inst.pdf. Fixed Broadband providers such as cable companies must provide deployment data by census block (see instructions, p. 11).

p. 11). ⁴⁷ *See*: https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477.

⁴⁸ First Lubeck Affidavit, ¶15.

⁴⁹ *Id*.

competitive service provider" has been met in 130 of CenturyLink QC's 154 wire centers in Minnesota."⁵⁰

- 74. The Department criticized CenturyLink's analysis regarding wireline competition data in two ways. First, the Department argued that FCC Form 477 Data overcounts the availability of service in a particular census block and identifies one situation where broadband was available in one portion of a census block but not in another portion.⁵¹
- 75. While the Department point cannot be dismissed out of hand, CenturyLink responded that it does not have access to confidential information about the availability of wireline service. In addition, the FCC Form 477 Data is the best data publicly available and notably, the FCC chose to make decisions about millions of dollars of Connect America Fund Phase II support based on this data.⁵²
- 76. CenturyLink also explained that it is possible that broadband availability understates voice availability. Wireline providers are generally classified as telecommunications carriers under Minnesota law. Minnesota Statute § 237.121 states that a telecommunications carrier may not "fail to provide a service, product, or facility to a customer . . . in accordance with its applicable tariffs, price lists or contracts . . ." Thus, if a carrier's tariff covers a larger territory than that in which facilities exist, a customer has a legal right to purchase service and therefore "can choose voice service" from that provider.
- 77. The Department also criticized CenturyLink's statement that where broadband service is available from a competitive service provider, voice service is available as well. However, in response to Department inquiries, the larger cable providers all responded to the Department that they offer voice services contemporaneously with broadband.
- 78. The Department identified five smaller cable providers that indicated they did not provide voice service over their broadband network.⁵⁴ However, a full analysis of those five companies demonstrates that their responses to the Department do not impact the analysis in this case, for the following reasons:
 - Company A acknowledged that it offered voice service, just not over its broadband network;

⁵⁰ *Id.*, ¶¶ 14-18, Exs. AL-2 through AL-10. Multiple wire centers can be included in a single "exchange service area." In this case, the 24 wire centers not meeting the wireline threshold are all individual exchange service areas, so there are 24 exchange service areas that do not have sufficient wireline coverage to meet the standard. However, the Commission finds that those exchanges meet the Competitive Choice Standard through wireless coverage, as discussed above.

⁵¹ Gullikson Affidavit, ¶¶ 40-51, Attachment 8.

⁵² Second Lubeck Affidavit, ¶ 24.

⁵³ Minn. Stat. § 237.121(a)(3).

⁵⁴ Gullikson Affidavit, ¶¶ 54-55, Attachment 12.

- Company B responded that it provided voice service in the one wire center where it competes with CenturyLink, but not in other wire centers *outside* CenturyLink's service areas;
- Company C responded that it provided voice service in some but not all cities where it competes. However, Company C is the *third* competitive broadband provider in the two CenturyLink wire centers where it competes with CenturyLink and the cable provider.
- Company D said that it does not provide voice services in the one CenturyLink wire center where it competes against CenturyLink, but a large cable provider is also in that wire center and provides voice services.
- Company E provided a verbal response indicating that it provided broadband service without providing voice service. However, Company E provides broadband service in three CenturyLink markets, all three of which are served by large cable companies that also provide voice services.⁵⁵
- 79. On the basis of this record, the Commission finds that at least 60 percent of households in each exchange service area included in the Petition may purchase voice service from a competitive service provider.

D. Summary of Commission Analysis

80. The record demonstrates that, in each exchange service area included in the Petition, CenturyLink serves less than 50 percent of the households and at least 60 percent of the households can choose voice service from at least one competitive service provided. Therefore, CenturyLink's Petition is granted.

E. Exchange Area By Exchange Area Analysis

81. While the Commission has already found that CenturyLink's Petition should be granted, an exchange area by exchange area analysis of the thirteen exchange service areas called out by the Department further demonstrates the appropriateness of the Commission's finding.

⁵⁵ Second Lubeck Affidavit, ¶ 27.

