



# Oregon

Theodore R. Kulongoski, Governor

## Public Utility Commission

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April 12, 2005

OREGON PUBLIC UTILITY COMMISSION  
ATTENTION: FILING CENTER  
PO BOX 2148  
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RE: **OPUC Docket No. AR 492** - In the Matter of a Rulemaking to Amend OAR Chapter 860, Division 023, 032 and 034 to Adopt Rule Changes, Minimum Service Quality Standards for Providing Retail Telecommunications Services.

Enclosed for filing in the above-captioned docket is the Public Utility Commission's AR 492 Staff's Opening Comments. This document is being filed by electronic mail with the PUC Filing Center.

*LOIS MEERDINK*

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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

AR 492

In the Matter of a Rulemaking to Amend	)	
OAR Chapter 860, Division 023, 032 and	)	<b>STAFF’S OPENING COMMENTS</b>
034 to Adopt Rule Changes, Minimum	)	
Service Quality Standards for Providing	)	
Retail Telecommunications Services	)	

The Public Utility Commission Staff (Staff) submits the following comments and recommendations regarding the rules proposed in AR 492. These comments supplement and provide background to the Staff Report submitted to the Commission on March 8, 2005.

**1. Introduction**

The Commission Staff reviewed and revised the minimum service quality standards as necessary to ensure safe and adequate retail telecommunications services to comply with ORS 759.450. This rulemaking was initiated to consider the Staff recommended Retail Service Quality Standards. These rules do not apply to: (1) the radio communications service, radio paging service, commercial mobile radio service, personal communications service, or cellular communications service; or (2) a cooperative corporation organized under ORS Chapter 62 that provides telecommunications services.

One informal workshop was held by the Commission Staff on July 13, 2004 to receive input from the industry and other concerned parties. After this input was obtained, the existing rules were reviewed and the proposed changes to the rules were drafted. Each of the comments provided at the workshop was considered in Staff’s recommended rule changes that were attached to Staff’s March 8, 2005 public meeting memo.

In the following text, the word ‘rules’ refers to OAR 860-023-0055, OAR 860-032-0012, and OAR 860-034-0390, for those changes that are identical. A matrix in Attachment 1 provides a summary of the changes to the existing rules. The recommended changes to the rules, as modified with these comments, are located in Attachment 2.

**2. ORS 759.450(3) Considerations**

The Commission Staff, for each standard adopted, considered the criteria set forth in ORS 759.450(3). The criteria considered are:

- (a) **General Industry Practice and Achievement**: The telecommunication utilities in Oregon have generally met existing standards. This demonstrates that

the rules are achievable. Staff also believes the standards are consistent with general industry practice, recognizing that company practices are not uniform. All telecommunication utilities and competitive telecommunication providers, with total access lines over 1,000, provide monthly service quality reports to the Commission.

(b) **National Data for Similar Standards**: Staff reviewed NRRI 03-17s, Survey of State Retail Telephone Quality of Service Standards: Organized by Category of Service; NRRI 03-23, Metrics Most Commonly Adopted By the States to Measure Performance of Local Exchange Carriers on Quality of Service Categories, dated September 2003; NRRI 04-09s, Survey of State Retail Telephone Quality of Service Regulations for Selected Categories of Service: Metrics, Penalties and Reports, dated May 2004; the “NARUC Service Quality White Paper,” dated March 24, 2004 and a comprehensive table of service quality standards by state. Attachment 3 contains a copy of the National Association of Regulatory Utility Commissioners (NARUC) “white paper,” a table comparing the NARUC recommended levels with the existing Oregon standards and the comprehensive table by state.

NARUC suggested the adoption of two monitoring levels, called objective and surveillance levels, for some of the categories of quality of service. The objective level refers to the level of performance considered adequate by a regulatory commission. The surveillance level, on the other hand, functions as a threshold. It represents the minimum level of performance that the service provider needs to achieve in order to avoid triggering an action from the regulatory commission. A comprehensive table of service quality standards by state was compiled and, for states that used these two categories, the surveillance level was used since Oregon rules are minimum service quality standards.

The NARUC white paper was discussed at the Service Quality Workshop held on July 13, 2004. Industry participants unanimously recommended that the current Oregon standards be retained in lieu of adopting the NARUC recommended standards. Staff concurs with this recommendation, in that the existing Oregon rules are reasonable, provide levels that maintain adequate service, and because industry is dedicated in providing the necessary resources to meet and often exceed the existing standards.

