

Minnesota Public Utilities Commission

Staff Briefing Paper

Meeting Dates: April 13 & 20, 2017 **Agenda Item # 1

Companies: CenturyLink QC

Docket No. PUC Docket Number: P-421/AM-16-496
In the Matter of the Petition of CenturyLink QC to be Regulated Pursuant to
Minn. Stat. § 237.025: Competitive Market Regulation (see also docket 16-547
for “Highly Sensitive Protected Data”)

PUC Docket Number: P-421/AM-16-547
Repository for “Highly Sensitive Protected Data” subject to additional protection
in Docket 16-496 (In the Matter of the Petition of CenturyLink QC to be
Regulated Pursuant to Minn. Stat. § 237.025: Competitive Market Regulation)

Issue: Should the Commission find that CenturyLink meets the Competitive Criteria of
Minn. Stat. § 237.025 for each of the 109 Exchange Service Areas identified in its
petition?

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1.0 Relevant Documents

CenturyLink Petition.....	June 30, 2016
First Affidavit of Robert Brigham	June 30, 2016
Second Affidavit of Robert Brigham.....	August 29, 2016
<i>Order Requiring Further Filings and Initiating Expedited Proceeding</i>	November 2, 2016
CenturyLink: First Affidavit of Lubeck.....	November 21, 2016
CenturyLink: First Affidavit of Nelson	November 21, 2016
CenturyLink: First Affidavit of Lubeck (corrected AL-13)	January 9, 2017
CenturyLink: First Affidavit of Lubeck (corrected AL-14)	January 9, 2017
CenturyLink: First Affidavit of Lubeck (replacement pages)	January 9, 2017
<i>Order Finding Petition Complete, Requiring Notice,</i> <i>and Setting Process Schedule</i>	January 27, 2017
OAG: Comments regarding Public Notice	February 3, 2017
DOC: Comments regarding Public Notice	February 6, 2017
Commission Notice Approving Public Notice	February 8, 2017
DOC: Affidavit of Legursky	February 9, 2017
DOC: Affidavit of Gullikson	February 9, 2017
DOC: Affidavit of Gullikson (replacement Att. 3, 6 & 8).....	February 10, 2017
DOC: Affidavit of Gullikson (replacement Att. 12).....	February 10, 2017
DOC: Affidavit of Gullikson (errata)	February 23, 2017
CenturyLink: Second Affidavit of Lubeck	February 23, 2017
CenturyLink: Second Affidavit of Nelson.....	February 23, 2017
CenturyLink: Initial Brief	March 9, 2017
CenturyLink: Proposed Findings	March 9, 2017
OAG: Initial Brief and Proposed Findings	March 9, 2017
DOC: Initial Brief	March 9, 2017
DOC: Proposed Findings	March 10, 2017
CenturyLink: Reply Brief	March 23, 2017
CenturyLink: Amended Findings	March 23, 2017
DOC: Reply Brief	March 23, 2017
DOC: Reply Findings	March 23, 2017
OAG: Reply Brief.....	March 23, 2017
DOC: Affidavit of Gullikson (replacement errata; initial file corrupted).....	March 24, 2017
DOC: Supplemental Affidavit of Gullikson	April 5, 2017

2.0 Procedural Background

On June 30, 2016, CenturyLink QC filed a petition seeking to be regulated pursuant to Minn. Stat. § 237.025. The petition was supported by the First Affidavit of Brigham (and a Second Affidavit filed on August 29, 2016).

On August 15, 2016, the Minnesota Office of the Attorney General (OAG) and the Minnesota Department of Commerce (DOC) filed objections to CenturyLink's petition arguing that it was incomplete. Had the Commission received no objections by that date CenturyLink's petition would have been deemed approved pursuant to § 237.025, Subd. 3(c).

On November 2, 2016, the Commission issued its *Order Requiring Further Filings and Initiating Expedited Proceeding*. The Commission determined that CenturyLink's filing was incomplete with respect to the filing requirements established in § 237.025, Subd. 2.

On November 21, 2016, CenturyLink responded to the Commission's November 2nd Order, filing the First Affidavits of Lubeck and Nelson, intended to complete its petition.

On January 27, 2017, the Commission issued its *Order Finding Petition Complete, Requiring Notice, and Setting Process Schedule*. That Order found that CenturyLink's petition was complete as of November 21, 2016. That finding established May 22, 2017, as the statutory deadline for Commission action on the petition (180 days from the date all required information was submitted; see § 237.025, Subd. 3(e)).

On February 9, 2017, DOC responded to CenturyLink's testimony filing the Affidavits of Gullikson and Legursky.

On February 23, 2017, CenturyLink responded with the Second Affidavits of Lubeck and Nelson.

On March 9, 2017, CenturyLink, OAG and DOC filed Initial Briefs.

On March 23, 2017, CenturyLink, OAG and DOC filed Reply Briefs.

On April 5, 2017, DOC submitted the Supplemental Affidavit of Gullikson.

3. Introduction

3.1 Introduction

Minn. Stat. § 237.025 establishes a path whereby a local exchange carrier may reduce its regulatory oversight. This section provides a brief sketch of the regulatory structure that CenturyLink QC seeks to depart from, and of the regulatory structure that it seeks to adopt. CenturyLink QC is the first local exchange carrier to seek to take advantage of § 237.025 (enacted in 2016) and the Commission faces the task of interpreting its language for the first time. This section also provides an overview of the analytical structure that derives from the language of the statute and of the decision criteria established by the statute. A brief discussion of the parties' positions follows.