1. Cook

- 82. The Cook Exchange has 1,030 households, which constitutes less than 50 percent of the 2,270 housing units in the exchange.⁵⁶ Households exclude vacant housing units. Vacant housing units include vacation housing units.
- 83. CenturyLink provides primary residential access lines in the exchange. Primary residential access lines include both households and vacation housing units, but CenturyLink does not maintain data allowing it to determine how many primary residential access lines serve households versus vacation housing units.
- 84. In order to account for the disproportionate percentage of vacation homes in Cook, an adjustment is required to accurately determine CenturyLink's market share in this exchange. A straight adjustment by the percentage of housing units to households yields a CenturyLink market share substantially below the 50% Standard, satisfying the first prong of the Track 1 test.
- 85. This adjusted market share is consistent with the presence of competitors in the Cook exchange. The Cook exchange is located in St. Louis County. The Connect Minnesota county map shows that 83 percent of the county has access to broadband services of at least 25Mbps download/3Mbps upload. In addition to the services provided by CenturyLink, the Cook exchange has broadband and voice service available from AT&T Mobility and Verizon Wireless.⁵⁷
 - 86. The Connect Minnesota map displays 100 percent coverage for Cook.⁵⁸
- 87. Based on the competitive option provided by AT&T Mobility and Verizon Wireless, the Commission finds that the Competitive Choice Standard, the second prong of the Track 1 test, is met as well.

2. Tofte

- 88. Tofte presents a similar situation to Cook. The Tofte exchange has 440 households, which constitutes just more than 25 percent of the 1,568 housing units in the exchange.⁵⁹
- 89. In order to account for this, the Commission again finds that it is appropriate to make an adjustment to account for the percentage of vacation homes in Tofte. A straight adjustment by the percentage of housing units to households yields a CenturyLink market share well below the 50% Standard, meeting the first prong of the Track 1 test.

⁵⁶ First Lubeck Affidavit, Ex. AL-2.

⁵⁷ Second Lubeck Affidavit, ¶ 39.

⁵⁸ First Lubeck Affidavit, Exhibit AL-11.

⁵⁹ First Lubeck Affidavit, Ex. AL-2.

90. Tofte also meets the Competitive Choice Standard, the second prong of the Track 1 test. The Tofte exchange is located in Cook County. The Connect Minnesota county map shows that 94 percent of the county has access to broadband services of at least 25Mbps download/3Mbps upload. In addition to the services provided by CenturyLink, Tofte has broadband and voice service available from AT&T Mobility, Verizon Wireless, Sprint and Arrowhead Electric Cooperative, the latter of which has overbuilt CenturyLink service areas with grants, and now offers broadband and voice service everywhere in Cook County under the True North Broadband brand.⁶⁰

3. Grand Marais

- 91. The Grand Marais exchange has 1,463 households, which constitutes just more than 50 percent of the 2,804 housing units in the exchange.⁶¹
- 92. Adjusting the Grand Marais market share analysis to account for the percentage of vacation homes in Grand Marais, yields a CenturyLink market share well below the 50% Standard, meeting the first prong of the Track 1 test.
- 93. Grand Marais also meets Competitive Choice Standard, the second prong of the Track 1 test. The Grand Marais exchange is also located in Cook County. The Connect Minnesota county map shows that 94 percent of the county has access to broadband services of at least 25Mbps download/3Mbps upload. In addition to the services provided by CenturyLink, Grand Marais has broadband and voice service available from AT&T Mobility, Verizon Wireless, Sprint and Arrowhead Electric Cooperative, the latter of which has overbuilt CenturyLink service areas with grants, and now offers broadband and voice service everywhere in Cook County under the True North Broadband brand. 62

4. Swanville

94. The Department disputes the Swanville exchange area, based on its contention that the Commission should include UNE-P and Resale lines as a part of CenturyLink's market share. As discussed above, the Commission finds that CenturyLink does not "serve" households where it provides UNE-P and Resale lines to another carrier who then serves the household. Without the addition of UNE-P and Resale lines, CenturyLink serves less than 50 percent of the households in the Swanville exchange area, meeting the first prong of the Track 1 test.

⁶⁰ http://www.aecimn.com/broadband-project/ where it claims Homes & Businesses EVERYWHERE IN COOK COUNTY are ready for connection to True North Broadband.

⁶¹ First Lubeck Affidavit, Ex. AL-2.

^{62 &}lt;a href="http://www.aecimn.com/broadband-project/">http://www.aecimn.com/broadband-project/ where it claims Homes & Businesses EVERYWHERE IN COOK COUNTY are ready for connection to True North Broadband.

