## **Minnesota Public Utilities Commission**

## Staff Briefing Paper

| Meeting Dat  | e: April 7, 2016   |  |  |  |
|--------------|--|--|--|--|
| Company:     | All Local Exchange Carriers  |  |  |  |
| Docket No.   | P-999/R-14-413<br>In the Matter of a Rulemaking to Consider Possible Amendments to Minnesota<br>Rules, Parts 7810.4100 through 7810.6100 |  |  |  |
| Issues:      | Should (or how should) the Commission proceed with the Telephone Service Quality Rulemaking Effort?                                      |  |  |  |
| Staff:       | Kevin O'Grady651-201-2218  |  |  |  |
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| The etteched | materials are work papers of Commission Staff. They are intended for use by the  |  |  |  |

The attached materials are work papers of Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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## Relevant Documents

| CenturyLink Request for Rulemaking (Docket 14-255)                           | March 26, 2014   |
|--|------------------|
| Order Detailing Disposition of Petition and Initiating Rulemaking Proceeding | ng May 22, 2014  |
| Comments: CenturyLink  | December 4, 2014 |
| Comments: Frontier   | December 4, 2014 |
| Comments: Minnesota Telecom Alliance (MTA)                                   | December 4, 2014 |
| Comments: Joint CLECs  | December 4, 2014 |
| Comments: Minnesota Cable Communications Association (MCCA)                  | December 4, 2014 |
| Comments: Consumer-Business Coalition (TCSBC)                                | December 4, 2014 |
| Comments: MN Office of the Attorney General (OAG)                            | December 4, 2014 |
| Reply Comments: CenturyLink  | March 13, 2015   |
| Reply Comments: Frontier   | March 13, 2015   |
| Reply Comments: Minnesota Telecom Alliance (MTA)                             | March 13, 2015   |
| Reply Comments: Joint CLECs  | March 13, 2015   |
| Reply Comments: Minnesota Cable Communications Association (MCCA).           | March 13, 2015   |
| Reply Comments: Consumer-Business Coalition (TCSBC)                          | March 13, 2015   |
| Reply Comments: MN Office of the Attorney General (OAG)                      | March 13, 2015   |
| Reply Comments: MN Department of Commerce (DOC)                              | March 13, 2015   |

## Background

On March 26, 2014, CenturyLink, on behalf of its affiliated companies, asked the Commission to:

- (1) open a rulemaking proceeding to revise its quality-of-service rules, and
- (2) grant an immediate variance of Part 7810.5800 governing restoration of service outages.

On May 22, 2014, the Commission initiated this current rulemaking proceeding to consider possible changes to Parts 7810.4100 through 7810.6100 – the quality-of-service rules.

On August 11, 2014, the Commission denied CenturyLink's request for a variance of Part 7812.5800, finding (1) that the company did not support its claim that the Rule imposes an excessive burden on the company, (2) that the rulemaking proceeding is the most appropriate vehicle for examining the issue, and (3) that there was not sufficient information to conclude the public interest would not be adversely affected by a waiver. The Commission denied CenturyLink's petition for reconsideration on October 10, 2014.

On December 4, 2014, the Commission received comments from interested entities addressing the merits of repealing, modifying, or retaining specific rules.

On March 13, 2015, the Commission received reply comments.

## The Service Quality Rules

The thirteen sections of rules in question address (1) adequacy of facilities (quality and capacity), (2) adequacy of service, (3) trouble reporting, (4) restoration of service after outages, and (5) safety:

| 7810.4100 | Access to Test Facilities       |
|-----------|---------------------------------|
| 7810.4300 | Accuracy Requirements           |
| 7810.4900 | Adequacy of Service             |
| 7810.5000 | <b>Utility Obligations</b>      |
| 7810.5100 | Telephone Operators             |
| 7810.5200 | Answering Time                  |
| 7810.5300 | Dial Service Requirements       |
| 7810.5400 | Interoffice Trunks              |
| 7810.5500 | Transmission Requirements       |
| 7810.5800 | Interruptions of Service        |
| 7810.5900 | <b>Customer Trouble Reports</b> |
| 7810.6000 | Protective Measures             |
| 7810.6100 | Safety Program                  |

The full text of each rule, proposed language modifications, and summaries of the positions of the commenters are presented in Appendix A.

## Request for Comments

On August 4, 2014, the Commission published a Request for Comments in the *State Register*. The Request was also distributed by way of a mailing (electronic or hard-copy) to all Local Exchange Carriers (LECs) and Interexchange Carriers (IXCs) in Minnesota.

The Request for Comments stated, in part:

Consistent with the *Order*, the Commission seeks comments regarding possible changes to the existing rules, parts 7810.4100 through 7810.6100, including specific language suggestions and substantive evidence supporting any suggested rule changes. The Commission invites comments on whether the rules should be modified and, if so, how they should be changed. Anyone requesting rule changes that would eliminate or reduce current service quality standards, at a minimum, is requested to:

- 1. Provide evidence of competition, including the level and scope of such competition in relation to different types of customers (large business, small business, residential, etc.) and geography, and the extent to which existing competition supports the rule changes being recommended. Such evidence and analysis should, at a minimum, reflect or be guided by the following:
  - a. Any market-power analysis should, at a minimum, address the analysis set forth in: (i) *Horizontal Merger Guidelines*, U.S. Department of Justice and Federal Trade Commission, August 19, 2010; and (ii) Memorandum Opinion and Order, *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C.* § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area. Federal Communications Commission, WC Docket No. 09-135, June 22, 2010.
  - b. Commenters should provide evidence of whether wireless service is a substitute for and/or a complement to wireline local service in each relevant market and, if so, to what extent.
  - c. Relevant markets should, at a minimum, reflect (i) different customer segments, including but not necessarily limited to residential, small business

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<sup>&</sup>lt;sup>1</sup> http://www.comm.media.state.mn.us/bookstore/stateregister/39\_05.pdf

- (1-3 lines, suggested), medium business (4-200 lines, suggested) and large business (over 200 lines, suggested); and (ii) different geographic areas where customers face the same choice of competitive services (in some cases this may require defining the market at a level less than that covered by a wire center for example where cable is offered in an urban area but not in the rural portion of the wire center).
- d. Relevant substitutes for traditional landline service should exclude services provided by carriers affiliated with the traditional landline service provider.
- 2. Provide proposed language for each rule change sought, and for each rule change provide:
  - a. A demonstration of how the recommended rule change would impact retail service quality and the extent to which service quality would be adequately protected by competition and/or the recommended rule change;
  - b. An analysis of how the change would, if at all, maintain or improve service quality;
  - c. An analysis and evidence of the impact any recommended change would potentially have on competition, local exchange carriers and wholesale service quality;
  - d. Any other relevant evidence, analysis and argument supporting any recommended rule change and the impact of such change on telecommunications consumers:
- 3. Provide arguments or evidence as to why rule changes should or should not be made regardless of evidence related to competition.

## Commenters' Positions in Brief

The following entities submitted comments and/or replies to the Commission's request for comments:

CenturyLink. CenturyLink believes that all the service quality rules could be stricken. Nonetheless, CenturyLink does not oppose some basic service quality rules provided that they apply equally to all providers and are based on a solid evidentiary showing that the standards are needed to protect Minnesota customers. The highly competitive nature of the voice marketplace in Minnesota means that any regulations the Commission imposes will (1) impose inefficient costs on competitors; (2) provide advantages to certain competitors (such as wireless or VoIP providers) while providing disadvantages to other competitors; and (3) will substitute regulatory judgment for the judgments of consumers. There is no evidence that the current rules meet such goals in today's marketplace.

**Frontier** (comprising Frontier Communications and Citizens Telecommunications). Frontier urges the Commission to modify its rules to address significant changes in how people communicate, their communication priorities, and available alternatives. Frontier argues that three rules should be repealed and the bulk of the remainder should be modified. In sum, the modifications would reduce the restrictions the rules place on LECs.

Minnesota Telecom Alliance (MTA). MTA argues that five of the rules should be repealed and another five rules should be modified. MTA argues that its proposed changes are fully justified because: (1) when implemented decades ago, the basic rationale for these rules was to provide requirements to assure service quality in the context of single (monopoly) providers of service, a rationale that is no longer justified in a highly competitive market; (2) some of these rules clearly were intended to apply to types of technology that are no longer in use, making the rules obsolete; (3) some of these rules could be substantially simplified; and (4) some of these rules address topics that are of little or no value to customers.

Minnesota Cable Communications Association (MCCA). MCCA does not seek any changes to the existing service quality rules and does not oppose amendments to these rules, provided that the changes do not affect, or potentially affect, wholesale service quality. MCCA purchases wholesale services from some ILECs. Reductions in retail service quality standards may diminish the quality of those wholesale services.

**Joint CLECs** (comprising Eschelon Telecom, Integra Telecom, twtelecom, TDS Metrocom, and Velocity Telephone). The Joint CLECs did not propose any changes

to the service quality rules. However, they seek to ensure that wholesale service quality is not inadvertently affected by changes to the retail service quality rules.

#### **Telecommunications Consumer and Small Business Coalition (Coalition)**

(comprising AARP, the Institute for Local Self Reliance, the Legal Services Advocacy Project, the Minnesota Community Action Partnership, and the Twin Cities Metro Independent Business Alliance). The Coalition agrees with some of the recommendations by CenturyLink and other commenters to update or repeal outdated rules. However, the Coalition strenuously objects to the notion that the telecommunications industry has evolved to a place of marketplace equilibrium where there is really no longer a need for any service quality rules. More specifically, the Coalition adamantly opposes recommendations that would erode or eliminate certain core service quality standards that remain as necessary today as they have traditionally been – and, it could be argued, never more important.

#### Office of the Attorney General – Residential Utilities and Antitrust Division

(OAG). Rolling back the substantive protections provided by the service quality rules will ensure that CenturyLink and other providers have little incentive to provide acceptable service in the absence of effective competition. Because wireline telephone service is a public utility, and there is no effective competition in the market, the service quality rules are necessary. The Commission should ensure that the rules continue to provide adequate protection to consumers, and that any changes are limited to those necessary to update the rules in a technology-neutral manner.

**Minnesota Department of Commerce (DOC)**. DOC recommends closure of the docket. It believes the there is insufficient evidence to demonstrate that adequate service quality will be maintained absent the service quality rules.

## Main Arguments, Evidence & Staff Comment

Arguments supporting and opposing rule changes can be broken down into five main categories: (1) technical obsolescence of the rules, (2) appropriate numerical standards, (3) disparity in regulatory requirements faced by different types of service providers, (4) the degree of competition in Minnesota, and (5) the role of the market in setting service quality standards. The

following discussion will focus on general arguments regarding rule change. Arguments regarding specific language proposals are addressed, rule by rule, in Appendix A.

#### 1. Technical Obsolescence of the Rules

Proponents of rule relaxation argue that many of the rules are obsolete, outdated, or antiquated. For example:

- (1) the requirement that utilities have access to testing facilities for circuit and switching equipment (7810.4100); arguing today's operations and transmission are based on IP technology and soft switches,
- (2) the requirement that metering and recording devices for bill preparation be accurate (7810.4300); arguing modern technology has progressed beyond mechanical metering devices,
- (3) the requirement that telephone operators shall be instructed to be courteous and considerate (7810.5100); arguing that such operators are a thing of the past, and
- (4) the requirement that customers must be connected to the network promptly upon picking up the handset (7810.5300); arguing the technology of call set-up has changed.

In general, opponents of rule change do not disagree that some rules do not reflect current technology. However, opponents point to the importance of the principles embodied in the rules. Opponents, typically, are willing to contemplate language change as long as the principles are retained.