3.2 Deregulation

A successful petitioner under § 237.025, does not evade all regulation (in the relevant geographic region). Rather, the petitioner remains subject to regulation ...

as a telecommunications carrier under section 237.035, and as a competitive local exchange carrier [CLEC] under Minnesota Rules, parts 7811.2210 and 7812.2210, as applicable. Nothing in this section shall 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, including, but not limited to:

- (1) sections 237.50 to 237.56;
- (2) sections 237.66, 237.661, 237.663, and 237.665;
- (3) sections 237.69 to 237.71; and
- (4) Minnesota Rules, chapter 7810. [Minn. Stat. § 237.025, Subd. 6(a)]

Currently, CenturyLink operates under traditional rate-of-return regulation, subject to substantial Commission oversight. Although there are many nuances to transitioning from rate-of-return regulation to competitive market regulation, perhaps the chief one is relaxed rate regulation. Under § 237.025, Subd. 8, the successful petitioner, at its discretion, may raise rates by increments of \$2.00 per month (maximum) to a cap of \$25.00 per month up until December 31, 2022 (any incremental increase must remain in effect for at least 12 months). After that date the \$25.00 cap is removed and incremental increases (\$2.00 maximum, effective for at least 12 months) are deemed approved if the Commission takes no action within 90 days of notice of the

rate change, unless within that 90 days the Commission begins to take action to determine if the rate increase will result in substantial harm.

The successful petitioner will not generally require prior approval of its tariffs or service offerings although it remains subject to the Commission's service quality rules (Minn. Rules, Parts 7810.4100 through 7810.6100).

3.3 Alternative Form of Regulation (AFOR)

For a number of years CenturyLink QC, by its choice, was regulated pursuant to a series of AFOR plans (approved by the Commission). CenturyLink's AFORs (modified over time) relieved it of traditional rate-of-return regulation. The AFORs restricted rate increases to some degree, required investment plans, and required detailed reporting of a number of service quality metrics.

CenturyLink, at its discretion, allowed its AFOR to terminate on December 31, 2016, thus placing it under traditional rate-of-return regulation for the past few months. Had the Commission found that CenturyLink's petition was complete at the time it was initially filed (June 30, 2016), and if the Commission made its decision within the statutory 180-day deadline, and if CenturyLink was successful in its petition, CenturyLink would have avoided a period of rate-of-return regulation.

Relative to the AFOR restrictions, a successful market regulation petition by CenturyLink would relieve it of some pricing restrictions, the need for an approved investment plan, and service quality reporting. These changes are not insignificant. Absent detailed service quality reports the Commission must rely on customer complaints, often sporadic and anecdotal, to determine if CenturyLink is meeting the service quality rules. And, § 237.025 is less restrictive than CenturyLink's AFORs in terms of allowable rate increases.

3.4 Competitive Market Criteria

Minn. Stat. § 237.025, Subd. 4, establishes two alternative groupings of competitive criteria that a petitioner must meet to satisfy § 237.025. A petitioner need only satisfy one grouping (track). CenturyLink has offered evidence it believes will satisfy what it refers to as Track 1. Specifically, Track 1 comprises two components:¹

¹ Minn. Stat. § 237.025, Subd. 4(2) establishes Track 2:

The commission **shall** approve a petition under this section if a petitioning local exchange carrier **demonstrates to the commission's satisfaction** 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; ... [emphasis added]

As the criteria are both expressed in fractions (50% and 60%) much of the argument by the parties focuses on estimation of the two numerators and the two denominators. Arguments focus on statutory interpretation and/or estimation methods.

3.5 Exchange Service Areas (ESAs)

Subdivisions 4 (above), 2 and 6 establish Exchange Service Areas (ESAs) as the geographic focal points of analysis. Subdivision 2(a) states, in part:

A local exchange carrier may petition the commission to have its residential voice services and business voice services to customers subscribing to three or fewer business lines regulated under this section **in any exchange service area** in which the carrier provides local voice service. [emphasis added]

And, Subdivision 6(a) states, in part:

A local exchange carrier that has received approval from the commission to be regulated under this section in one or more of its **exchange service areas** shall be subject to regulation in those **approved exchange service areas** as a telecommunications carrier ... and as a competitive local exchange carrier ... [emphasis added]

The commission shall approve a petition under this section if a petitioning local exchange carrier demonstrates to the commission's satisfaction that: ...

- (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.

An ESA is the “geographical territory served by an exchange, usually embracing a city, town, or village and its environs.” [Minn. Rules, Part 7810.0100, subpart 15]

With the analytical focus placed on the ESA it is possible that the Commission could find that some ESAs meet the competitive criteria and some ESAs do not. There are **154 wire centers** within CenturyLink QC’s service territory. Those wire centers can be grouped into **109 ESAs** (see the First Affidavit of Lubeck, Exhibit AL-1). Many ESAs comprise a single wire center. Some ESAs comprise multiple wire centers. Effectively, CenturyLink’s November 21st filing comprises 109 separate petitions. Note that these figures exclude **6 ESAs/wire centers** where the central office is located in either North Dakota or Iowa.²

3.6 Burden of Proof

Minn. Stat. § 237.025, Subd. 5, states that the “burden of proof to show that the competitive criteria of subdivision 4 have been met shall be on the petitioning local exchange carrier.”

3.7 Reexamination in Future

Minn. Stat. § 237.025, Subd. 11, states:

The commission may, upon petition or on its own motion, open a proceeding to examine whether the competitive criteria in subdivision 4 continue to be met in an exchange service area in which a local exchange carrier previously received commission approval to be regulated under this section. If the commission determines that the competitive criteria are no longer met, it shall determine the appropriate level of regulation for that provider in that exchange service area.