95. Regarding the Competitive Choice Standard, the Swanville exchange is located primarily in Morrison County. The Connect Minnesota county map shows that 74 percent of the county has access to broadband services of at least 25Mbps download/3Mbps upload. In addition to the services provided by CenturyLink, Swanville has broadband and voice service available from AT&T Mobility, Verizon Wireless, Sprint and T-Mobile.

5. Biwabik

- 96. The record demonstrates that CenturyLink's unadjusted market share in the Biwabik exchange already meets the 50% Standard. This unadjusted figure does not address the fact that Biwabik has 1,213 households but 1,542 housing units. If an adjustment is made similar to that made for Tofte and other exchanges, the CenturyLink market share would meet the 50% Standard even more easily. With or without this adjustment, the Biwabik exchange meets the first prong of the Track 1 test.
- 97. The 60 percent criteria is also met for Biwabik. The Biwabik exchange is located in St. Louis County. The Connect Minnesota county map shows that 83 percent of the county has access to broadband services of at least 25Mbps download/3Mbps upload. In addition to the services provided by CenturyLink, Biwabik has broadband and voice service available from AT&T Mobility, Verizon Wireless and Mediacom.

6. Carlton

98. The Department originally contested the Carlton exchange, however it conceded that the Carlton exchange meets the 50% Standard. It also appeared to concede the Competitive Choice Standard. Carlton is not included in Ms. Gullikson's list of exchanges that it argues fail to have 60 percent wireless coverage. Mr. Nelson's analysis of wireless coverage showed that 65 percent of households in Carlton have indoor coverage from at least AT&T Mobility or Verizon Wireless in just the 800MHz frequency band. Therefore, Carlton meets the Competitive Choice Standard as well.

7. Isanti

99. The Department acknowledged that Isanti meets the 50% Standard, but questioned inclusion of the Isanti exchange, apparently because it "marginally" meets the Track 1 test.

⁶³ Biwabik has 1,542 housing units but only 1,213 households. Households comprise 78% of the total housing units. First Lubeck Affidavit, Ex. AL-2, p. 1.

⁶⁴ Gullikson Affidavit, ¶ 72.

⁶⁵ Paragraph 77 of Ms. Gullikson's Affidavit lists the exchanges that did not meet the wireless 60 percent criterion based on Mr. Nelson's wireless signal strength conclusion (including Carlton). By its absence, the Department concedes that Carlton met the criterion.

⁶⁶ First Nelson Affidavit, Ex. 2, §4.2.

- 100. The Isanti exchange is located in a growing bedroom community north of the Twin Cities in Isanti County. In addition to the services provided by CenturyLink, Isanti has broadband and voice service available from AT&T Mobility, Verizon Wireless, Sprint, T-Mobile and Midcontinent Communications.
- 101. The Connect Minnesota map in Exhibit AL-11 indicates 100 percent mobile broadband coverage in Isanti.
- 102. The Commission finds that CenturyLink's market share, together with the presence of other providers and the extent of broadband coverage demonstrates that Isanti meets the Competitive Choice Standard and therefore meets the Track 1 test.

8. Rush City

103. The Department acknowledged that Rush City meets the 50% Standard. Regarding the Competitive Choice Standard, Mr. Nelson analyzed wireless signal strength as covering 90.5 percent of households in the Rush City exchange.⁶⁷ Therefore, the Commission finds that Rush City meets the Track 1 test.

9. Nashwauk

- 104. Nashwauk appears to be contested based on the Department's position that the Commission should reject CenturyLink's application in situations where its data "marginally" meets the statutory standards.
 - 105. There is no dispute that Nashwauk meets the 50% Standard. 68
- 106. The Nashwauk exchange is located in Itasca County. The Connect Minnesota county map indicates that 79 percent of the county has access to broadband services of at least 25Mbps download/3Mbps upload. In addition to the services provided by CenturyLink, Nashwauk has broadband and voice service available from AT&T Mobility, Verizon Wireless, Sprint, T-Mobile, Paul Bunyan Rural Telephone Cooperative and Mediacom. The Paul Bunyan Rural Telephone Cooperative has overbuilt northern portions of the Nashwauk exchange and now provides both broadband and voice service there.
- 107. The Department acknowledged that Nashwauk "marginally" meets the 60 percent criteria based on wireless availability alone.⁶⁹
- 108. The Commission finds that the record demonstrates the Nashwauk exchange satisfies both prongs of the Track 1 test.