Staff believes that perceived technical obsolescence should not drive the Commission's decision as to whether to proceed further with the rulemaking (unless the Commission wishes to strengthen those rules). If anything, obsolescence is likely to diminish any burden associated with the rules. Indeed, rule change proponents did not argue that technical obsolescence made the rules more burdensome.<sup>2</sup> Clearly, the principles expressed in the rules could be enhanced by

<sup>&</sup>lt;sup>2</sup> There may be more smoke than fire in the discussion regarding technical obsolescence. Ernestine (Lily Tomlin) no longer sits at a switchboard managing an octopus of phone jacks. That this rule receives attention from proponents of rule change may have more to do with its value as a poster child for deregulation in general, than with any substantive regulatory burden.

modernizing the language, but the effort required by the Commission and the industry at this time must be balanced against perceived benefit.<sup>3</sup>

## 2. Appropriate Numerical Standards

A number of the rules specify precise numerical standards, such as 7810.5800 governing restoration of service after an outage, stating in part:

Each telephone utility shall make all reasonable efforts to prevent interruptions of service. When interruptions occur, the utility shall reestablish service with the shortest possible delay. The minimum objective should be to clear 95 percent of all out-of-service troubles within 24 hours of the time such troubles are reported.

Rule 7810.5900, governing trouble reports, states in part:

It shall be the objective to so maintain service that the average rate of all customer trouble reports in an exchange is no greater than 6.5 per 100 telephones per month. A customer trouble report rate of more than 8.0 per 100 telephones per month by repair bureau on a continuing basis indicates a need for investigative or corrective action.

And, 7810.5200, governing answering time, states in part:

Adequate forces shall be provided at local manual offices in order to assure that 95 percent of the calls will be answered within ten seconds. Ninety percent of repair service calls, calls to the business office, and other calls shall be answered within 20 seconds.

CenturyLink recommended changes that would strip out precise numeric thresholds for service restoration time (7810.5800). For the same rule, Frontier recommended the 95 percent threshold be reduced to 85 percent. MTA also recommended stripping out precise numeric thresholds. With respect to answering time (7810.5200), Frontier and MTA recommended some relaxation of the standard. CenturyLink supported repeal. Opponents to rule change stressed the importance of the rules to customers.

<sup>3</sup> It has been estimated that an agency can expect to spend, roughly, \$45,000 for a small rulemaking; \$130,000 for a medium rulemaking, and \$300,000 for a major rulemaking. These costs include agency staff time, agency counsel, and costs for services provided by the Office of Administrative Hearings. These figures do not account for the cost.

and costs for services provided by the Office of Administrative Hearings. These figures do not account for the cost to industry stakeholders. See the *Minnesota Rulemaking Manual: A Reference Book for the Practitioner*. Patricia Winget, editor, September 18, 2014, p. 249; http://www.health.state.mn.us/rules/manual/2014manual.pdf.

There is little empirical evidence in the record to support modifying specific numerical standards (say, from 95 % to 85 %). The impact on the utilities or upon customers was not quantified in a manner that would indicate the significance of the burden the rules may place on the utilities or how customers would be affected if the rules were changed. Rather, the arguments favoring rule relaxation are more general in nature and are addressed in subsequent sections.

## 3. Disparity in Regulatory Requirements

One of the arguments raised by proponents for relaxation of the rules holds that the rules place them at a disadvantage with respect to other providers of voice communication services. One main element of this argument focuses on the reporting requirements faced by utilities operating under AFOR (Alternative Forms of Regulation) plans. The other main element focuses on the different regulatory requirements faced by incumbent carriers and industry new-comers, in particular, wireless and cable providers.

#### **AFOR Plan Signatories**

AFOR plans for large companies are a regulatory mechanism whereby, for a specified term, a company is relieved of significant regulatory oversight in exchange for assurances to provide service of a measurable quality, and to cap changes to local rates (although the cap may change annually)(Minn. Stats. §§ 237.76 to 237.774). AFORs plans are entered voluntarily. Currently, CenturyLink QC, Citizens, and Frontier operate pursuant to AFOR plans.

Although all local wireline service providers in Minnesota are bound by Minnesota's service quality rules, the AFOR signatories face more stringent oversight in that (1) monetary penalties are imposed for failure to meet some measurable goals, (2) they bear the burden of monitoring and reporting performance, and (3) if not in "substantial compliance" they may be subject to investigation by regulators. For example, consider Frontier's customer remedies for service restoration. Frontier's AFOR plan states:

If Frontier fails to reinstate basic primary residential service within 48 hours and basic primary business service within 24 hours of the outage or a later date requested by the customer for the repair to be made, for Company reasons, Frontier will provide the customer a pro rata adjustment (i.e., 1/30th) of the monthly recurring charge for the first two days (Residential) and one day (Business) that there is a service outage. Frontier shall provide the customer \$5 for each day thereafter that the Residential

customer is out-of-service and \$10 for each day the Business customer is out-of-service.<sup>4</sup>

In general, Frontier must remain in "substantial compliance:"

Substantial compliance with retail service quality standards is satisfied if Frontier meets 4 out of 5 of its individual service quality standards each year [including the outage repair standard]. For purposes of determining substantial compliance, compliance with the individual service quality standards will be measured on an annual statewide basis. Frontier will not be in substantial compliance with the service quality standards if it fails to meet the same individual service quality standards for two consecutive years. Failure to substantially comply with the service quality standards for two consecutive years will require Frontier to meet and confer with the Department and OAG to negotiate a voluntary resolution to the matters. If successful resolution of the matter cannot be negotiated, Frontier will present the Department and OAG with a plan to bring service quality into compliance including specific actions the Company will take to remedy the situation. If the plan is not acceptable to the Department or OAG, the Department or OAG may file a complaint with the Commission for the purpose of determining whether reasonable additional customer remedies or other actions are warranted.<sup>5</sup>

However, Frontier's regulatory burden is alleviated somewhat by the AFOR's recognition of atypical operating conditions:

The service quality standards and customer remedies apply only to normal operating conditions and do not establish a level of performance to be achieved where circumstances are beyond Frontier's control. Frontier is exempted from the otherwise applicable individual customer remedies if it is prevented from meeting a quality of service standard because of conditions caused by persons, things, or events outside the reasonable control of Frontier, that Frontier could not have reasonably anticipated and prevented, or circumstances that endanger the safety of Frontier employees or members of the public, including: (1) delays of a local government unit in granting approval for obtaining easements, permits or access to rights-of-way; where Frontier has made a timely application for any permits; (2) the customer, including but not limited to, no access to customer's premises, delays caused by the customer's

<sup>5</sup> Frontier AFOR Plan, Docket 14-735, June 15, 2015, pp. 13 - 14.

<sup>&</sup>lt;sup>4</sup> Frontier AFOR Plan, Docket 14-735, June 15, 2015, p. 14.

construction project or lack of facilities or the customer choosing a later appointment than offered; (3) delays caused by a vendor in the delivery of equipment where Frontier has made a timely order or request; (4) other delays outside the control of Frontier, including, but not limited to, acts of God, explosions or fires, floods, frozen ground, tornadoes, severe weather, epidemics, injunction, war, acts of terrorism, strikes or work stoppages, or negligent or willful misconduct by customers or third parties including outages originating from the introduction of a computer virus onto the provider's network. Events caused by Frontier employees or contractors are not outside Frontier's control for the purpose of the Plan.<sup>6</sup>

Clearly, the AFOR signatories face a degree of regulatory oversight not borne by other local service providers. The most obvious response is that the signatories voluntarily accepted those terms in exchange for relief from other regulatory requirements (i.e. rate-of-return regulation).

#### **Industry New-Comers**

Proponents of rule relaxation argue that much has changed in the industry over recent years. It has, and providers are subject to varying degrees of regulatory oversight. But, as to how this should affect the Commission's examination of its rules, is not readily obvious.

For many decades, prior to the nineties, traditional local telephone carriers operated in an environment that, if not highly lucrative, was at least one of assured markets and revenues. Markets were assured within geographic regions by state sanctioned grants of monopoly power; revenues were assured by implicit and explicit subsidies; and service quality was assured by standards embodied in rules and technical industry guidelines. As such, the traditional local carriers were able to provide ubiquitous gold-standard telephone service at reasonable rates throughout the state. Today, that relatively simple market structure has been altered by new entrants and new technologies.

Today's local market may be broken down into two main subsectors: (1) wireless service providers and (2) wireline local service providers. The latter group includes cable providers, incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs). Each of these groups holds unique advantages and disadvantages in the market.

<sup>&</sup>lt;sup>6</sup> Frontier AFOR Plan, Docket 14-735, June 15, 2015, p. 12.

<sup>&</sup>lt;sup>7</sup> The terms of the Frontier AFOR quoted above are substantially the same as those found in the Citizens (15-388) and CenturyLink QC AFORs (13-498). Frontier's AFOR expires on March 1, 2018; Citizens' plan expires on November 1, 2018; and CenturyLink QC's plan expires on December 31, 2016.

Cable providers have several advantages over traditional ILECs. Unlike ILECs, cable providers are not required to serve large, sparsely-populated high-cost areas, allowing them to concentrate their efforts in urban areas. Additionally, with co-axial cable already in place, cable providers were better situated to capture the emerging broadband market, leaving ILECs to scramble to catch up. Some cable providers possess valuable assets such as sports franchises and television stations, allowing them to leverage those possessions in a way that traditional ILECs cannot.

Wireless carriers possess a particularly significant advantage over both cable carriers and LECs. That is, mobility. Furthermore, wireless carriers are subject to less rate and service quality regulation than are traditional ILECs, and wireless carriers are typically not required to serve all geographic areas within an exchange. Wireless carriers, too, are not burdened with the high cost of the last-mile wire loop.

Despite the advantages accruing to wireless carriers and cable providers, ILECs are not entirely disadvantaged. All local exchange carriers in the state, ILEC, CLEC or cable, are subject to the Commission's quality-of-service rules and those carriers enjoy a significant advantage over wireless carriers in terms of voice quality. A chief complaint about wireless service is the variability of voice quality, due generally to terrain and to cell tower placement. The value of assured voice quality should not be minimized.

The ILECs are not without other resources, in particular, access to the federal high-cost universal service fund. Table 1 below indicates that between 2003 and 2014, Minnesota's ILECs have drawn over one billion dollars (nominal) in subsidies from the high-cost fund. In 2014, competitive carriers drew less than 1.5 percent of the Minnesota total, that sum effectively going to one carrier, T-Mobile. Prior to 2012 the fund supported traditional phone service, and in subsequent years the fund has explicitly supported broadband buildout. In August of this year the FCC announced that four ILECs in Minnesota will receive over \$85 million in annual support from the Connect America Fund for the buildout of broadband to over 170 thousand homes and businesses in Minnesota. The point to be made here is that traditional ILECs have market advantages that other competitors do not.

It should be noted too, that many ILECs have not been idle in their response to new entrants. Many ILECs have sought to shore up their revenues by offering new Internet Protocol services over their copper lines and by building out broadband facilities.

<sup>&</sup>lt;sup>8</sup> CenturyLink, Frontier, Windstream and Consolidated. <a href="https://apps.fcc.gov/edocs-public/attachmatch/DOC-335269A5.pdf">https://apps.fcc.gov/edocs-public/attachmatch/DOC-335269A5.pdf</a>. Accessed March 7, 2016.

Table 1. Federal High-Cost Fund Disbursements to Competitive Eligible Telecommunications Carriers (CETCs) and Incumbent Local Exchange Carriers (ILECs) in Minnesota, 2003 to 2014 (in \$ millions).

| (IEE es) in Minnesota, 2003 to 2014 (in φ ininions). |         |       |         |        |  |
|--|---------|-------|---------|--------|--|
| Year   | Total   | CETC  | ILEC    | ILEC % |  |
| 2003   | 80.1    | 1.7   | 78.5    | 97.9   |  |
| 2004   | 95.5    | 20.1  | 75.4    | 79.0   |  |
| 2005   | 113.4   | 31.9  | 81.4    | 71.8   |  |
| 2006   | 119.9   | 40.3  | 79.6    | 66.4   |  |
| 2007   | 132.4   | 48.2  | 84.2    | 63.6   |  |
| 2008   | 134.0   | 50.0  | 84.0    | 62.7   |  |
| 2009   | 127.0   | 48.6  | 78.5    | 61.8   |  |
| 2010   | 105.7   | 22.0  | 83.8    | 79.2   |  |
| 2011   | 98.9    | 15.5  | 83.4    | 84.3   |  |
| 2012   | 113.2   | 11.5  | 101.7   | 89.8   |  |
| 2013   | 102.2   | 1.6   | 100.6   | 98.4   |  |
| 2014   | 103.4   | 1.4   | 102.1   | 98.7   |  |
| Total  | 1,325.7 | 292.7 | 1,033.0 | 77.9   |  |

Source: Federal Communications Commission, <u>Universal Service</u> <u>Monitoring Report, 2014</u>, Supplemental Report Material. Note: Figures for 2014 are estimated based on January through June disbursements. Figures are based on disbursements to 98

Minnesota carriers.