(c) **Normal Operating Conditions**: For the measurements in each standard of the proposed rules, Staff considered the use of the telecommunications network as defined by Telcordia’s SR-2275, issue 4, Telcordia Notes on the Network, dated October 2000. This document is accepted by the industry as the definitive reference document on the normal use of the telecommunications network in the United States.

The current rules, with the exception of the access to the utility/provider representatives, are routinely being met by utilities/providers and are therefore considered by Staff as reasonable and within normal operating capability. Industry has had great difficulty meeting the representative access standards and Staff, after lengthy discussions with industry representatives, concurs that these standards should be modified.

**(d) The Historic Purpose for Which the Telecommunications Network was Constructed:** The telecommunications network was originally designed to provide “plain old telephone service” (POTS). The network has advanced from a poor quality voice medium to a complex network that provides high quality voice capabilities and the ability to transport large amounts of data at high rates of speed. Individual customers are becoming more sophisticated and are also requiring varied data traffic capabilities.

The Internet has changed calling patterns and has placed new challenges on the network. The industry, as a whole, has handled the new challenges and has made the necessary enhancements and adjustments to their network to provide the required service. The reported trouble report rates have shown that the challenges are being met.

**(e) Technological Improvements and Trends:** This criterion overlaps, to some extent, with criteria of (a) General Industry Practice and Achievement, (b) National Data for Similar Standards, and d) the Historic Purpose for Which the Telecommunications Network was Constructed.

The telecommunications industry is transitioning toward Voice over Internet Protocol (VoIP), Broadband over Power Line (BPL), increased Internet access demands (both in the number of users and the demand for faster and cheaper service) and the focus of the telephone industry is to provide this triple play (video, data, and voice) to every business and home. The national fiber optic network overlay has provided the industry with virtually unlimited capacity (predominantly in urban and suburban areas), and in a competitive market, options are heavily influenced by end-user customers.

Staff could go into detail on the capabilities and limitations of these various technologies and market strategies, but for the purpose of these service quality rules, Staff has focused on voice telephony capabilities. For the purpose of these rules, the standards are considered technologically neutral. The one area that may eventually require change is the “Customer Access Line Testing” section. As the network moves from a switched network to a virtual network, parameters such as latency, jitter, and packet loss may need to be addressed, but with proper network engineering by the industry these parameters may not require additional Commission rules.

(f) **Other Factors as Determined by the Commission:** Staff reviewed Consumer Services Division complaint data. The telecommunications' complaints in 1999, as reported in AR 375, comprised 83% of the total complaints processed by the Consumer Services Division for Telephone, Natural Gas, Electric, Water and Other. In 2004, telecommunications' complaints processed were 66% of the total. A comparison of the 1999 and 2004 large telecommunications utilities' data can be seen in charts 1 and 2.