3.8 Argument in Brief

Two parties, CenturyLink and DOC, submitted verified pleadings. CenturyLink argues that the Track 1 criteria are satisfied for all of the 109 ESAs. DOC states that it would be reasonable for the Commission to find that the statutory criteria are satisfied in a significant number of ESAs but DOC believes that CenturyLink’s analysis is flawed in a number of ways and it recommends that the Commission not approve the petition in for a number of ESAs. DOC also argues that

² According to DOC, the central offices for Estherville, Lake Park and Spirit Lake are located in Iowa, and the central offices for Moorehead, East Grand Forks and Breckenridge are located in North Dakota. Initial Brief, p. 3.

the errors in CenturyLink's arguments – errors that favor CenturyLink's arguments – errors that are not precisely quantifiable given the record – are of such a significance that those ESA's that marginally meet the Track 1 criteria should not be approved. DOC argues that CenturyLink bears the burden of proof and that proof is required by a preponderance of the evidence. DOC also believes that, especially in the case of the marginal ESAs, the Commission should weigh its consumer protection mandates in the balance.

CenturyLink argues that the statute makes no provision for "marginal" decision criteria – that there is a bright line – either an ESA meets the criteria or it does not – and that all 109 ESAs do meet the Track 1 criteria. Staff agrees that "margin" or "marginal" do not appear in the statute, however Staff believes that DOC uses the term "marginal" to account for the level of confidence it believes the Commission could attach to the Track 1 criteria estimates. It does not appear that DOC argues for the establishment of any particular margin or degree of confidence, leaving that judgement to the Commission. Thus "margin" is associated with "weight of evidence." The statute, Subdivision 4, requires the petitioner to "demonstrate to the commission's satisfaction" that it meets the criteria.

OAG did not submit any verified pleadings although it filed Initial and Reply Briefs generally supporting DOC's position. OAG argues that doubts as to reasonableness should be resolved in favor of consumers. DOC argues that it is reasonable for the Commission to consider consumer protection statutes and rules in making its decision, especially for the marginal ESAs. CenturyLink disagrees, arguing that the Commission cannot reach beyond the criteria of § 237.025 to make its decision.

Further, OAG recommends the Commission require CenturyLink to provide additional notice to customers and to periodically provide information in the future to ensure that the Track 1 criteria continue to be met. DOC also supports more detailed customer notice. CenturyLink opposes additional customer notification and scheduled periodic review.

4. Market Share Criterion (<50%)

Section 237, Subd. 4(1) states the market share criterion:

The commission shall approve a petition under this section if a petitioning local exchange carrier demonstrates to the commission's satisfaction that:

(1) it serves fewer than 50 percent of the households in an exchange service area, ...

4.1 Line Counts of Brigham and Lubeck

In its initial petition of June 30, 2016, and again on August 29, 2016, CenturyLink offered two Affidavits of Robert Brigham. Subsequently, CenturyLink offered the testimony of Al Lubeck (First Affidavit of November 21, 2016, and Second Affidavit of February 23, 2016). The First Affidavit of Lubeck (p. 2) stated that this "affidavit is intended to supplement those filings [of Brigham] but, for ease of reference, will repeat and add to the information filed at that time."

DOC argues that CenturyLink did not withdraw or refute the June 30th Affidavit of Brigham and that the CenturyLink line counts of Brigham (Exhibit RHB-3) and Lubeck differ significantly (Brigham estimating some higher counts). Further, DOC argues that CenturyLink has not explained, despite requests, the basis for the difference in the line counts other than to say that the Brigham counts are in error. Attachment 6 to the Affidavit of Gullikson compares Brigham numbers (column B) to Lubeck numbers (column K) for wire centers with relatively large differences. (DOC Initial Brief pp. 13-15)

CenturyLink argues that DOC's concerns here are overblown. DOC fails to note that other exhibits of Brigham (RHB-2 and RHB-4) align with those of Lubeck. CenturyLink, in a supplemental discovery response, has served a new RHB-3 and will make it available to the Commission if necessary. (CenturyLink Reply Brief, p. 21)

Question: Should the Commission adopt the line counts of Brigham or Lubeck as a basis for analysis (recognizing that those counts may be modified based on subsequent findings – see below)?

4.2 Households & Housing Units

The parties appear to agree that “household” should be defined as it is by the U.S. Census Bureau:

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.³

The parties appear to have accepted the Census Bureau’s definition of “housing unit:”

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 a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible.⁴

And the parties appear to agree that “household” does not include “housing units.”

CenturyLink estimates its market share for each wire center as follows:

number of CenturyLink primary residential voice lines
(representing households served by CenturyLink)

number of households.