## 4. The Degree of Competition in Minnesota

The question as to whether the Minnesota telecommunications market is a competitive one has drawn the lion's share of the discussion in this proceeding. Proponents for rule change have submitted numerous figures, tables and charts in support of their contention that the Minnesota market is highly competitive. Proponents draw particular attention to (1) the loss of lines over time to other carriers, (2) the number of carriers that now populate the Minnesota market, and (3) the growth and ubiquity of wireless services.

#### Proponents' Evidence

CenturyLink summarizes its arguments regarding the level of competition as follows:

- \* Since 2001, CenturyLink's access lines have decreased from 2,251,637 to 737,283, a decrease of over 67 %. At the same time Minnesota's population has increased by approximately 10.7 %.
- \* In the same time period, the percentage of households CenturyLink serves has decreased from close to 100% to approximately 28 %.
- \* Competition is significant in every wire center CenturyLink serves. Non-incumbent providers serve more than 50 % of the households in 201 of 219 wire centers.
- \* Wireless providers dominate the Minnesota voice market, providing 67.5 % of voice connections.
- \* Wireless communication is the primary method of placing 9-1-1 calls, with the FCC reporting that 70 % of 9-1-1 calls are placed from wireless phones.
- \* 37.2 % of Minnesota customers relied only on wireless services, and that percentage continues to increase.
- \* Wireless service is available in nearly all areas of Minnesota.
- \* Non-ILEC wireline providers provide more access lines in Minnesota than do ILECs.

#### MTA provides similar information:

- \* As of June, 2013, approximately 42 % of all wireline service, nationally, was provided by non-ILECs. The percentage of wireline service provided by non-ILECs in Minnesota is actually higher than the national average, with non-ILECs representing 47 % of all non-wireless subscriptions.
- \* There are 142 different non-ILECs operating in the state, and DOC lists 267 different long distance providers.
- \* VoIP now represents approximately 34 % of all wireline service nationally and 29 % of wireline service in Minnesota.
- \* In 2003, less than 5 % of U.S. households had substituted wireless for their residential landline service; the figure now stands at 41 %.

- \* Approximately 36 % of Minnesota households are wireless-only, with no meaningful difference between the Metro Area and Greater Minnesota.
- \* As of December 2012, 35.7 % of all Minnesota adults, 36.7 % of adults in the Twin Cities, and 34.6 % of adults in Greater Minnesota lived in households with only wireless services.

Frontier presents similar figures, addressing its own experience and that of Minnesota in general:

- \* In 2001, Frontier served approximately 287,000 access lines; currently, we serve approximately 146,000. In other words, over the past 13 years we have lost roughly half of our customers to competitors of one sort or another.
- \* On an exchange-specific basis, during the period of 2012 and 2013, Frontier ported out customer numbers to 32 different competitors in nearly all of its 161 exchanges. Only nine exchanges did not experience a port-out to a competitor during that period. Thus, we experienced the loss of customers to competitors in 94 % of our exchanges. Those nine exchanges without porting activity account for approximately 1,500 access lines out of a total of roughly 146,000 or about 1 % of our customer base. Looking at it the other way, 99 % of our customer base is in exchanges subject to current and active competition.
- \* 58 % of Minnesota households have both a wireless and a wireline phone.
- \* For households that have only a single phone connection: 35 % of outstate Minnesota households are wireless-only; only 7 % are wireline-only; 37 % of Minnesota households in the Twin Cities are wireless-only; only 3 % are wireline-only. So, in situations that reflect true substitution (one or the other, but not both), customers are between five and twelve times more likely to choose wireless to wireline service.

#### Challenges to Evidence

Opponents of relaxation of the rules address the problem largely by questioning the relevance of the data and, to a lesser extent, by focusing on the converse of the proponents' evidence. With respect to the latter, the Coalition argues that, markedly absent from the comments of CenturyLink, MTA, and Frontier is the proper emphasis on the actual number of households and human beings who continue to rely on landlines, especially in cases of emergency; this

omission masks the true and adverse impacts of any potential reduction in core service quality on certain segments of customers:

- \* CenturyLink serves more than 737,000 landline households. Therefore, an estimated two million Minnesotans rely on landline service.
- \* That 37 % of Minnesota consumers have cut the cord implies that 63 % have not.
- \* Over 86 % of older Americans, many of whom are also disabled, still rely on landline service, only 14 % relying on wireless only.
- \* Even if 70 % of calls to 9-1-1 are placed over wireless phones the 30 % of remaining calls represents 360,000 calls annually.

Some opponents argue that the proponent's evidence is much too aggregated to determine whether all Minnesota's consumers have access to sufficient competitive options.

#### Analytical Framework

To sort through the competing claims it is useful to consider this fundamental question:

How, and to what extent, does the existence of threats to the revenue streams of Minnesota's ILECs - threats proceeding from the growth of new entrants - result in Mary Jane Doe enjoying satisfactory service quality protections at her home fifteen miles east of Small Town?

Or, to phrase this question differently:

How, and to what extent, does the existence of threats to the revenue streams of Minnesota's ILECs - threats proceeding from the growth of new entrants - diminish the market power of providers that offer service to Mary Jane Doe, such that no one of those providers could perceptibly raise price and/or diminish quality for a sustained period.

At heart, these questions reflect a fundamental difference between the perspectives of the service provider and the service consumer. Proponents of rule relaxation proceed from a

multi-product, company-wide perspective focusing on threats to total revenue streams. A prudent provider will seek to shift its efforts to specific products and specific locations as it follows higher margins. This focus may be directly at odds with the specific needs of Mary Jane Doe, where Mary Jane Doe lives. A provider may face stiff "competition" (better characterized as "rivalry") while some of its customers have no reasonable alternative choices. As such, opponents of rule relaxation seek granularity in any analysis, asking that it focus on specific services in specific locations.

#### **Product Market and Geographic Market**

In issuing its Request for Comments the Commission sought to explore the link between market rivalry and localized service quality when it asked the parties to provide granular information:

Anyone requesting rule changes that would eliminate or reduce current service quality standards, at a minimum, is requested to:

- 1. Provide evidence of competition, including the level and scope of such competition in relation to different types of customers (large business, small business, residential, etc.) and geography, and the extent to which existing competition supports the rule changes being recommended. Such evidence and analysis should, at a minimum, reflect or be guided by the following:
  - a. Any market-power analysis should, at a minimum, address the analysis set forth in: (i) *Horizontal Merger Guidelines*, U.S. Department of Justice and Federal Trade Commission, August 19, 2010; and (ii) *Memorandum Opinion and Order, Petition of Qwest Corporation for Forbearance Pursuant to 47 US.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area.* Federal Communications Commission, WC Docket No. 09-135, June 22, 2010.
  - b. Commenters should provide evidence of whether wireless service is a substitute for and/or a complement to wireline local service in each relevant market and, if so, to what extent.
  - c. Relevant markets should, at a minimum, reflect (i) different customer segments, including but not necessarily limited to residential, small business (1-3 lines, suggested), medium business (4-200 lines, suggested) and large business (over 200 lines, suggested); and (ii) different geographic areas where

customers face the same choice of competitive services (in some cases this may require defining the market at a level less than that covered by a wire center - for example where cable is offered in an urban area but not in the rural portion of the wire center).

d. Relevant substitutes for traditional landline service should exclude services provided by carriers affiliated with the traditional landline service provider.

Front and center in the Commission's Request is a recognition that customers vary in the type of services required (referred to as the product market) and in the customer's location (geographic market). This recognition is central to the two documents referenced above: the *Merger Guidelines* and the *Phoenix Order*. The *Merger Guidelines* provide a generalized framework for determining the presence of market power, a framework that can be applied to any market. The FCC's *Phoenix Order* is one application of that framework to the wholesale telecommunications market. The findings of the *Phoenix Order* are not directly transferable to the issue before the Commission but the discussion is highly informative. Given that the *Merger Guidelines* and the *Phoenix Order* are a central feature of the Commission's Request for Comments several parties addressed the relevance of those documents to the question before the Commission today. In particular, CenturyLink in its Comments (12/4/14), and its associated Affidavit of Brian Staihr, argued that the *Guidelines* and *Order* were inappropriate to the task here. In opposition, the Office of the Attorney General provided substantial argument in support of the *Guidelines* and the *Order* (Comments of 12/4/14 and Replies of 3/13/15).

The *Guidelines* and the *Order* have significant appeal. The granular nature of the analysis can account for disparities, recognizing that a customer in one part of the state may have numerous options, while another customer elsewhere may have few. And, that a business customer may have many choices while the residential customer across the street may have fewer options. A state-level analysis of line-loss, or threats to revenue, or the presence of competitors, may mask concerns in some regions of the state for some types of customers. Without granular information, arguments based on operating company rivalry may say little about market power in a particular region or for a particular product. Threats to revenue streams may be very real at a state or corporate level, but that may say little else to the Commission.

If perceived threats to revenue streams are meant to show an undue burden upon the ILECs, there is little to no evidence to support such argument. Line losses have been documented, but revenue per line is not in evidence. Over the last two decades ILECs have sought ways to increase revenue per line to counter, more or less, the effects of line loss. The sale of calling

features (caller ID, etc.) supplements basic revenues, and as does the sale of DSL service for Internet access and video streaming. VoIP services may provide new revenues.

#### **Wireless Substitution**

One of the main points addressed by proponents and opponents of rule change is the degree to which wireless services are a substitute for (compete with) wireline services. If wireless and wireline services are substitutes they may provide competitive pressure to diminish market power. If wireless services are viewed as a compliment (customer wants both) then wireless does not provide competitive pressure. The answer is very much an empirical one, one that reflects individual customer needs and incomes. It is difficult to imagine a business operator thinking about whether to purchase wireline service or wireless service. That operator will choose both. So too a pensioner, long accustomed to wireline service and its gold-standard quality, may frame the choice as one between wireline-only, or both wired and wireless. Wireless can effectively reduce the cost of landline service by eliminating the long-distance portion of the landline bill. In some cases, especially where mobility is critical and/or income is low a customer may choose only wireless because of mobility. Here, the products may be too different to be considered competitors by the customer. The FCC notes:

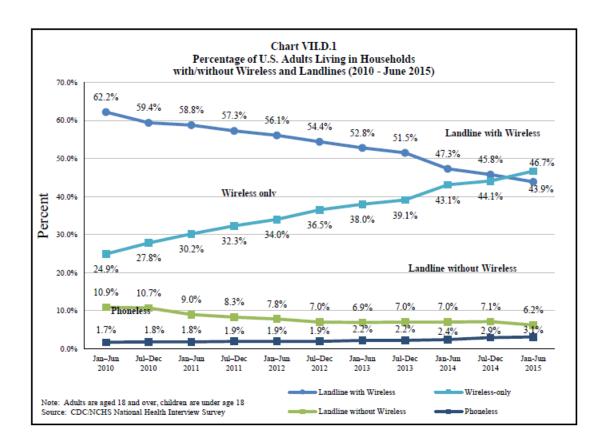
[J]ust as some customers may rely solely on mobile wireless service regardless of the price of wireline service, several classes of customers appear unlikely to drop wireline service in response to a significant price increase, including those who: (a) value the reliability and safety of wireline service; (b) value a single point of contact for multiple household members; (c) live in a household with poor wireless coverage; (d) operate a business out of their home and believe that wireline service offers better reliability and sound quality; or (e) desire a service that is more economically purchased when bundled with a local service (e.g., wireline broadband Internet service, or a video service).

In the *Phoenix Order* in 2010, the FCC rejected the claim that wireless services were substitutes for wireline service, but the FCC was clear to note that its analysis was specific to that particular time and location, highlighting the understanding that measures of substitutability are narrowly fact-specific. <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Phoenix Order, ¶ 59.