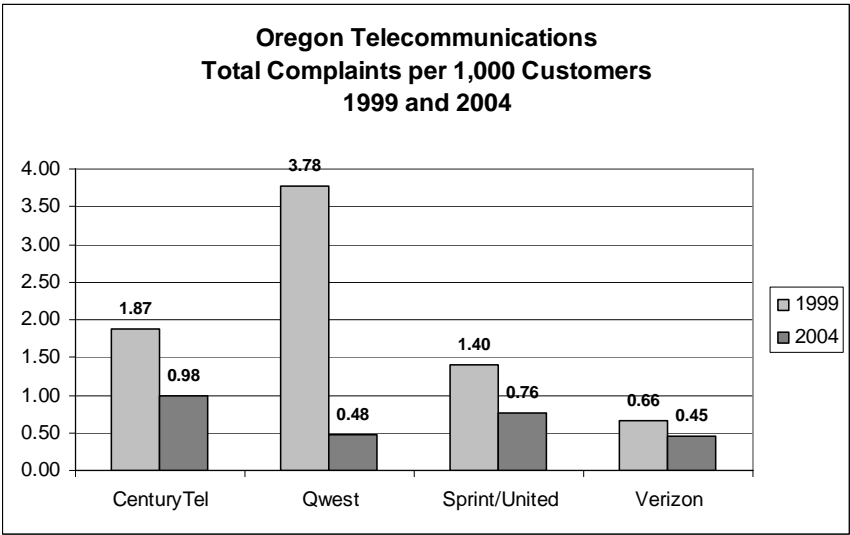


Chart 1. Comparison of total complaints per 1,000 customers in 1999 and 2004

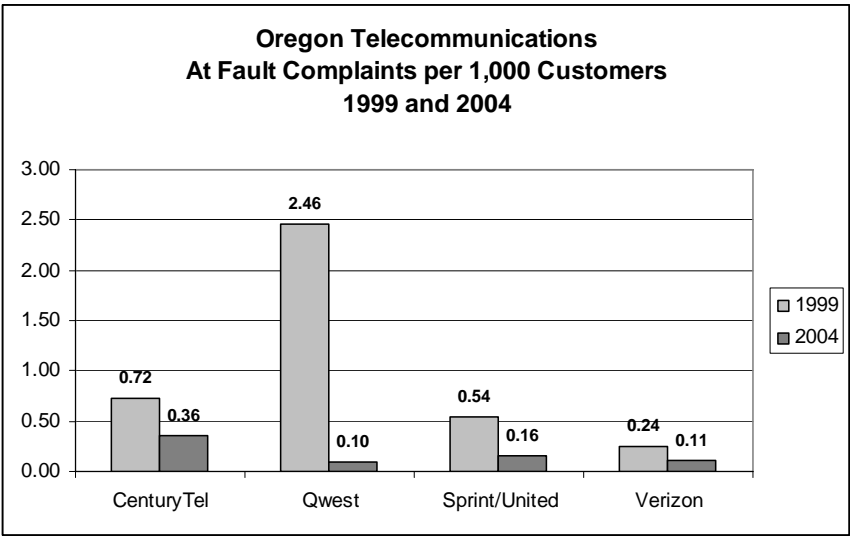


Chart 2. Comparison of "at fault" complaints per 1,000 customers in 1999 and 2004.

The complaints counted for this chart concern billing, disconnection, service, customer service, rate, and miscellaneous/jurisdictional. Billing was the major

contributor to the total complaint count. Overall, the number of complaints to the Consumer Services Division was lower in 2004 than 1999. Although service quality data is not directly available from this data, an in-depth analysis showed that areas that contained service quality data had marked improvements between 1999 and 2004. The analysis also indicates to staff that the current service quality levels are reasonable, achievable, and that customers are showing their agreement with this conclusion by the lower number of complaints.

### **3. Changes to Rules – Proposed OAR 860-023-0055, OAR 860-032-0012, and OAR 860-034-0390.**

The summaries to the rule changes are provided in Attachment 1. The first section addresses the changes that are common to the three rules. This is followed by changes that are specific to the individual rules.

#### **Common Changes for OAR 860-023-0055, OAR 860-032-0012 and OAR 860-034-0390**

- (a) **General Format.** Staff maintained the format of the original rules. Guidelines from the Secretary of State were followed and references to “and/or” were removed and the word “shall” was changed to “may” or “must.” Each of the three sets of rules was tailored to specific providers by changing the generic term “carrier” to “large telecommunications utility,” “small telecommunications utility,” or “competitive telecommunications provider,” as applicable. Grammatical and minor housekeeping changes were also made.
- (b) **Definitions, Section 1.** The fourteen existing definitions were reviewed, and other than “housekeeping changes,” only the following four definitions were changed.
  - a. **Average Speed of Answer.** This definition was added because of Staff’s recommendation to add an alternative measurement in section 8, Access to Large Telecommunications Utility Representatives. Technically, when a call is in the queue for the “live representative,” the call has left the interactive system and does not go into “the interactive answering system queue.” Staff recommends that the definition be changed to: “Average Speed of Answer – The average time that elapses between the time the call is directed to a representative and the time it is answered.”
  - b. **Commitment Date.** Clarification was required in section 4, Provisioning and Held Orders. The basic definition did not change, but was modified to clarify that the commitment date was the initial commitment date.