CenturyLink estimates that all but three ESA’s meet the 50% criterion: Cook, Grand Marais and Tofte. (Note that Island Lake wire center, too, does not meet the criterion but it is part of the

³ https://www.census.gov/glossary/#term_Household

⁴ https://www.census.gov/glossary/#term_Housingunit

Duluth ESA). However, CenturyLink goes on to argue that those ESAs are not typical of Minnesota ESAs in that there are many summer homes and vacation homes in those ESAs, homes that CenturyLink serves. CenturyLink thus adjusts its estimates arguing:

For these areas, the household share calculated for CenturyLink QC is distorted, since there are voice lines active in dwellings that are defined as housing units, but not households. Thus, the numerator in the calculation includes voice lines for households that are not included in the denominator. This anomaly can be corrected by removing the primary access lines that are not associated with a household from the numerator. An estimate of the number of primary access lines associated with households can be calculated by multiplying the number of CenturyLink voice lines by the ratio of households to housing units in the wire center. The adjusted primary access lines can then be divided by households to yield the percentage of households with CenturyLink QC voice service. . . . If the mismatch is corrected, the company “serves fewer than 50 percent of the households” [in Cook, Grand Marais, Island Lake and Tofte]. [First Affidavit of Lubeck, pp. 6-7, and tables on pp. 5 and 7]

Thus, based on Census Bureau data, CenturyLink estimates the ratio of households (HH) to housing units (HU) and estimates market share as follows:

$$\frac{\begin{array}{l} \text{number of CenturyLink primary residential voice lines} \\ \text{(representing households served by CenturyLink)} \\ \times \\ \text{HH/HU} \end{array}}{\text{number of households.}}$$

As HH/HU is less than one, CenturyLink’s market share estimate is reduced.

DOC recommends that the Commission not accept CenturyLink’s proposal, because it should have taken steps to reasonably adjust the numerator of the 50% test to account for lines not used by households. CenturyLink’s Petition understated the numerator and overstated the denominator of this ratio (households served by CenturyLink ÷ total households). CenturyLink overstated the denominator in Tofte, Cook, and Grand Marais with a proposed convoluted adjustment to the denominator that was based on speculation and disregard of the statutory requirement that the Commission determine the percent of “households” served, and not housing units. Further, DOC argues that the numerator should have been reduced to account for non-households that CenturyLink serves. From its own records, CenturyLink easily could have accounted for the seasonally-disconnected and seasonally-suspended lines, and lines for which the service and billing addresses differed in a manner to disclose lines that serve a Tofte, Cook,

or Grand Marais service address for a subscriber who maintains his or her primary residence and mailing/billing address elsewhere (DOC Reply Brief, pp. 6-7).

OAG agrees with DOC that the Commission should reject CenturyLink's petition for the ESAs of Cook, Grand Marais and Tofte (OAG Reply Brief, pp. 4-5)

Note: On April 5, 2017, DOC submitted the Supplemental Affidavit of Gullikson. There DOC adopted a method of accounting for seasonal lines that differs from that used by CenturyLink. DOC modified the numerator, multiplying it by the ratio of suspended lines to all CenturyLink lines. DOC believes that suspended lines are usually associated with vacation homes.

Question: Are CenturyLink's adjustments to its market share estimates for the Cook, Grand Marais, Tofte and Island Lake wire centers appropriate?

Question: Are DOC's adjustments to the market share estimates for the Cook, Grand Marais and Tofte ESAs appropriate?

Question: Are *any* adjustments to the market share estimates for the Cook, Grand Marais, Tofte and Island Lake wire centers appropriate?

4.3 Farm/Home Business Lines

The previous discussion focused on the specific adjustments that CenturyLink and DOC made to CenturyLink's market share estimates for Cook, Grand Marais and Tofte. This section addresses an objection raised by DOC applying potentially to all ESAs. CenturyLink used counts of primary residential access lines as a measure of households served. DOC argues this approach understates the market share as it does not account for CenturyLink's provision of service to households from which a small business is operated and where that household chooses to subscribe to a business line, and not to a 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 residential service. 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. DOC 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. (DOC Initial Brief, pp. 9-10)

CenturyLink argues that DOC's argument should be rejected, that there is no evidence in the record that would support a conclusion that these types of lines exist, let alone exist in sufficient numbers to have an impact on the residential line counts at issue in this proceeding. Even if DOC could determine such an estimate, that theoretical estimate would need to be reduced by the number of households that also purchase a residential line. If a household already purchases a residential line, it is already included in CenturyLink's market share calculation. There can be no doubt that the number of households meeting this definition would be very small. The monthly rate for residential flat rated service currently ranges from \$15.96 to \$16.76. The rates for business services are more than double that amount, ranging from \$34.61 to \$43.29. It is extremely unlikely that a customer would voluntarily choose to purchase the higher-priced service in order to address residential telecommunications needs. The Commission should not adjust the evidence in light of the remote possibility that some customers have chosen to purchase a business line as its only wireline connection to a household. (CenturyLink Initial Brief, pp. 15-16)

DOC responds to CenturyLink arguing that it, not DOC, bears the burden of proof. (DOC Initial Brief, pp. 9-10)

OAG argues that the customer count should include small business customers (three or fewer business lines) because the statute applies to the regulation of those entities (§ 237.025, Subd., 2(a)). (OAG Reply Brief, p. 7)

Question: Should CenturyLink include in its estimate of primary residential lines those lines of farm and home businesses where the customers subscribe only to business lines?

Question: Should CenturyLink include small business customers (three or fewer lines) in its market share line count?

4.4 Wholesale Line Counts

DOC argues that CenturyLink understated its market share because it did not count resold lines and UNE-P lines in the numerator, and that such lines would not exist if CenturyLink did not provide the plant (for UNE-P, say You Knee Pea; Unbundled Network Elements – Platform). UNE-P refers to a bundling of the local loop, switching functions and transport functions that is made available at wholesale to Competitive Local Exchange Carriers (CLECs) that, in turn, sell those services to end-users. Resale refers to products and services that CenturyLink sells to non-facilities-based CLECs and resellers, typically at a wholesale discount rate (see Gullikson

Affidavit, p. 15, footnotes 20 & 21). DOC's argument applies to all ESAs where CenturyLink provides service via wholesale resold and UNE-P products.