<sup>&</sup>lt;sup>10</sup> Phoenix Order,  $\P$  60.

Clearly, in recent years there has been an increase in wireless adoption and a decline in wireline voice-only adoption. Recent figures from the Center for Disease Control bear this out (see Chart VII.D.1 below). <sup>11</sup> Currently, at a national level, the percentage of adults in households with both



landline and wireless service is roughly equal to the percentage living in wireless-only households. Although landline subscription appears to be declining, a very significant portion of U.S. households still rely on landline service (43.9 % landline with wireless, plus 6.2% landline without wireless).

CenturyLink cites an econometric analysis by Caves using data from 2001 to 2007 suggesting that wireless service competes with (is a substitute for) wireline service. The general finding that there is some substitution between the services is not surprising. However, that finding (even if unchallenged) only provides the Commission partial information, and perhaps not the most

<sup>&</sup>lt;sup>11</sup> Source: FCC. Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services. DA-15-1487, December 23, 2015, p. 99.

relevant information.<sup>12</sup> Caves' analysis provides a statistic (cross price elasticity) that summarizes a many-dimensional matrix of data (like an arithmetic mean, or average, summarizes a column of numbers). CenturyLink, based on Caves' work, would have the Commission declare that wireless and wireline services are competitive services for all Minnesotans when there is ample evidence to suggest that, for many households, the services are complimentary (not competitive). <sup>13</sup>

#### **Number of Competitors**

Aside from the question of whether wireless service is a competitive force, another question remains: how many competitors (2, 3, 4, ...) are sufficient to diminish market power to acceptable levels? The answer is not crisp or clear, other than to say that more is better. Where there are only two sellers providing reasonably comparable services, those competitors need not communicate with each other to effectively collude. They well understand each other's constraints and opportunities. With the entry of a third provider, offering a reasonably comparable service, strategies can become more complicated; effective collusion becomes more difficult. Economic practitioners have developed a number of ways of examining this issue but proffered answers are seldom without controversy. Add to this fog the sparsity of evidence in the record, and it becomes difficult to find strong support for the proponents of rule relaxation.

At least, not at a state-wide level. For some customer groups, in some locations, within the state there may well be substantial competition - that is, competition that would prevent the exercise of market power. But to go beyond that statement is to strain the record beyond its capacity.

## 5. Role of the Market in Providing Quality Service

Proponents of repeal or relaxation of the rules hold that (1) the voice communication market in Minnesota is highly competitive and (2) that the market forces should be substituted for some or most of the rules. The degree to which the market is competitive was addressed in the preceding section. This section addresses the question of whether the market, competitive or not, will provide sufficient quality.

<sup>&</sup>lt;sup>12</sup> Consider this, too. Econometric analysis is a powerful tool for investigating relationships. However, the results of such analyses can be highly sensitive to the specific analytical tools employed and the data to which those tools are put. Caves relied on state level data (one observation per state per year for 38 states for each of seven years). Individual household level data may have yielded a much clearer picture of customers' decision to opt for wireless, wireline, or both.

<sup>&</sup>lt;sup>13</sup> A statistician set out to walk across a lake that was, on average, three feet deep ....

Arguments for allowing the market to determine service quality appear in numerous places. For example, Frontier argued that some rules are unnecessary because carriers are keen to provide service (7810.4100, 7810.4300, 7810.4900, 7810.5300, 7810.5400). CenturyLink has argued that some rules are not necessary because of the existence of competition and that markets should define service quality obligations (7810.4900, 7810.5200). CenturyLink has also argued that there is no evidence to suggest that some rules have an impact upon, or promote, service quality (7810.5800, 7810.5900).

In examining the arguments of the rule-change proponents it is possible to tease out two main themes: (1) that the market will provide sufficient quality to satisfy consumers, and/or (2) that consumers should accept the level of service quality offered by the providers. That the market will provide quality sufficient to customers' needs is highly debatable <sup>14</sup> and is ultimately an empirical question and one of defining "needs." The second theme is largely an appeal to ideology: customers should accept market outcomes even if they don't like them because the process for determining those outcomes is, in some way, beyond reproach. <sup>15</sup>

At the outset, it is important to note a fundamental truism that often gets lost in the cloud of ideology. That is, even the most perfect market, the most efficient market, will not necessarily be effective in providing a desired outcome. "Efficiency" is a relative notion (a measure of resources-in relative to goods-out); "effectiveness" is an absolute notion (are goods-out sufficient to a fixed task?). A market may be efficient without being effective. Consider these markets:

- \* The telecommunications market, considered by proponents of rule change to be highly competitive, would not deliver service to much of rural Minnesota absent implicit and/or explicit subsidies.
- \* Commercial passenger airline services, arguably competitive, deliver service of appalling and declining quality. That arrivals and departures are relatively on-schedule may be due

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<sup>&</sup>lt;sup>14</sup> The Market works in mysterious ways.

<sup>&</sup>lt;sup>15</sup> CenturyLink's Staihr Affidavit (December 4, 2014, p.2) states: "When a market is effectively competitive, the role of regulation is not to set standards or impose requirements that may or may not reflect customers' preferences; such standards may actually produce real harms and impose real costs, despite regulators' best intentions. The role of regulation is to ensure that the market remains open and that competitors operate on a level playing field." Staihr's statement is overbroad. Some markets may never be effectively competitive (due to cost structure). Some markets may become effectively competitive only by way of substantial regulation (direct and indirect subsidies, technological standards, public infrastructure, standardized instruments of finance and banking, and supporting law and law enforcement). Effective competition may not deliver sufficient, affordable essential goods and services. Customers may prefer to act as citizens to satisfy their needs through direct collective action (the voting booth). Regulatory action (or for that matter, non-action) may cause real harms but, especially for those who have no market power, focused thoughtful regulatory action may be preferable to impassively accepting the harms delivered by the market (e.g. unemployment, tainted water supplies, undelivered (dropped) telephone calls).

more to federal regulations than to competition. Parenthetically, one feature of airline service quality is the two-tiered structure. Those who pay more get better service. Arguments by some proponents of rule relaxation suggest that they would seek to shift service quality resources away from low-margin customers to higher-margin broadband customers.

- \* One can speculate that the highly competitive construction trades would not deliver sufficient safety absent enforced construction codes. The same can be said for automobile seatbelts, occupational safety, and food and drug safety.
- \* The highly competitive soft drink market does not focus its competitive efforts on price or quality, preferring to establish market share through advertising.

The examples listed above are not cited to suggest that the local service market will *not* compete on quality absent the rules. Rather, they are intended to suggest that there is no guarantee there will be service-quality-based competition, or if there is, that it will be sufficient to support a high quality communications network. CenturyLink has suggested that the market should determine standards. But standards aren't standards if they fluctuate with the whims of the market.

A clue as to what might happen to service quality if the rules are relaxed is contained, in plain view, within the arguments of proponents of rule relaxation: the rules are a burden to providers, that is, the providers, if free to do so, would choose to reduce expenditures on service quality, at least for some customers. And, one can speculate reasonably that a decline in service quality expenditures for some customers would decrease their service quality. And further, one can speculate that this phenomenon could open a new revenue source for providers where customers can pay an additional surcharge for quality. Like airline customers do.

The degree to which a competitive market will deliver socially acceptable service quality is perhaps one of the most important questions to answer before service quality rules should be relaxed. And it is the question that has received the least discussion in the record (effectively, no discussion). There is insufficient evidence in the record to support an argument that, upon relaxation of the rules, all customers will enjoy service quality at least equal to that which is provided by the rules as they stand now (or that some customers would willingly pay more to retain current quality). And, there is no explicit discussion as to why some customers should experience reduced quality.

## Summary & Conclusion

Staff believes the central question to be addressed by the Commission at this point in the proceeding is:

In light of the responses to the Commission's Request for Comments, should the Commission proceed further with the rulemaking process? If so, should the Commission examine all of the rules, or some of the rules, and should examination be constrained such that the principles embodied in the current rules are retained?

With respect to the effort required to purse rulemaking further, it may be that for a particular rule alone, the game is not worth the candle. However, if there are a number of such rules, examination of the group may be more cost-effective.

In general, Staff proceeds from the presumption that the existing rules were deemed to be necessary and reasonable at the time they were put in place, and that they remain so until shown to be otherwise. As such, the evidentiary burden may lie more heavily upon the proponents of rule change. However, this is not to say that the current rules are the most appropriate way to regulate today's industry. Staff speculates that, in light of changes in technology and industry structure, all parties would acknowledge that the rules could be improved. But, clearly the parties have different views as to what changes should be made.

Arguments supporting and opposing rule changes were examined above in terms of five main categories: (1) the degree of competition in Minnesota, (2) the role of the market in setting service quality standards, (3) disparity in regulatory requirements faced by different types of service providers, (4) appropriate numerical standards, and (5) technical obsolescence of the rules.

#### The Degree of Competition in Minnesota

Proponents of rule relaxation have submitted evidence to show (1) the loss of lines over time to other carriers, (2) the number of carriers that now populate the Minnesota market, and (3) the growth and ubiquity of wireless services. At a minimum, this evidence would suggest the proponents face significant threats to their revenue streams. However, there is no evidence in the record that would show economic hardship. Lines may have been lost to other carriers, but revenues derived from the remaining lines could, conceivably, have offset the line loss.

Critical to the question of the level of competition is the analytical framework on which an analysis is based. Responses to this question reflect a fundamental difference between the perspectives of the service provider and the service consumer. Proponents of rule relaxation proceed from a multi-product, company-wide perspective focusing on threats to total revenue streams. A prudent provider will seek to shift its efforts to specific products and specific locations as it follows higher margins. This focus may be directly at odds with the specific needs of Mary Jane Doe, where Mary Jane Doe lives. A provider may face stiff "competition" (better characterized as "rivalry") while some of its customers have no reasonable alternative choices. As such, opponents of rule relaxation seek granularity in any analysis, asking that it focus on specific services in specific locations. The *Merger Guidelines* embody this notion of granularity in focusing on product markets and geographic markets. Staff believes this granular approach is appropriate. The purpose of service quality rules is to protect Mary Jane Doe, not her providers.

The proponents of rule relaxation argue that they face rivalry from numerous service providers, in particular, wireless. The proponents provide evidence indicating that wireless services are nearly ubiquitous. However, the degree to which wireless competes for the consumer's communication budget is less clear. Clearly, many customers purchase both wired and wireless services, seeking the benefits of both. Others choose only wired or wireless. Staff believes that the degree to which wireless services compete with wired services is not to be answered with a simple yes or no, but speculates that the services are in competition, at least for some types of consumers, in some regions.

Proponents of rule relaxation make reference, too, to wired rivals: cable and CLECs. The evidence here is not as strong as it could be, but Staff speculates that for some customers in some regions the proponents face significant rivalry. Dense urban areas, like the Twin Cities, are attractive to all providers. As to whether this rivalry would deliver quality that is "good enough" is not clear and depends, in part, on what "good enough" means.

#### **Role of the Market in Providing Service Quality**

Much discussion has been focused on the degree to which the Minnesota market is competitive. To some extent this discussion is not entirely on point given that market competition alone is not sufficient to deliver a desired level of service quality. Whether a competitive market will deliver socially acceptable service quality is perhaps one of the most important questions to answer before service quality rules should be relaxed. And it is the question that has received the least discussion in the record (effectively, no discussion). There is insufficient evidence in the record to support an argument that, upon relaxation of the rules, all customers will enjoy service quality at least equal to that which is provided by the rules as they stand now (or that some customers

would willingly pay more to retain current quality). And, there is no explicit discussion as to why some customers should face a reduction in quality. Determining the desirable level of service quality owes as much to arguments of equity, justice and safety, as to market economics.

#### **Disparity in Regulatory Requirements**

All providers of voice communication services in Minnesota are not regulated in the same manner. However, taking a broad perspective it is possible to see that all subsectors possess advantages over other subsectors, and not just disadvantages. Parenthetically, the notion of a "level playing field" disintegrates upon examination. Removal of all regulation would leave the playing field tilted in a manner reflecting differences in technology and market power. And, to fine-tune regulation (even if it could be done across all jurisdictions, and if there was an understanding of what "level" means) would produce an industry characterized by an even more complicated dog's-breakfast of penalties and subsidies. And such penalties and subsidies may remove any incentive to innovate (because, why bother, the playing field would need to be releveled). Staff does not believe the disparity argument is compelling.