- c. **Held Access Line Service Order.** Clarification in section 4, Provisioning and Held Orders, required the definition for held order be modified to emphasize that the held order measurement was not for “all” held orders, but only for held orders “for lack of facilities.” The definition was also modified by removing the prerequisite reference. This reference is more appropriately incorporated in the section 4 rule.
- d. **Telecommunications Carrier.** This definition was removed as it was redundant to the information provided in ORS 759.450(8).

- (c) **Measurement and Reporting Requirements, Section 2.** The common change to this section added the requirement that the reported measurements must be reported to the first significant digit. This addition was needed to ensure that “rounding” of the reported measurements did not mask the fact that the parameter did not meet standard. For example, if a standard threshold is 85% and 85% was reported, it would not be known if the actual measurement was 84.5% or 85.4%, with the former number not meeting standard and the latter number meeting the standard. The ambiguity was removed.
- (d) **Additional reporting Requirements, Section 3.** Only housekeeping changes were made.
- (e) **Provisioning and Held Orders for Lack of Facilities, Section 4.** This rule was modified to clarify that the held order measurement was for “lack of facilities,” the referenced “commitment date” was actually the “initial commitment date” and that the utility/provider could only change the initial commitment date if requested by the customer. The prerequisite reference that was formally in the “Held Access Line Service Order” definition, i.e. “An order requiring the customer to meet specific reasonable prerequisites (for example, line extension charges) shall be measured from the time the prerequisites have been met,” was moved to this section for clarity and completeness.

A number of issues surfaced with the original wording in this section. Held Order, as required within the Commission rules, was only for a delay in receiving service due to lack of facilities and not for all reasons. The “commitments met” percentage captures the overall capability of the utility/provider to provide service by the initial commitment date.

Qwest had been reporting held orders as the number of orders that were not completed by the end of the reporting month. This was in lieu of the number of held orders that were not provided by the initial commitment date, during the month. Changes to this section clarify what should be measured when reporting held orders.

The industry asked that the definition of “initial commitment date” be changed. Clarification was provided in the rule to specify that the initial commitment date could be changed if requested by the customer. For example, if a customer asked for service to be installed at a date 30-days in the future because they expected to occupy the facility at that time, but due to unforeseen circumstances the customer was not going to occupy the facility until two weeks later, the customer could change the initial commitment date and the utility/provider would not be charged with a held order. The reverse, i.e., the company changing the date, would not be acceptable to Staff as the commitment date could easily be extended a number of times by a company, thus avoiding a held order.

- (f) **Trouble Reports, Section 5.** Currently a utility/provider is required to provide the reason(s) a wire center exceeds a trouble report rate of 3.0 per 100 working access lines during a reporting month. Staff recommends that this requirement apply only to a wire center that is meeting standard, i.e. has not exceeded a trouble report rate of 2.0 for more than three months. For those wire centers that are not meeting standard, Staff recommends that the utility/provider be required to provide the reason(s) a wire center exceeded a trouble report rate of 2.0 per 100 working access lines during the reporting month. This information is currently being requested, after the fact, for many of these wire centers. This information is crucial for Staff to properly analyze network problems, resolutions for those wire centers that are not meeting standard, answering management/Commission questions, and to determine if an audit or performance plan is required. The utility/provider should be actively resolving service quality parameters that are not meeting standard. Therefore, this reporting requirement should not add any further burden on the company.

Each utility/provider is already providing, at the request of Staff, a monthly access line count by wire center. This requirement is now formally added to the rules with clarification that DSL lines, associated with basic phone service, are included in the reported count. This information is required for Staff to properly analyze, on a month-by-month basis, network operations.

A request was made by the industry, prior to the opening of this rulemaking, to change the trouble report rate threshold for small wire centers. They argue that very few reported troubles, sometimes just one or two, in these small exchanges will cause the wire center to be out-of-standard. It is also difficult and takes time to identify, with only one or two troubles, the common equipment or cable that may be bad. One commenter said “To say that a small wire center is out of compliance, giving bad service, due to very few reports,



does not seem right.” The industry would like to see the smaller wire centers having a trouble report rate threshold of 3.0 troubles per 100 lines.

Staff believes this concern is already being addressed in the current rules. The trouble report rate threshold allows for two (2) troubles to be reported for every 100 access lines, i.e. allows the company to have troubles on 2% of the wire centers total access lines. A small wire center with 100 lines is allowed two troubles. A larger wire center with 12,000 lines is allowed 120 troubles. Both wire centers are allowed to have troubles on 2% of their lines in 100 line increments. This normalization process was adopted to compensate for the number of access lines, i.e. potential for more troubles because of the higher line count. Staff does not concur with this request and did not change the rule.