DOC argues that resold and UNE-P lines are used to "serve" customers and that resold lines, in particular, largely comprise residential voice service and their inclusion could have a substantial impact on the number of ESAs that could meet the 50% threshold. DOC further argues that resold lines cannot be considered as lines provided by a Competitive Service Provider (CSP) because a reseller "does not own a substantial portion of the last-mile loop or facilities" [§ 237.025, Subd. 2(iii)] (DOC Initial Brief, pp. 10-13)

CenturyLink argues that it does not "serve" end-user customers when it provides wholesale resold and UNE-P products and services. CenturyLink argues that it is the wholesale purchaser of such products and services, not CenturyLink, that serves the end user and, further, this Commission has imposed significant limitations on interactions between CenturyLink and the end users. CenturyLink also notes that "telecommunications service" is defined as "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used." DOC's focus on the owner of the facilities as the provider of "service" is inconsistent with statute. (CenturyLink Reply Brief, pp. 6-8)

Staff notes that Minn. Stat. § 237.01, Subd. 6a, states that telecommunications service means "the offering of telecommunications under the commission's jurisdiction for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."

Question: Should CenturyLink include UNE-P and/or resold lines in its estimation of primary lines served?

5. *Competitive Service Providers (>60%)*

Section 237, Subd. 4(1) states the competitive service provider (CSP) criterion:

The commission shall approve a petition under this section if a petitioning local exchange carrier demonstrates to the commission's satisfaction that:

- (1) ... at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider; ...

Subdivision 1(a), defines CSP:

- (a) Except as otherwise provided in this subdivision, a "competitive service provider" means:
 - (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.

"Competitive service provider" does not include:

- (i) a provider using satellite technology;
- (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;
- (iv) an over-the-top VOIP provider; or
- (v) a local exchange carrier petitioning to be regulated under this section or any affiliate of the petitioning local exchange carrier.

CenturyLink argues that it meets the 60% criterion in all ESAs. DOC argues that CenturyLink has overstated the degree to which CSPs compete in a number of ESAs by inflating the

percentage of households with access to a wireline CSP and overstating the level of competition in some ESAs where wireless service is minimally adequate.

Note: On April 5, 2017, DOC submitted the Supplemental Affidavit of Gullikson. There DOC stated that it had obtained new evidence that CenturyLink had significantly overstated the presence of competitors. DOC had contacted a number of competitors to determine if they were actually in competition with CenturyLink.

5.1 Households with Access to a Wireline CSP

DOC argues that there are a number of flaws in CenturyLink's argument regarding the level of wireline competition in the ESAs. OAG agrees and goes further arguing that CenturyLink's estimates are so unreliable that the Commission should focus solely on wireless competition levels when addressing the 60% criterion. DOC focuses on several aspects of the statutory definition of a wireline CSP in Subdivision 1(a)(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.
[emphasis added]

5.1.1 "Owns a Substantial Portion"

Staff is not clear as to the parties' arguments here. However, Staff believes that DOC's argument ties in, to some extent, with its arguments regarding ownership of facilities used to "serve" end-users (see Section 4.4 above). There DOC argued that CenturyLink "serves" end users when it provides UNE-P and services for resale. DOC argues here that CenturyLink "owns" such facilities and, as such, lines leased via UNE-P or resale cannot be considered as CSP lines. If so, there are two implications. If leased lines are not owned lines (1) that affects the estimation of a "substantial portion," potentially disqualifying a provider as a CSP, and (2) even if a provider qualifies as a CSP leased lines should be excluded from its competitive line count. DOC argues that CenturyLink has not provided any data to indicate whether it excluded leased lines from lines owned by a competitor.

Staff understands CenturyLink's argument to be that a provider is a CSP if it "owns a substantial portion" of facilities, not all the facilities. Staff is unclear as to whether CenturyLink perceives leased lines to be equivalent to owned lines but in Section 4.4 it argues that UNE-P and resold lines should not be included in its market share estimation.

Question: Which entity “owns” lines that are leased (resold or UNE-P)?

Question: Does the record show that CenturyLink excluded UNE-P and resold lines from CSP line counts?

5.1.2 “Majority of Households”

DOC argues that, by statutory definition, a service provider cannot qualify as a CSP unless it serves a “majority of households.” Reading Subdivision 1(a)(2) in this manner DOC argues that CenturyLink has not put evidence into the record to show that each CSP serves a majority of households. DOC also argues that DOC inappropriately aggregates the households served by a number of CSPs to reach the 60% target. (DOC Initial Brief, pp. 25-26)

OAG agrees with DOC’s reading that each individual provider must serve a majority of the households to be qualified as a CSP. OAG argues that in addition to the plain language meaning of the statute, there are strong policy reasons that support the statute’s requirement that at least one competitive service provider be able to offer service to at least 60% of households. The presence of at least one competitive service provider that meets the 60% threshold, though not dispositive, is indicia of some level of competition in that ESA. On the other hand, the presence of multiple competitive providers each offering service to fewer than 60% of households, does not indicate competition in that ESA. For example, it is possible that those providers are clustered in a particularly dense area of the ESA and so combining the percentages would result in significant overlap. This could result in an ESA where 20% of households could choose voice service from four competitive service providers. In that scenario, the proper accounting under the statute would be 0%, not 80% (20% x 4), as the Company would have it. To the extent possible under this statute, the more limited - and only reasonable - interpretation of the 60% test ensures that at least a modicum of competition exists in an ESA that surpasses the threshold.