⁶⁷ First Nelson Affidavit, Ex. 2, p. 20.

⁶⁸ See Gullikson Affidavit, ¶72.

⁶⁹ *Id.*, ¶ 77.

10. Marble

109. Ms. Gullikson for the Department acknowledged that CenturyLink's market share in Marble meets the 50% Standard. With respect to the Competitive Choice Standard, CenturyLink established that service is available in 100 percent of the exchange from AT&T Mobility, Verizon Wireless and T-Mobile and nearly 100 percent from Sprint. Additionally, the Connect Minnesota map displays 100 percent coverage for Marble and Mr. Nelson concluded that 63 percent of the exchange has indoor wireless service available under his conservative analysis.

11. Sabin

110. With respect to the Sabin exchange, there is no dispute CenturyLink meets the 50% Standard. With respect to the Competitive Choice Standard, Mr. Lubeck's First Affidavit, at Exhibit AL-16, shows service available in 100 percent of the exchange from AT&T Mobility, Verizon Wireless, T-Mobile and Sprint. Additionally, the Connect Minnesota map in Exhibit AL-11 displays 100 percent coverage for Sabin. When this information is combined with CenturyLink's very small market share, the Commission concludes that this exchange meets the Competitive Choice Standard, thereby qualifying for relief under Track 1.

12. Staples

111. With respect to the Staples exchange, there is no dispute that CenturyLink meets the 50% Standard. Mr. Nelson concludes that 55 percent of the exchange has indoor service available under his analysis of just the 800MHz frequency band. Furthermore, Exhibit AL-16 shows service available in 100 percent of the exchange from AT&T Mobility, Verizon Wireless and T-Mobile and nearly 100 percent from Sprint. And the Connect Minnesota map in Exhibit AL-11 displays 100 percent coverage for Staples. As with the Sabin exchange, when this information is combined with CenturyLink's very small market share, the Commission concludes that this exchange meets the Competitive Choice Standard, thereby qualifying for relief under Track 1.

13. Holdingford

112. With respect to the Holdingford exchange, there is no dispute that CenturyLink serves less than 50 percent of residential households. With respect to the 60 percent standard, Mr. Nelson concludes that 56 percent of the exchange has indoor service available under his analysis of just the 800MHz frequency band. Furthermore, Exhibit AL-16 shows service available in 100 percent of the exchange from AT&T Mobility, Verizon Wireless, T-Mobile and Sprint. And the Connect Minnesota map in Exhibit AL-11 displays 100 percent coverage for Holdingford. As with the Sabin exchange, when this information is combined with CenturyLink's very small market share, the Commission concludes that this exchange meets the Competitive Choice Standard, thereby qualifying for relief under Track 1.

CONCLUSIONS OF LAW

- 1. The Competitive Market Regulation Statute ("Statute"), Minn. Stat. § 237.025, governs this proceeding.
- 2. The Statute requires the Commission to grant CenturyLink's Petition to be regulated pursuant to the Statute for each exchange service area for which it has demonstrated that: (a) CenturyLink serves fewer than 50 percent of the households in the exchange; and (b) at least 60 percent of the households can choose voice service from at least one competitive service provider.
 - 3. CenturyLink bears the burden of proof in this proceeding.
- 4. CenturyLink does not "serve" a household in instances where it provides UNE-P or Resale lines to another provider, where that other provider provides voice service to the household.
- 5. It is reasonable to use the United States Census Bureau definition of "household" in determining whether the statutory standard has been met in each exchange.
 - 6. The Statute defines wireless carriers as competitive service providers.
- 7. The Statute defines cable or broadband providers of voice service as competitive service providers.
- 8. The record of this proceeding demonstrates that, in each of the 109 exchange service areas included in the Petition, CenturyLink serves fewer than 50 percent of the households in the exchange and at least 60 percent of the households can choose voice service from at least one competitive service provider. Therefore, CenturyLink's Petition is granted in its entirety.

Dated: March 9, 2017 WINTHROP & WEINSTINE, P.A.

By: /s/ Eric F. Swanson

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