#### **Appropriate Numerical Standards**

Some of the rules embody precise numerical thresholds. Proponents for change argued either for removal or modification of those thresholds. Opponents note that there is little to no evidence in the record to support modification of the rules. The opponents support the principles embodied in the rules. The Commission, if not persuaded to repeal or substantially water down these rules, could continue to explore alternative numerical standards. Staff believes the arguments favoring rule change are less than compelling.

#### **Technical Obsolescence**

There is no debate that some of the rules refer to industry technology and practices that are not current. Some proponents of rule change argue that some of these rules should be repealed in entirety. Opponents were willing to consider updating the rules, but rejected the notion of repeal, arguing that the principles embodied in the rules should be retained. Commenters provided little to no empirical evidence to support rule change. Indeed, unchanged, these rules may be less burdensome today than at the time of their approval. Clearly, the principles expressed in the rules could be enhanced by modernizing the language, but the effort required by the Commission and the industry at this time must be balanced against perceived benefit.

#### **Conclusion and Recommendation**

There are many aspects to the question of continued examination of the rules. The arguments presented by proponents and opponents, at their core, pit provider revenues against customer service quality. In sum, Staff believes that the rules exist for the benefit of Mary Jane Doe and there is no compelling argument that she should do with less, or that the market will deliver what she needs. Thus, Staff leans toward the recommendation made by DOC: close the rulemaking without further action.

Alternatively, the Commission could update the rules to reflect current technology.

#### **Commission Options**

- Proceed with the rulemaking process. Establish an Advisory Committee. Delegate to the Executive Secretary the authority to determine the size and composition of the Committee.
- Proceed with the rulemaking process. Limit the scope of the rulemaking to
  modernization of the rules to account for technological change. Establish an Advisory
  Committee. Delegate to the Executive Secretary the authority to determine the size and
  composition of the Committee.
- 3. Find that there is insufficient evidence to warrant continuation of the proceeding. Close the docket.
- 4. Take other action.

Staff recommends option #3.

## Appendix A

# Recommended Language Modifications and Summary Arguments

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## Access to Test Facilities (7810.4100)

This Rule states, in full:

Each telephone utility shall provide or have access to test facilities which will enable it to determine the operating and transmission capabilities of circuit and switching equipment, either for routine maintenance or for fault location.

#### **CenturyLink Position**

This rule should be repealed. It does not address the complexity of the communications network and does nothing to ensure the health of the network. The facility descriptions in the rule are antiquated and share few similarities with the technology in today's networks such as Internet Protocol (IP) technology. The IP switches, or "soft switches," of today use Quality of Service (QOS) protocols that have inherent testing and maintenance capabilities that render this rule obsolete.

#### **Frontier Position**

The rule should be deleted. The micro-managing of provider operations by rule is no longer necessary or useful. Deletion of the rule will not adversely impact service quality, as carriers are keen to provide satisfactory service to their customers in order to retain their business.

#### Minnesota Telecom Alliance (MTA) Position

The Commission should repeal this rule because it refers to obsolete testing procedures and it does not address all the testing that is required in today's telecommunications environment. The testing facilities described in this section reflect an era when operating and transmission capabilities were based on Time Division Multiplexing (TDM) technology. Today, operations and transmission are based on Internet Protocol (IP) technology. IP switches, or "soft switches," use Quality of Service (QOS) protocols that have inherent testing and maintenance capabilities that render the rule obsolete. Soft switches are more like large computer routers than traditional TDM telephone switches and therefore their testing and maintenance is completely different.

#### TCSBC (Coalition) Position

The Commission should not grant the requests to repeal this rule, and not make any changes unless and until a party proposes an amendment that updates the rules without eviscerating its underlying purpose. The carriers have failed to meet their burden to show that the underlying purpose of the rule has been rendered obsolete and unnecessary. At best, they have shown that perhaps different methods must be employed to fulfill that purpose. Yet, none of the proponents of repeal offer any alternative language that makes more sense in the modern era to accomplish the underlying goal of the rule.

#### **OAG Position**

While the transition towards newer technologies may mean that CenturyLink's method for conducting tests must change, it does not mean that CenturyLink should not still be required to have a method for testing the adequacy of its system. Moreover, regardless of any technological change to switching, CenturyLink's system will always rely on many miles of cable, whether they are copper suspended from utility poles or underground fiber-optic. It will always be necessary for every telephone utility, to be able to test for, locate, and repair faults so that any outages can be repaired.

#### **DOC Position**

The providers supporting elimination of this rule fail to establish an adequate basis for repeal.

## **Accuracy Requirements (7810.4300)**

This Rule states, in full:

All meters and/or recording devices used to record data and prepare customers' bills shall be in good mechanical and electrical condition, shall be accurately read, and shall not involve approximations. All meters and/or recording devices shall accurately perform the following.

For message rate service, where timing of length of message is not involved, the meter and/or recording device shall show accurately the number of completed messages sent by the station which it is measuring. For message rate and/or toll service when in addition to recording the calls it is necessary to time the calls, the meter and/or recording device shall show accurately the number of calls and the talking time involved in each call and the station making such call. When the recording equipment provides coded information that is used to automatically prepare customer bills, accurate interpretation of such coded information is required.

#### CenturyLink Position

Accurate and timely preparation of customer bills is important to telecommunications providers but the process described by the rule bears little resemblance to the manner in which customer bills are rendered. This rule describes an outdated process and technology that is no longer in use and therefore should be deleted.

#### Frontier Position

Much of the content of this rule can be deleted as unnecessary. Such deletion will not adversely impact service quality, as carriers are keen to provide satisfactory service to their customers in order to retain their business. Frontier proposes a simplified version:

All meters and/or recording devices used to record data and prepare customers' bills shall accurately read and record the data.

#### Minnesota Telecom Alliance (MTA) Position

The Commission should repeal this rule because it does not reflect the technologies used in today's telecommunications markets. It reflects an outdated mechanical approach (e.g. "meters and/or recording devices ... shall be in good mechanical and electrical condition") that does not reflect current industry practice, which is based on software applications. In addition, the accuracy requirements included in the rule were created for an environment where long distance minutes were an important commodity. Today's voice service is one of many services that can be supplied over the broadband telecommunications networks. Long distance is a bundled service included in a service package that does not bill on a minutes of use basis. These service packages are billed at a single monthly rate and frequently include unlimited long distance calling.

#### TCSBC (Coalition) Position

Billing accuracy is a core function and central to the integrity of the communications system. The Coalition favors modernization rather than repeal, but contends that Frontier's proposal is not sufficiently comprehensive. The Coalition recommends that the Commission reject CenturyLink and MTA's proposals and instead amend the rule to read:

All meters and/or , recording devices, software applications, or other mechanisms used to record data and prepare customers' bills shall be in good mechanical and electrical operating condition, shall be accurately perform the functions necessary to read and record the data, and shall not involve approximations. All bills provided to customers shall be accurate. All meters and/or recording devices shall accurately perform the following.

For message rate service, where timing of length of message is not involved, the meter and/or recording device shall show accurately the number of completed messages sent by the station which it is measuring. For message rate and/or toll service when in addition to recording the calls it is necessary to time the calls, the meter and/or recording device shall show accurately the number of calls and the talking time involved in each call and the station making such call. When the recording equipment provides coded information that is used to automatically prepare customer bills, accurate interpretation of such coded information is required.

## **DOC Position**

CenturyLink provides scant basis for repeal. The contention that the standards are unnecessary is unsupported. The Frontier proposal would render the rule unenforceable.

## Adequacy of Service (7810.4900)

This Rule states, in full:

Each utility shall employ reasonable engineering and administrative procedures to determine the adequacy of service being provided to the customer. Traffic studies shall be made and records maintained to the extent and frequency necessary to determine that sufficient equipment and an adequate operating force are provided during the busy hour, busy season. Each telephone utility shall provide emergency service in all exchanges operated in which regular service is not available at certain periods during the 24 hours of the day. When service is not continuous for the full 24-hour day, proper arrangements shall be made for handling emergency calls during the off-periods by the use of alarms maintained in proper conditions with someone conveniently available so that emergency calls will be given prompt attention.

Each utility shall employ adequate procedures for assignment of facilities. The assignment record shall be kept up to date and checked periodically to determine if adjustments are necessary to maintain proper balance in all groups.

#### **CenturyLink Position**

The specific provisions in this rule are in many respects out of date and not appropriate for an internet protocol environment. The remainder of the rule simply requires adequate service and adds little to the statutory requirement that providers offer reasonably adequate service which is also covered by Rule 7810.5000 (Utility Obligations). In a competitive environment, this rule is not needed and should be stricken.

#### Frontier Position

Much of the content of this rule can be deleted as unnecessary. Such deletion will not adversely impact service quality, as carriers are keen to provide satisfactory service to their customers in order to retain their business. Frontier proposes a simplified version:

Each utility shall employ reasonable engineering and administrative procedures to determine the adequacy of service being provided to the customer. Each utility shall employ adequate procedures for assignment of facilities. The assignment record shall be kept up to date and checked periodically.

#### Minnesota Telecom Alliance (MTA) Position

MTA recommends this rule be amended to eliminate references to specific metrics that no longer match industry practice and service levels. For example, the rule reflects part time service that is available less than 24 hour per day. Records of "assignment of facilities" are similarly based on long outdated operating methods. Accordingly, MTA recommends the following amendment:

Each utility shall employ reasonable engineering and administrative procedures to determine the adequacy of service being provided to the customer. Traffic studies shall be made and records maintained to the extent and frequency necessary to determine that sufficient equipment and an adequate operating force are provided during the busy hour, busy season. Each telephone utility shall provide emergency service in all exchanges operated in which regular service is not available at certain periods during the 24 hours of the day. When service is not continuous for the full 24 hour day, proper arrangements shall be made for handling emergency calls during the off-periods by the use of alarms maintained in proper conditions with someone conveniently available so that emergency calls will be given prompt attention.

Each utility shall employ adequate procedures for assignment of facilities. The assignment record shall be kept up to date and checked periodically to determine if adjustments are necessary to maintain proper balance in all groups.

#### Minnesota Cable Communications Association (MCCA) Position

MCCA urges the Commission to maintain the bolded language (below). It is important that a utility continues to "employ reasonable engineering and administrative procedures" to determine if it is providing adequate service to customers, both wholesale and retail. Accurate facility assignment records are very important in a wholesale environment, where competitors are leasing unbundled network elements.

Each utility shall employ reasonable engineering and administrative procedures to determine the adequacy of service being provided to the customer. Traffic studies shall be made and records maintained to the extent and frequency necessary to determine that sufficient equipment and an adequate operating force are provided during the busy hour, busy season. Each telephone utility shall provide emergency service in all exchanges operated in which regular service is not available at certain periods during the 24 hours of the day. When service is not continuous for the full

24-hour day proper arrangements shall be made for handling emergency calls during the off-periods by the use of alarms maintained in proper conditions with someone conveniently available so that emergency calls will be given prompt attention.

Each utility shall employ adequate procedures for assignment of facilities. The assignment record shall be kept up to date and checked periodically to determine if adjustments are necessary to maintain proper balance in all groups.

## Joint CLEC Position

The Joint CLECs do not propose modification of the rule. Carriers need to employ reasonable engineering and administrative procedures, not just to retail customers, but to their wholesale customers as well. This standard highlights an overarching obligation which can be useful if disputes arise between carriers in a multicarrier environment. The rule also strengthens the ability to have the Commission as an arbitrator of disputes by offering clear rules that set expectations between carriers.

Should the Commission modify this rule, the Joint CLECs propose adoption of Frontier's proposal which though significantly modifying the rule, maintains the requirement for reasonable engineering and administrative procedures as well as adequate procedures for assignment of facilities.