OAG also agrees that it is inappropriate to aggregate providers to reach the target 60%. OAG believes CenturyLink’s reading of the statute renders its wireline CSP estimates so unreliable that the Commission should look only to wireless CSPs when performing its analysis of the presence of CSPs. (OAG Reply Brief, pp. 9-20)

CenturyLink disagrees with DOC’s interpretation of the statute. First, if a CSP is defined using DOC’s interpretation there would be no need for a 50% market share test because wherever a CSP existed CenturyLink would necessarily serve less than 50% of the households. Second, where there are several providers serving an entire exchange none of them would qualify as a

CSP if each served less than the majority of households. The legislature does not intend an absurd, impossible or unreasonable reading. (CenturyLink Reply Brief, pp 15-8)

Question: How should the Commission interpret the statute: such that each provider must serve a majority of households to qualify as a CSP?

Question: Is it appropriate to aggregate CSPs in determining the level of competition in an ESA?

5.1.3 “Delivering Service”

DOC argued that CenturyLink overstated the service provided by broadband providers. Via contact with broadband providers DOC determined that not all broadband providers offer voice service, or offer voice service in the ESAs in which CenturyLink classified broadband providers as CSPs. More importantly CenturyLink’s estimation methods would count all households in census block as being served by a CSP even if only one household received broadband service. CenturyLink adopted an approach used by the FCC in determining whether a census block would be eligible for high cost support for broadband buildout. The FCC determined that “unserved” blocks (unserved by an unsubsidized competitor) would be eligible for support and that even if a census block contained at least one household with broadband access (from an unsubsidized competitor) it could not be considered as “unserved.” CenturyLink relied on the FCC’s analysis to determine which blocks were unserved, treating “not-unserved” blocks as “served.” Thus, even if only one household received broadband service all households in the block were treated as if they were served by a CSP. DOC argues that CenturyLink’s method can lead to extreme distortion and it uses the Chisholm ESA as example. CenturyLink argued that the ESA met the 60% threshold. DOC argued that CenturyLink’s estimates were based only on evidence that 7.6% of the households received wireline broadband. (DOC Initial Brief, p. 31)

CenturyLink responded that it reviewed DOC’s claim that not all broadband providers offer voice service (or at least in the relevant areas) and found that it did not alter CenturyLink’s analytical results (Second Affidavit of Lubeck, p. 12). CenturyLink also noted that wireless CSPs offer services broadly. With respect to DOC’s claim that CenturyLink overstates the presence of competitive broadband, CenturyLink responds that the FCC data is the best available and that the FCC relied on it to distribute billions of dollars in support. (CenturyLink Initial Brief, p. 24)

Question: To what degree, if any, does CenturyLink’s reliance on the FCC’s criterion overstate CSP-served households?

5.1.4 “Voice Service”

DOC argues that, in light of the flaws in CenturyLink’s analysis, the Commission should consider its public interest goals, especially for those ESAs where the criteria are marginally met. Section 237.011 directs the Commission to consider consumer protections and just and reasonable rates. CenturyLink has made no showing that any CSP offers TAP and Lifeline. Further, CSPs, such as Mediacom in Chisholm, price their voice services (\$60) much higher than does CenturyLink (\$17). (DOC Initial Brief, pp. 36-39)

OAG argues that the Commission should resolve doubts as to reasonableness in favor of consumers (OAG Initial Brief, pp. 16-18).

CenturyLink argues that § 237.025 makes no room for arguments regarding universal service or affordable rates. The Commission must look only to the Track 1 criteria. (CenturyLink Reply Brief, p. 18)

Question: Can the Commission look to its statutory goals, beyond § 237.025, as guidance in determining whether a petitioner meets the Track 1 criteria?

5.2 Households with Access to Wireless Service

Subdivision 1(a)(1) states that a “voice service provider” is a CSP. DOC raises several challenges to CenturyLink’s estimates and, as with the wireline arguments above, DOC argues that the Commission should consider the broader public interest when examining the estimates, especially for ESAs at the margin. OAG argues that the Commission should resolve doubt in favor of the consumer. And CenturyLink argues that the statute provides a bright-line criterion, especially so in defining a wireless service provider as a CSP.

5.2.1 Indoor Call Quality

DOC argues that CenturyLink inflated the number of households that can choose wireless service by including households that do not have adequate indoor call quality. DOC argues, first, that the Commission should conclude that residential indoor signal strength is the appropriate measure of voice service for a household. Second, Commission rules and statutes require a carrier to provide quality service. Third, the legislature has determined that it is important for individuals with a communication disability to have access to the statewide telecommunications relay service. And fourth, the Commission should consider that a substantial portion of

Minnesota's elderly reside in rural areas and need access to quality voice service. (DOC Initial Brief, pp. 40-43)

CenturyLink states that it will continue to serve all of the ESAs in the petition and, as such, "access" to voice-grade service will continue to exist. Further, DOC suggests that the Commission could, if it wished, decline to consider wireless availability under the statute. It cannot do so. The legislature has determined that wireless providers are competitive service providers. CenturyLink has established the wireless service is broadly available throughout its service area. (CenturyLink Reply Brief, pp. 18-19)

Question: Is there a level of call quality below which a wireless carrier is not, in effect, providing voice service (that is, is not a CSP)?

5.2.2 Affidavits of Nelson

Adam Nelson provided an estimate of wireless voice coverage in 32 wire centers. DOC argues that Nelson's estimates represent an upper bound estimate of quality since no explanation was provided (1) for the selection of model inputs and (2) for whether the purpose of the model is consistent with the purpose of the Commission in this proceeding. Again, the methods and estimates used to determine whether 60% 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 some ESAs. (DOC Initial Brief, pp. 43-45)

CenturyLink argued that the Nelson study is conservative. First, it only looks at one technology because public information about the location, size and other salient attributes of antennas for other frequencies are not available. Second, it looks solely to two providers, when at least four have certified to the FCC that they offer service to most Minnesota households. Third, the analysis makes assumptions consistent with industry recommendations for Minnesota terrain and signal loss associated with receiving a wireless signal inside a building, and takes into account weather factors that vary with time. And, fourth, it makes conservative assumptions about the locations of households, by randomly assigning them to locations within a census block. (CenturyLink Reply Brief, p. 26)

Question: Does Nelson's analysis overstate wireless coverage?

5.2.3 Comstock and Nashwauk

DOC argues that CenturyLink has failed to explain an inconsistency in the methods it chose to estimate household population, and that that inconsistency may be significant enough to cause the Comstock and Nashwauk ESA's to fail the 60% criterion. Specifically, Brigham and Lubeck used the Centroid method to model the dispersion of households in census blocks. Nelson used the Random Distribution of Points method. DOC states that CenturyLink did not provide a justification for the choice of different models although it did provide a comparison of model results. DOC argues that the discrepancy between the models for the two ESAs was of such a magnitude that those ESAs may have failed the 60% criterion. DOC argues that the Commission should determine those ESAs fail given the magnitude of the discrepancy and the lack of any justification for changing models. (DOC Initial Brief, pp. 45-47)

CenturyLink has submitted a correction to its comparison of results under the two methods (see Gullikson, Attachment JG-3). The difference between the results of the two methods is such that the indoor coverage for Comstock dropped from 70.5% to 66.04%; and for Nashwauk the coverage dropped coverage dropped from 62.7% to 60.3%. Both ESAs meet the 60% criterion. (CenturyLink Reply Brief, pp. 27-28)

Question: Does the unexplained change in the estimation method diminish confidence in the results?

6. Notice and Review

DOC and OAG raised concerns regarding the customer notice distributed by CenturyLink, and OAG recommended that the Commission establish an ongoing process to determine whether CenturyLink continues to meet the Track 1 criteria.

6.1 Customer Notice

In its Order of January 27, 2017, the Commission directed CenturyLink to notify its customers of its petition to be regulated under § 237.025. The Commission delegated to the Executive Secretary the authority to determine the form and content of the notice. The notice approved by the Executive Secretary stated:

CenturyLink has asked the Minnesota Public Utilities Commission to be regulated similar to other competitive telephone companies. State law requires the Commission to approve the application for exchange areas where CenturyLink can show it serves less than 50 percent of the households in the exchange area and where at least 60 percent of the households in the exchange area can choose telephone service from another company. 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. Approval of CenturyLink's application will not change its obligation to meet service quality standards or to provide customers with notice of rate increases. Customers would still be able to file complaints with the Commission. The Commission will likely make its decision about CenturyLink's request by May 2017.

DOC and OAG raised concerns about the content of the notice and noted that they weren't given an opportunity to participate in the drafting of the notice (see their Initial Briefs, the OAG comments of February 3, and the DOC comments of February 6). DOC and OAG believe the notice is insufficient to inform customers fully and that the notice is, arguably, inaccurate. OAG also argues that the inadequacy of the notice contributed to the limited customer response. (OAG Reply Brief, pp. 17-18)

DOC and OAG believe the font size of the notice as it appeared on customer bills was too small to make it effective (see the Commission notice approving the customer notice; February 8, 2017). OAG argues that the content of the notice is too brief and nondescript, that, it doesn't mention the broader context and scope of the regulatory change (i.e. the near contemporaneous expiration of CenturyLink's AFOR). It recommends that CenturyLink be required to give

customers additional notice and that it develop an outreach plan that could include the use of an interactive web page, a social media campaign, or traditional print and/or television advertising. OAG offers a sample of text addressing questions such as: What does deregulation mean?; What type of regulation was CenturyLink previously subject to?; What does deregulation mean for CenturyLink?; and What does deregulation mean for me?

DOC and OAG are concerned that the customer notice may have misled customers as to the extent of potential rate increases. The notice states that “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.” DOC and OAG believe that the notice does not inform customers that their rates could increase by \$2.00 **per year**, subject to a cap of \$25.00 per month before 2023 and subject to no cap after that. Subdivision 8(b) states, in part:

- (1) prior to January 1, 2018, basic local service rates may not be increased beyond the rates in effect on May 20, 2016;
- (2) on or after January 1, 2018, basic local service rates for residential customers and business customers subscribing to three or fewer lines may not be increased on a per month basis by more than \$2.00. Any new basic local service rate established must remain in effect for a minimum of 12 months. Until December 31, 2022, basic local service rates may not exceed \$25.00; or
- (3) on or after January 1, 2023, basic local service rates for residential customers and business customers subscribing to three or fewer lines may not be increased on a per month basis by more than \$2.00. Any new basic local service rate established must remain in effect for a minimum of 12 months. ...

DOC recommends that for any ESA 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.

CenturyLink argues that the Commission should reject OAG’s request for an additional customer notice; the Commission has already addressed the notice issue. (CenturyLink Reply Brief, p. 20)

Staff believes that the Commission’s interpretation of Subdivision 8 and, thus, CenturyLink’s pricing obligations, should be determined independent of any judgement as to the sufficiency of the customer notice.

Question: Should CenturyLink, where its petition is successful, be held to the terms of the customer notice?