## TCSBC (Coalition) Position

The Coalition supports modification of the rule as recommended by Frontier, but not for the reasons stated by Frontier. Rather, the Commission should adopt Frontier's proposal because: (1) the maintenance and improvement of service quality requirements is state policy; (2) the rule represents a bulwark against the steady deterioration of quality and service in the telecommunications industry; and (3) the proposal eliminates one obsolete section while retaining the still vibrant core of the rule.

The Coalition believes the simple requirement of adequate service has never been more important. As the telecommunications industry is transforming technologically, creating consumer benefits, it is at the same time engaging in a race to the bottom with respect to customer service and service quality. Requiring providers to have reasonable procedures to

measure accuracy seems, at a minimum, to be a fundamental, sensible, and desirable requirement.

## **OAG Position**

This rule serves an essential purpose: telecommunication utilities have to provide service that is adequate. To accomplish this, the rule requires utilities to conduct basic traffic studies to determine what facilities are necessary to provide adequate service, to assign their facilities in a manner sufficient to accomplish that goal, and to keep basic records so that the adequacy of service can be reviewed. Regardless of what type of technology is used to connect the telephone system, ensuring the adequacy of the connection will always be a fundamental requirement.

## **DOC Position**

The proposal to replace specific standards with a vague, general requirement to act reasonably would create enforcement difficulties for the Commission.

# **Utility Obligations (7810.5000)**

This Rule states, in full:

Each telephone utility shall provide telephone service to the public in its service area in accordance with its rules and tariffs on file with the commission. Such service shall meet or exceed the standards set forth in this chapter. Each telephone utility has the obligation of continually reviewing its operations to assure the furnishing of adequate service. Each telephone utility shall maintain records of its operations in sufficient detail as is necessary to permit such review and such records shall be made available for inspection by the commission upon request at any time within the period prescribed for retention of such records. Each utility shall make measurements to determine the level of service for each item included in these rules. Each utility shall provide the commission or its staff with the measurements and summaries thereof for any of the items included herein on request of the commission or its staff. Records of these measurements and summaries shall be retained by the utility as specified by the commission.

Where a telephone utility is generally operated in conjunction with any other enterprise, suitable records shall be maintained so that the results of the telephone operation may be determined upon reasonable notice and request by the commission.

## **CenturyLink Position**

CenturyLink proposes the following modification (as an alternative to repealing the rule):

Each telephone utility telecommunications provider shall provide telephone service to the public in its service area in accordance with its rules and tariffs on file with the commission. Such service shall meet or exceed4he standards set forth in this chapter. Each telephone utility telecommunications provider has the obligation of continually reviewing its operations to assure the furnishing of adequate service. Each telephone utility shall maintain records of its operations in sufficient detail as is necessary to permit such review and such records shall be made available for inspection by the commission upon request at any time within the period prescribed for retention of such records. Each utility shall make measurements to determine the level of service for each item included in these rules. Each utility shall provide the commission or it, staff with the measurements and summaries thereof for any of the items included

herein on request of the commission or its staff. Records of these measurements and summaries shall be retained by the utility as specified by the commission.

Where a telephone utility is general operated in conjunction any other enterprise, suitable records shall be maintained so that the results of the telephone operation may be determined upon reasonable notice and request by the commission.

CenturyLink has proposed changes to eliminate unnecessary recordkeeping and details that reflect antiquated operational methods that are no longer in use, and to eliminate vague references and obligations.

## Frontier Position

Frontier argues that this rule can be retained with no change.

#### Minnesota Telecom Alliance (MTA) Position

MTA recommends this be rule simplified and amended to eliminate unnecessary record-keeping and details that reflect operational methods that are no longer in use, and to eliminate vague references and obligations. MTA recommends the following amendment:

Each telephone utility shall provide telephone service to the public in its service area in accordance with its rules and tariffs on file with the commission. Such service shall meet or exceed the standards set forth in this chapter. Each telephone utility has the obligation of continually reviewing its operations to assure the furnishing of adequate service. Each telephone utility shall maintain records of its operations in sufficient detail as is necessary to permit such review and such records shall be made available for inspection by the commission upon request at any time within the period prescribed for retention of such records. Each utility shall make measurements to determine the level of service for each item included in these rules. Each utility shall provide the commission or its staff with the measurements and summaries thereof for any of the items included herein on request of the commission or its staff. Records of these measurements and summaries shall be retained by the utility as specified by the commission.

Where a telephone utility is generally operated in conjunction with any other enterprise, suitable records shall be maintained so that the results of the telephone operation may be determined upon reasonable notice and request by the commission.

## TCSBC (Coalition) Position

This rule, at its essence, requires carriers to measure their own service levels and make available for Commission review records that carriers should be keeping and making accessible so that the Commission can adequately perform its critical regulatory function. CenturyLink and MTA, each in its own way, would erode important protections contained in the rule. Neither's proposal should be adopted. The rule should stand as is.

The nonexistence or unavailability of records fundamentally thwarts the ability of the Commission to rely on measurable data necessary to assess service quality performance. Such an outcome is unacceptable.

## **DOC** Position

Proposals by CenturyLink and MTA would render the rule unenforceable.

# **Telephone Operators (7810.5100)**

This Rule states, in full:

Suitable practices shall be adopted by each telephone utility concerning the operating methods to be employed by operators with the objective of providing efficient and pleasing service to the customers. Telephone operators shall be instructed to be courteous, considerate, and efficient in the handling of all calls, and to comply with the provisions of the Communications Act of 1934 in maintaining the secrecy of communications. All operator-handled calls shall be carefully supervised and disconnects made promptly. When an operator is notified by a customer that the customer has reached a wrong number on a direct-dialed call, the customer shall be given a bill credit when the claim has been substantiated.

## **CenturyLink Position**

This rule has been subsumed by technological changes in the industry and should be deleted.

#### **Frontier Position**

Much of the content of this rule can be deleted as unnecessary. Such deletion will not adversely impact service quality, as carriers are keen to provide satisfactory service to their customers in order to retain their business. Frontier proposes a simplified version:

When an operator is notified by a customer that the customer has reached a wrong number on a direct-dialed call, the customer shall be given a bill credit when the claim has been substantiated.

## Minnesota Telecom Alliance (MTA) Position

MTA recommends the Commission repeal this rule because it reflects methods of operation that are long obsolete. Specifically, this rule is directed to the use of operators to manually connect and disconnect calls, which the operator could also hear.

#### TCSBC (Coalition) Position

The Coalition asks the Commission not to repeal the rule or go as far in amending the rule as Frontier recommends. The Coalition urges the Commission to retain language requiring suitable practices, and recommends that the Commission amend this rule to read:

Suitable practices shall be adopted by each telephone utility concerning the operating methods to be employed by regarding service provided by operators with the objective of providing efficient and pleasing service to the customers. Telephone operators shall be instructed to be courteous, considerate, and efficient in the handling of all calls, and to comply with the provisions of the Communications Act of 1934 in maintaining the secrecy of communications. All operator handled calls shall be carefully supervised and disconnects made promptly. When an operator is notified by a customer that the customer has reached a wrong number on a direct-dialed call, the customer shall be given a bill credit when the claim has been substantiated.

## **DOC Position**

The generality of the Frontier language would create an environment with no enforceable regulations.

# **Answering Time (7810.5200)**

## This Rule states, in full:

Adequate forces shall be provided at local manual offices in order to assure that 95 percent of the calls will be answered within ten seconds. Ninety percent of repair service calls, calls to the business office, and other calls shall be answered within 20 seconds. An "answer" shall mean that the operator or representative is ready to render assistance and/or ready to accept information necessary to process the call. An acknowledgment that the customer is waiting on the line shall not constitute an answer.

#### **CenturyLink Position**

This rule imposes an obligation and costs on specific telephone companies that provide service to a small percentage of the marketplace. Competition provides the incentive to telephone companies like CenturyLink to respond to the calls, or other forms of contact from customers or potential customers expeditiously. Customers will be best served if the marketplace defines this obligation rather than the imposition of artificial standards.

## **Frontier Position**

The reference to manual offices is obsolete, and should be deleted. The "90% answered within 20 seconds" is a high bar, exceeding the results achieved by call centers in other industries. A more representative standard is 80% answered within 20 seconds. Alternatively, some carriers may desire to operate and organize their call centers around different call center metrics. For example, Frontier has been operating under an answer time metric of an average answer time, with the standard being an average answer time of 60 seconds. The rule should allow for carriers to choose the metric that best fits their business plans. Frontier proposes a revised version:

Eighty percent of repair service calls, calls to the business office, and other calls shall be answered within 20 seconds. Alternatively, the average answer time for repair service calls, calls to the business office, and other calls shall be 60 seconds or less. An "answer" shall mean that the operator or representative is ready to render assistance and/or ready to accept information necessary to process the call. An acknowledgment that the customer is waiting on the line shall not constitute an answer.

## Minnesota Telecom Alliance (MTA) Position

MTA recommends this rule be amended because it does not reflect current operating practices and technologies used for handling customer care through automated calling systems. MTA recommends that the rule be amended because common call answering and help-desk techniques now anticipate far more interaction recorded messages and recorded guidance and key-pad activated menu selections. In contrast, the current rule reflects a time when the only way to move a call forward to resolve service related or other issues was through a live operator. Further, as telecommunications service has evolved, customer calls have become more complex and more variable, making a one-size fits all standard unreasonable. MTA recommends the Commission update this rule to reflect modern automated answering systems and to focus only on call times related to repairs. MTA's recommended amendments are as follows:

Calls to the repair service center by retail residential customers will be on hold no more than an average of 120 seconds after the last menu option is selected by the customer. A repair service representative will accept the information needed to begin processing the call and direct the caller to the appropriate personnel. Compliance shall be determined by a 12 month statewide average for residential customer repair calls.

Adequate forces shall be provided at local manual offices in order to assure that 95 percent of the calls will be answered within ten seconds. Ninety percent of repair service calls, calls to the business office, and other calls shall be answered within 20 seconds. An "answer" shall mean that the operator or representative is ready to render assistance and/or ready to accept information necessary to process the call. An acknowledgment that the customer is waiting on the line shall not constitute an answer.

## TCSBC (Coalition) Position

None of the proponents for repeal or modification offer anything but generalizations and unsupported, conclusory evidence for their requests for change. The Coalition contends that the standards imposed for answering time reflect an element of service quality that is highly valued by customers. They should be retained.

CenturyLink argues that the rule imposes costs on specific telephone companies that provide service to a small percentage of the marketplace. Yet CenturyLink provides zero evidence of

what those costs are and how or why they are incurred. In addition, CenturyLink contends that competition provides the incentive to respond to calls expeditiously. In a similar vein, MTA urges the Commission to reduce answering time standards in part because they do not reflect modern automated answering systems. It appears, however, that consumers do not agree. Many consumers attempting to navigate phone menus frequently feel trapped in "automated phone purgatory." In fact, *Consumer Reports* found that not being able to reach a live person is "the No. 1 gripe about customer service." Answering time is important.

Further, the numerical standard for general and repair calls should remain unchanged. Answering time for repair service calls, calls to the business office, and other calls is not a relic of a bygone era. MTA and Frontier's proposals should be rejected at this time because neither MTA nor Frontier provide any rationale whatsoever for the particular standards each proposes. There is no basis in this record to reduce the current standard to either of the levels recommended.

## **DOC Position**

CenturyLink fails to explain how the marketplace will define the standards in the absence of the existing rules. Further, there is insufficient information in the record to determine the effect of the proposed changes on other carriers.

# **Dial Service Requirements (7810.5300)**

This Rule states, in full:

Sufficient central office capacity and equipment shall be provided to meet the following minimum requirements during average busy season, busy hour:

- A. Dial tone within three seconds on at least 98 percent of telephone calls. Dial tone delays of more than 2.6 percent of calls on a continuing basis indicates a need for investigative or corrective action.
- B. Complete dialing of called numbers on at least 97 percent of telephone calls without encountering an all-trunks busy condition within the central office.

## **CenturyLink Position**

The Commission should repeal this rule because it is obsolete. The rule does not reflect current methods of operation and does nothing to enhance the quality of service delivered by a telecommunications provider.

## Frontier Position

This rule can be deleted. Deletion will not adversely impact service quality, as carriers are keen to provide satisfactory service to their customers in order to retain their business.