Question: Should CenturyLink be required to distribute another, more detailed, customer notice in the ESAs where its petition is successful?

Question: Should CenturyLink be required to develop and implement a media campaign to improve customer awareness of its changed regulatory status?

6.2 Periodic Review

Minn. Stat. § 237.025, Subd. 11, states:

The commission may, upon petition or on its own motion, open a proceeding to examine whether the competitive criteria in subdivision 4 continue to be met in an exchange service area in which a local exchange carrier previously received commission approval to be regulated under this section. If the commission determines that the competitive criteria are no longer met, it shall determine the appropriate level of regulation for that provider in that exchange service area.

OAG recommends that, in light of the uncertainty roiling the telecommunications market, the Commission require CenturyLink to submit, periodically, data that would allow the Commission to assess whether CenturyLink continues to meet the competitive criteria. A regular filing would promote administrative efficiency. (OAG Initial Brief, pp. 22-23)

CenturyLink argues that a regular filing process would involve a tremendous waste of resources. The competitive trends discussed in this proceeding have been in place for a long period of time and there is no reason to anticipate changes in the near future. The data the commission has required in this proceeding are very expensive to obtain (for example a wireless study) and litigating the issues is a tremendous task. There is no reason to believe another proceeding will be necessary. If a party has some reason to think circumstances have changed, the party will always have the right to request that the Commission open an investigation. (CenturyLink Reply Brief, p. 20)

Question: Should the Commission periodically reexamine whether CenturyLink meets the Track 1 criteria?

7. Staff Comment

The arguments presented in this docket are many and varied and, to a large extent, data-intense. And, the relevance and accuracy of the data hinge upon statutory interpretation and estimation techniques. Further, many arguments go to the confidence that the Commission should or should not place in the estimates addressing the two prongs of the Track1 criterion.

Staff suggests that the Commission approach its analysis by first addressing the identifiable principles, statutory and methodological, that underpin the empirical work (i.e. how should “majority” be interpreted for the >60% criterion?; are farm business lines counted or not?). Those decisions in place, the analytical task can be narrowed and freed of much superfluous and distracting discussion. To this end, although untypical, and with a nod to time constraints, Staff suggests that the Commission leave open the possibility of making some core decisions on the 13th. This would allow the Commission, its staff and the parties to refocus and recalculate estimates – or at least display them in a more accessible manner by the 20th (sort of a compliance filing on the run). Staff expects there will still be significant work left for the 20th, not the least of which is an assessment of the confidence that can be placed in estimations and assumptions.

Staff suggests that the Commission first address the following questions regarding statutory interpretation and estimation methods.

Market Share Criterion (<50%):

1. Adjustment to line counts for seasonal occupation: Is any adjustment appropriate? If so, is CenturyLink’s adjustment preferable to DOC’s adjustment? Is another adjustment appropriate?
2. Adjustments to line counts for farm/home business lines: Should the estimate of primary residential lines include farm and home business lines for those customers that do not purchase a residential line?
3. Adjustments to line counts for small business lines: Should the estimate of primary residential lines include the primary lines of small businesses (defined as three lines or less)?

4. Adjustments to line counts for primary UNE-P lines: Should the estimate of primary residential lines include the primary lines of customers served by CenturyLink's UNE-P lines?
5. Adjustments to line counts for primary resold lines: Should the estimate of primary residential lines include the primary lines of customers served by CenturyLink's resold lines?

Competitive Service Providers (>60%):

6. Majority of households: Must a CenturyLink competitor serve more than 60% of the households in an ESA to be considered a Competitive Service Provider?
7. Aggregation of CSPs: Is it appropriate to allow aggregation of competitors in an ESA in targeting the 60% criterion?
8. Line Ownership: Which entity "owns" the line, CenturyLink as the provider of the line, or the CSP that obtains the line from CenturyLink?

Customer Notice and Periodic Review:

9. Should CenturyLink, where its petition is successful, be held to the terms of the customer notice?
10. Should CenturyLink be required to distribute another, more detailed, customer notice in the ESAs where its petition is successful?
11. Should CenturyLink be required to develop and implement a media campaign to improve customer awareness of its changed regulatory status?
12. Should the Commission periodically reexamine whether CenturyLink meets the Track 1 criteria?

Questions 1 through 8 above set parameters for the estimation process. There are distinct and severable, although the answers to questions 4 and 5 (regarding "serve") may be connected to the answer to question 8 (regarding "own"). Questions 9 through 12 stand separate from the preceding questions.

There are numerous other questions raised by the parties that will require the Commission to determine the level of confidence it has in the estimation process. Some of them are:

13. Should the primary residential line counts proposed by Brigham (or Ludeck?) form the base count that would be modified by the decisions above?
14. Should CenturyLink's estimate of ESA population and population distribution form the basis of the analysis? Is it significant that Brigham and Ludeck (wireline) used a population distribution model different from the one used by Nelson (32 wireless wire centers)?
15. Does CenturyLink's reliance on the FCC's "served/unserved" criterion significantly overstate the presence of wireline competitors?
16. Did CenturyLink significantly overstate the presence of wireline competitors?
17. Is there a level of voice quality below which a wireless carrier is not, in effect, providing voice service.
18. Is Nelson's analysis of wireless coverage an upper bound?
19. Can the Commission look to statutes and rules other than § 237.025 in making its decisions?
20. Where there is doubt should the Commission decide in favor of customers (which begs the question as to whether approval or rejection of the petition can be said to favor customers)?

No doubt the parties will be able to augment or recast these questions.