#### Minnesota Telecom Alliance (MTA) Position

MTA recommends the Commission repeal this rule because it is obsolete, as the rule reflects neither current methods of operation nor current technology. Telephone calls were initially transmitted as electrical pulses of varying amplitude, known as analog signals. Analog calls were interconnected between the calling party and the called party with step switch technology. Beginning in the 1960's, step switch technology was converted to digital technology. Digital technology translated the voice transmission into a binary format (zero or one) where each bit is representative of two distinct amplitudes. With the advent of digital technology, analog step switches were replaced by Time Division Multiplexing (TDM) switches. Today, TDM switches have mostly been phased out and replaced with Internet Protocol (IP) "soft" switches. Soft

switches route calls using Internet Protocol and act like large computer routers. These technological advances and associated operational changes render this rule obsolete.

## TCSBC (Coalition) Position

The Coalition believes that obtaining dial tone immediately and completing the call once dial tone is obtained is at the core of what customers want, expect, and, in emergencies, need. The Commission should retain this rule as is, unless and until proponents of change provide both an alternative to reflect modern technology that preserves the basic requirement of this rule and the concrete data and evidence to support the request for the change.

## **OAG Position**

The rule is short, specific, and to the point. It contains little technical language, and appears to be generally applicable to all telephone service. Moreover, it represents the most basic assumptions about how telephone service should work: when you pick up the phone, you get a dial tone, and when you dial a number, your call is connected. Regardless of what technology is used to complete a telephone call, a utility should always meet those expectations.

#### **DOC Position**

CenturyLink, Frontier and MTA provide scant basis to support repeal of this rule. CenturyLink also fails to explain why the current methods of operation render this rule unnecessary. MTA fails to explain how this rule is obsolete at a time when the Commission and FCC are wrestling with rural call completion issues.

# **Interoffice Trunks (7810.5400)**

This Rule states, in full:

Local interoffice trunks shall be provided so that at least 95 percent of telephone calls offered to the group will not encounter an all-trunks-busy condition. For toll connecting trunks, this figure shall be at least 97 percent. When the completion rate falls below 95 percent on a continuing basis investigative or corrective action should be initiated.

## **CenturyLink Position**

This rule should be deleted. All providers have significant incentive to ensure that adequate capacity exists for the completion of calls. To the extent an issue exists with capacity that requires regulatory intervention, the Commission has the authority to resolve such issues.

## Frontier Position

This rule can be deleted. Its deletion will not adversely impact service quality, as carriers are keen to provide satisfactory service to their customers in order to retain their business.

#### Minnesota Telecom Alliance (MTA) Position

MTA believes the vast majority of dedicated Interoffice Trunks have been eliminated in favor of Internet Protocol (IP) soft switches. At the same time, however, the MTA does not recommend any modification of this rule because the underlying principle of insuring adequate connectivity between facilities remains valid.

#### Minnesota Cable Communications Association (MCCA) Position

MCCA recommends retaining the current rule. However, if the Commission decides that this rule can be eliminated with respect to retail services, the Commission should make clear its intent to preserve the standard with respect to a parity measurement for wholesale services.

With respect to a carrier's own retail customers, MCCA agrees that a carrier has an incentive to provide satisfactory service. However, a carrier's incentive to provide adequate trunk lines is much less clear when those trunk lines service another carrier's end-users. When a company provides both retail services to end-users and wholesale services to its competitors for those end-users, the prospect of gaining retail customers and disadvantaging a competitor give that company incentives to provide inadequate wholesale service. When the competitor has no alternative wholesale providers to turn to for better service, the competitor's retail offerings suffer in quality and competition is hampered. In their respective service territories, CenturyLink and Frontier are the primary providers for MCCA members of essential wholesale network elements and services. The benchmark of 95 percent (97 percent for toll trunks) provides for a minimum level of wholesale performance that competitors can point to if they receive inadequate wholesale service for interconnection trunks.

#### Joint CLEC Position

Interoffice trunks serve not only end user customers but are the life-blood of a multicarrier environment. Current performance with regard to trunk blocking for local interconnection trunks is well above the current benchmark, but incentives should be in place to maintain this level of performance.

## TCSBC (Coalition) Position

MTA does not recommend any modification of the rule because the underlying principle of insuring adequate connectivity between facilities remains valid. The Coalition agrees with MTA.

CenturyLink argues for repeal, asserting that all providers have significant incentive to ensure that adequate capacity exists for the completion of calls. Additionally, it argues, the Commission has jurisdiction to resolve disputes about capacity. This is hardly justification for repeal. Because there is incentive to meet certain benchmarks does not mean there is no longer a need for a particular benchmark. Further, whether or not the Commission has jurisdiction to intercede on questions of whether capacity was or was not adequate to ensure call completion is unrelated to whether there ought to be a standard for call completion. CenturyLink has not met its burden to prove repeal is in the public interest. To the contrary, in the Coalition's view, service quality standards regarding call completion are essential.

## **DOC Comments**

CenturyLink and Frontier provide a scant basis to support repeal. Under CenturyLink's proposed revision the Commission would have to take remedial action to deal with complaints regarding connection standards for interoffice trunks, rather than rely on established standards intended to proactively reduce the incidence of such complaints.

# **Transmission Requirements (7810.5500)**

This Rule states, in full:

Telephone utilities shall furnish and maintain adequate plant, equipment, and facilities to provide satisfactory transmission of communications between customers in their service areas. Transmission shall be at adequate volume levels and free of excessive distortion. Levels of noise and cross talk shall be such as not to impair communications.

## **CenturyLink Position**

CenturyLink proposes a slight modification to this rule in order to make it apply uniformly to telecommunications providers. In the first sentence, CenturyLink would replace "utilities" with "providers."

#### Frontier Position

This rule can be retained as it is.

#### Minnesota Telecom Alliance (MTA) Position

MTA does not recommend any modification of this rule.

## Minnesota Cable Communications Association (MCCA) Position

MCCA urges the Commission to retain this rule. It provides a uniquely important standard for wholesale service adequacy as supplied by incumbent carriers. Competition is harmed when adequate facilities are not available and the incumbent carrier denies or delays fulfilling wholesale orders.

## Joint CLEC Position

This rule, like rule 7810.5400, remains important in a multi-carrier environment. Carriers need

to rely on each other to be able to effectively serve end user customers. CenturyLink provided slight modifications to the language, to which the Joint CLECs are not opposed.

## TCSBC (Coalition) Position

The Coalition urges the Commission to retain this rule as written. CenturyLink's "slight modification" has hefty implications far beyond the scope of this proceeding. The Commission is being asked only to decide whether and how existing service quality rules should be changed; it is not being asked to decide to whom they should apply. Making such a change, clothed in technicality with only a broadest, yet thinnest justification, would have significant substantive consequences that, if the Commissions deems it worthy, ought to be explored in a separate docket.

# **Interruptions of Service (7810.5800)**

This Rule states, in full:

Each telephone utility shall make all reasonable efforts to prevent interruptions of service. When interruptions occur, the utility shall reestablish service with the shortest possible delay. The minimum objective should be to clear 95 percent of all out-of-service troubles within 24 hours of the time such troubles are reported. In the event that service must be interrupted for purposes of working on the lines or equipment, the work shall be done at a time which will cause minimal inconvenience to customers. Each utility shall attempt to notify each affected customer in advance of the interruption. Emergency service shall be available, as required, for the duration of the interruption.

Every telephone utility shall inform the commission, as soon as possible, of any major catastrophe such as that caused by fire, flood, violent wind storms, or other acts of God which apparently will result in prolonged and serious interruption of service to a large number of customers.

## CenturyLink Position

CenturyLink has proposed modifications to make this standard applicable to the entire industry and has recommended elimination of the metric imposed by current rules. CenturyLink has detailed the adverse consequences of the current rule in its waiver petition and subsequent filings and incorporates that material into these comments by reference. Because of the importance of restoring out of service conditions, CenturyLink supports maintaining a rule without the metrics included historically. The Commission receives reporting on these metrics for an extremely small subset of providers and relatively few customers in Minnesota. There is no evidence to suggest that the existence or absence of these metrics has a significant impact on customer service quality. CenturyLink proposes:

Each telephone utility Every telecommunications provider shall make all reasonable efforts to prevent interruptions of service. When interruptions occur, the utility telecommunications provider shall reestablish service with the shortest possible delay. The minimum objective should be to clew 95 percent of all out of service troubles within 24 hours of the time such troubles are reported. In the event that service must be interrupted for purposes of working on the lines or equipment, the work shall be done at a time which will cause minimal inconvenience to customers. Each utility

shall attempt to notify each affected customer in advance of the interruption. Emergency service shall be available, as required, for the duration of the interruption.

Every telephone utility Each telecommunications provider shall inform the commission, as soon as possible, of any major catastrophe such as that caused by fire, flood, violent wind storms, or other acts of God which apparently will result in prolonged and or serious interruption of service to a large number of customers.

## Frontier Position

The existing standard of clearing 95% of out-of-service troubles is a very stringent expectation, which has an enormous impact on the carrier's resources and work processes, and necessitates prioritizing restoral of wireline voice service over the much preferred priority of broadband service restoral. A number of changes have occurred since the standard was first put into rule that warrant a change. In the vast majority of cases, customers whose wireline voice service is interrupted are not left without means to carry on voice communications. Roughly 95% of Minnesota customers have a wireless telephone which will be available for any communications needs during an outage. The importance of broadband service in customers' lives now generally exceeds the importance of their wireline voice service. Customers generally are more concerned about the prompt restoral of their broadband service, rather than their voice service. However, the existing standard forces carriers to prioritize the restoral of voice service over broadband service, in direct conflict with customer wishes. Therefore, a revision to the rule to reflect the current environment and more closely align with customer desires is appropriate. Frontier proposes a revised version:

Each telephone utility shall make all reasonable efforts to prevent interruptions of service. When interruptions occur, the utility shall reestablish service with the shortest possible delay as soon as practicable. The minimum objective should be to clear 95 85 percent of all out-of-service troubles within 24 hours of the time such troubles are reported, or by the date of a repair appointment established with the customer. In the event that service must be interrupted for purposes of working on the lines or equipment, the work shall be done at a time which will cause minimal inconvenience to customers. Each utility shall attempt to notify each affected eustomer in advance of the interruption. Emergency service shall be available, as required, for the duration of the interruption.

Every telephone utility shall inform the commission, as soon as possible, of any major catastrophe such as that caused by fire, flood, violent wind storms, or other acts of God which apparently will result in prolonged and serious interruption of service to a large number of customers.

## Minnesota Telecom Alliance (MTA) Position

MTA recommends the Commission amend this rule to reflect equal application to all telecommunications service providers that are subject to the Commission's jurisdiction. MTA's recommended amendments are as follows:

Each telephone utility Every telecommunications provider shall make all reasonable efforts to prevent interruptions of service. When interruptions occur, the utility telecommunications provider shall reestablish service with the shortest possible delay. The minimum objective should be to clear 95 percent of all out of service troubles within 24 hours of the time such troubles are reported. In the event that service must be interrupted for purposes of working on the lines or equipment, the work shall be done at a time which will cause minimal inconvenience to customers. Each utility shall attempt to notify each affected customer in advance of the interruption. Emergency service shall be available, as required, for the duration of the interruption.

Every telephone utility Each telecommunications provider shall inform the commission, as soon as possible, of any major catastrophe such as that caused by fire, flood, violent wind storms, or other acts of God which apparently will result in prolonged and or serious interruption of service to a large number of customers.

#### Minnesota Cable Communications Association (MCCA) Position

The Commission should not lower or remove this standard on the present record. MCCA members cannot support a reduction in or elimination of wholesale repair standards. The parties proposing to change or eliminate the rule provide no documentation of the high costs they claim are imposed by the rule. While Frontier asserts that many of its customers prefer to have their broadband restored rather than their voice service, its comments provide no documentation of consumer preferences or documentation of repair incidents that involve both a customer's voice and broadband service. There is scant record evidence that improvements to consumer welfare will result from lowering or eliminating the

standard for restoring voice service following an outage. Certainly competitors and their customers will not benefit from doing so.

## Joint CLEC Position

The obligation to prevent interruptions and repair service with the shortest possible delay is important in minimizing customer inconvenience and notifying impacted customers of outages in a multi-carrier environment. The Joint CLECs note that all incumbent carrier proposals retained the most important part of this rule, which maintains expectations with respect to the prevention of interruptions and minimizing out of service conditions. If the Commission intends to modify this rule, the Joint CLECs request the Commission consider the importance of maintaining the obligations to prevent interruptions, minimize service outages, and continue the obligation to notify impacted customers of service interruptions.

## TCSBC (Coalition) Position

This rule has four components. It requires carriers to: (1) work to prevent outages and if they occur reestablish service in the shortest time possible; (2) restore 95% of outages within 24 hours of their being reported; (3) notify customers of planned outages, complete maintenance with minimal disruption to consumers, and make emergency service available; and (4) notify the Commission when Acts of God are expected to cause prolonged outages. CenturyLink, MTA, and Frontier all would do violence to all or parts of this rule. With one small improvement proposed by MTA, the remainder of the carriers' proposals should be rejected.

(1) One portion of the rule reads: "When interruptions occur, the utility shall reestablish service with the shortest possible delay." CenturyLink and MTA would both retain this provision. The Coalition agrees that no change should be made to this portion of the rule.

Frontier proposes to amend the rule to require restoration, not "with the shortest possible delay," but rather "as soon as practicable." The Coalition urges the Commission to reject this change. First, the amendment Frontier proposes represents a subtle but perceptible and inappropriate erosion of the standard. The current standard encourages the promptest possible response. Frontier's language change suggests a lowering of the standard without explanation or justification. Second, neither CenturyLink nor MTA recommend any changes. This portion of the rule should remain as is.

(2) One portion of the rule sets a standard of 95% restoration within 24 hours of an outage. CenturyLink's earlier request to suspend this restoration of service standard was denied by the Commission. The Commission found that CenturyLink utterly failed to prove that compliance with the existing rule presented an excessive burden and repeal of the rule was in the public interest. To the contrary, the Commission found that CenturyLink: (1) admitted it was "in substantial compliance" with the rule; and (2) failed to substantiate its claim that the rule imposed "extraordinary costs" or impeded "the company's competitiveness." Further, the Commission found that CenturyLink failed to meet its public interest test burden to show its proposal would not have an adverse impact on consumers and or conflict with state policy goals. In this proceeding, CenturyLink presents not a single new argument. Instead, it affirmatively rests its case on the adverse consequences of the current rule detailed in its waiver petition and subsequent filings – details the Commission has already found wanting.

Frontier proposes amending the rule in two ways: (i) reduce from 95% to 85% the percentage of outages that must be cleared within 24 hours of a specified time – currently the time the outage is reported; and (ii) add an alternative time from which the 24-hour restoration period would start. CenturyLink also recommended reduction of the standard from 95% to 85%.

No evidence as to how the proposal would further these goals has been presented – then or now.

Finally, by arguing that the rules "force" prioritization of restoration over the deployment of broadband, Frontier implicitly acknowledges that, if relieved of its obligation under this rule, it will indeed reorder its priorities and thus diminish service quality in the area of restoral of service.

- (3) Regarding customer notification of planned outages, the Coalition opposes any change to this portion of the restoration of service standard. It should be self-evident that notifying customers of planned maintenance and possible disruption to their lives, minimizing to the extent possible that disruption, and providing for emergencies during the duration of the disruption are reasonable, common sense, and appropriate standards to which any responsible business should be proud to be held.
- (4) MTA would improve the wording of the rule to make it applicable where there would be a catastrophic "prolonged and or serious interruption of service to a large number of customers." MTA's proposal in this instance should be adopted.

## **DOC Comments**

MTA's proposal to replace the existing specific standards with a vague, general requirement to act reasonably would create enforcement difficulties for the Commission. Under CenturyLink's proposal, the Commission would only be informed of service outages that rose to the level of "major catastrophes." Such a rule would leave the Commission unable to carry out its responsibilities to satisfactorily monitor service quality.

# **Customer Trouble Reports (7810.5900)**

This Rule states, in full:

Arrangements shall be made to receive customer trouble reports 24 hours daily and to clear trouble of an emergency nature at all hours, consistent with the bona fide needs of the customer and personal safety of utility personnel.

Each telephone utility shall maintain an accurate record of trouble reports made by its customers. This record shall include appropriate identification of the customer or service affected, the time, date, and nature of the report, the action taken to clear trouble or satisfy the complaint, and the date and time of trouble clearance or other disposition. This record shall be available to the commission or its authorized representatives upon request at any time within the period prescribed for retention of such records.

It shall be the objective to so maintain service that the average rate of all customer trouble reports in an exchange is no greater than 6.5 per 100 telephones per month. A customer trouble report rate of more than 8.0 per 100 telephones per month by repair bureau on a continuing basis indicates a need for investigative or corrective action.

## **CenturyLink Position**

The competitive marketplace has rendered the current rule obsolete. The Commission retains complaint authority notwithstanding the presence of this rule. Thus, the current rule does nothing to promote improved customer service and therefore should be eliminated.

## Frontier Position

Frontier's experience is that average rate of customer troubles is lower now than when this standard was put into rule. To reflect the current environment, Frontier proposes a revised version:

Arrangements shall be made to receive customer trouble reports 24 hours daily and to clear trouble of an emergency nature at all hours, consistent with the bona fide needs of the customer and personal safety of utility personnel.

Each telephone utility shall maintain an accurate record of trouble reports made by its customers. This record shall include appropriate identification of the customer or service affected, the time, date, and nature of the report, the action taken to clear trouble or satisfy the complaint, and the date and time of trouble clearance or other disposition. This record shall be available to the commission or its authorized representatives upon request at any time within the period prescribed for retention of such records.

It shall be the objective to so maintain service that the average rate of all customer trouble reports in an exchange is no greater than 6.5-5 per 100 telephones per month. A customer trouble report rate of more than 8.0 per 100 telephones per month by repair bureau on a continuing basis indicates a need for investigative or corrective action.

## Minnesota Telecom Alliance (MTA) Position

MTA recommends the Commission amend this rule to adopt a state-wide objective for retail service of 6.5 or fewer trouble reports per 100 telephones. This standard is appropriate because the rationale for any level of service quality regulation has been eliminated by the dramatic change from the completely non-competitive market (in effect when the rule was adopted) to the current market (which features competition from both multiple wireline providers and wireless providers). Certainly, there is ample justification to eliminate outdated and detailed record keeping requirements which add costs without any benefits. The MTA's recommended amendments as follows:

Arrangements shall be made to receive customer trouble reports 24 hours daily and to clear trouble of an emergency nature at all hours, consistent with the bona fide needs of the customer and personal safety of utility personnel.

Each telephone utility shall maintain an accurate record of trouble reports made by its customers. This record shall include appropriate identification of the customer or service affected, the time, date, and nature of the report, the action taken to clear trouble or satisfy the complaint, and the date and time of trouble clearance or other disposition. This record shall be available to the commission or its authorized representatives upon request at any time within the period prescribed for retention of such records.

It shall be the objective <u>of all telecommunications providers</u> to <u>so-maintain service so</u> that the <u>statewide</u> average rate of all <u>retail</u> customer trouble reports <u>in an exchange</u> is no greater than 6.5 per 100 telephones per month. A customer trouble report rate of more than 8.0 per 100 telephones per month by repair bureau on a continuing basis indicates a need for investigative or corrective action.

## Minnesota Cable Communications Association (MCCA) Position

MCCA supports raising the standard (from 6.5 to 5.0 as recommended by Frontier), but not removing the floor (of 8.0 as recommended by MTA and Frontier).

High levels of customer trouble reports reflect poor quality service. Competitive carriers receive trouble reports from their customers, and if the problem is isolated to wholesale facilities, report the trouble to the wholesaler. Eliminating or reducing the trouble report standard would affect wholesale customers as well as retail customers.

## Joint CLEC Position

This rule is crucial in a multi-carrier environment. It sets the expectations that troubles can be reported 24 hours a day, and that emergency situations will be prioritized and repaired as quickly as possible. Adequate records of troubles are also important in order for carriers to investigate and trouble shoot chronic issues. Should the Commission modify this rule, the Joint CLECs recommend Frontier's proposal. Frontier's proposal retains the most important part of this rule, which requires carriers to receive trouble reports 24 hours a day, and clear troubles of an emergency nature at all hours.

## TCSBC (Coalition) Position

This rule should be retained. Century Link's proposal should be rejected. First, whether or not the market is competitive and whether or not the Commission retains complaint authority are not relevant to whether there should be a rule that contains a standard of reliability – a core customer value. As one of the Coalition members (AARP) notes: "Consumers must have affordable, reliable and high-quality access to essential telecommunications services in their residences, regardless of where they live." Second, state telecommunications policy goals expressly provide that service quality should be maintained, as well as improved. CenturyLink's justification for

change (i.e., that this rule "does nothing to promote improved customer service") ignores the fact that it does much to maintain service quality.

MTA asserts that there is ample justification to eliminate outdated and detailed record keeping requirements which add costs without any benefits, but fails to provide any justification whatsoever or to detail the alleged costs incurred.

Frontier has failed to produce any evidence to back its proposal to eliminate a standard intended as a red flag to trigger at least an investigation into aberrant and less than satisfactory performance.

## **DOC Position**

While proposing to eliminate these sections of the Commission's service quality rules, CenturyLink provides scant basis to support its proposal. CenturyLink fails to explain how the marketplace will define the standards in the absence of the existing rules. The generality of the language, proposed by Frontier would create an environment with no enforceable regulations. At the present time, there is insufficient information in the record to determine the effect of the proposed changes on other carriers.

# **Protective Measures (7810.6000)**

This Rule states, in full:

Each utility shall exercise reasonable care to reduce the hazards to which its employees, its customers, and the general public may be subjected. The utility shall give reasonable assistance to the commission in the investigation of the cause of accidents and in the determination of suitable means of preventing accidents.

## **CenturyLink Position**

CenturyLink recommends that this rule be eliminated. It is antiquated because workplace safety is covered by other specialized agencies (e.g. OSHA).

## Frontier Position

This rule can be retained as it is.

#### Minnesota Telecom Alliance (MTA) Position

MTA recommends the Commission repeal this rule because the investigation of accidents is outside of the Commission's area of expertise. Further, the investigatory role described in the rule is now filled explicitly by other specialized agencies (e.g. OSHA), unlike the situation at the time the rule was adopted.

## TCSBC (Coalition) Position

This rule should be retained. While dual jurisdiction may exist, public and worker safety are squarely within the Commission's jurisdiction and are among the duties with which it is expressly charged in Minnesota statutes (§ 237.163, subd. 8).

## **DOC Position**

CenturyLink provides scant basis to support its proposal. CenturyLink proposes eliminating this

rule arguing that workplace safety is covered by other agencies, but the carrier provides no details regarding the regulatory oversight of other agencies.

# **Safety Program (7810.6100)**

This Rule states, in full:

Each utility shall adopt and execute a safety program, fitted to the size and type of its operations. As a minimum, the safety program should:

- A. require employees to use suitable tools and equipment in order that they may perform their work in a safe manner;
- B. instruct employees in safe methods of performing their work; and
- C. instruct employees who, in the course of their work, are subject to the hazard of electrical shock, asphyxiation, or drowning, in accepted methods of artificial respiration.

## **CenturyLink Position**

CenturyLink argues that this rule could be eliminated for the same reasons it recommends eliminating Rule 7810.6000 (Protective Measures). Nonetheless, if the Commission decides to retain this rule, CenturyLink does not object.

#### Frontier Position

This rule can be deleted, as there are other state and federal requirements covering workplace safety matters. There will be no impact to service quality.

## Minnesota Telecom Alliance (MTA) Position

MTA does not recommend any modification of this rule.

## TCSBC (Coalition) Position

This rule should be retained. The Commission's clear jurisdiction over safety in the provision of telecommunications services is not completely usurped because other agencies may have

 $concurrent \ or \ slightly \ different \ jurisdictional \ responsibility.$