- (g) **Repair Clearing Time, Section 6.** Only housekeeping changes were made.
- (h) **Blocked Calls, Section 7.** Clarification was added to this rule to specify which final trunk group blockages had to be reported. For the purpose of these rules, only final trunk groups associated with local and extended area service (EAS) traffic are reported. The emphasis was also added to include these blockages as seen from a tandem switch or that terminate on another company’s switch. Additional blockage information, which is already being reported by the utilities/providers but not required by rule, is added to the rules as part of Staff’s recommended changes.

The sentence requiring a switching system blocking report was deleted. A separate report is not required and the system blocking data is often included as part of an exchange audit report. Depending on the circumstances, no report may be required. This sentence was deleted to provide flexibility and eliminate unnecessary reporting.

The industry requested, prior to the rulemaking, that the blockage level change from a 99 percent completion of dialed calls to a 98 percent completion rate. Staff rejected this recommendation for several reasons. The existing level is the nationally recognized blockage level and is consistent with previous Oregon Commission policy, e.g., Commission Order 91-395. Further, Telcordia Notes on the Networks, Network Design and Configuration, paragraph 4.5.1.2, Blocking states that the design of the intraLATA network is generally based on a blocking probability criteria of B.01. There were 19 local and EAS final trunk group blockages during the 2004 calendar year. Of those 19, only three final trunk groups had blockages between 1 and 2 percent. Qwest, for instance, has over 500 final trunk groups. The existing standard is reasonable and generally being met by the industry. Staff does not support changing this standard.

- (i) **Access to Representatives, Section 8.** The common changes only apply to OAR 860-023-0055 and OAR 860-032-0012. ORS 759-450(9) exempts small telecommunications utilities from measuring carrier inquiry response time. Staff and the industry have been considering changes to this rule for four years. Staff did a study in AR 375, the previous major rulemaking investigation on these retail service quality rules, on adopting “Average Answer Time” as an alternative measurement to the current “Answer Within” measurement. A mathematically equivalent conversion between these two measurements was determined to be unattainable and, therefore, Staff did not recommend the alternative method.

Staff reviewed various technical articles over the last year, as well as an analysis of measurements taken and reported in other states. Calls were made to verify if complaints were received at other Commissions that used “Average Answer Time” measurements. All information seemed to support the use of the “Average Answer Time” as an alternative method of measurement. Standards varied, but the most accepted “Average Answer Time” levels were 50 and 60 seconds. Staff’s main concern, rather than trying to find a mathematical equivalent conversion, was to ensure that if the company met a selected “Average Answer Time” level, that the customer would not experience any degradation in service.

A summary of customer “Access to Representatives” complaints submitted to the Commission’s Consumer Services Section is listed in the table below. The Consumer Services Section handled 2,603 telecommunications complaints in 2004. The number of “Access to Representative” complaints in 2004 was 19, or 0.73% of the total number of complaints.

Table 1. Total Number of “Access to Representative” PUC Complaints

Year	Repair	Business Office
2000	36	0
2001	385	0
2002	104	0
2003	6	13
2004	19	0

Based on Staff’s research, Staff settled on recommending a 5% reduction in the current “Answer Within” standard and allowing an alternative “Average Answer Time” standard of 50 seconds. Staff recommends one small change to Staff’s public meeting memo rule recommendation. Staff intended for the “Average Answer Time” standard to be 50 seconds or less, therefore subsection (8)(b)(B) should be changed from “... or have an average speed of

answer time less than 50 seconds” to “... or have an average speed of answer time of 50 seconds or less.”

- (j) **Interruption of Services Notification, new Section 9.** This is a new section and formalizes the requirements on reporting outages and service interruptions. The information is required to assess the overall network operations and to inform Staff of real time outage/disruptions that affect customer service. This information is already generated within companies, and in most cases, already being reported to the Commission. Staff is willing to adjust some of the reporting criteria in this rule during the rulemaking if change can better align with the majority of the company’s existing, internal reporting thresholds and reporting criteria. This information will also assist our Consumer Services personnel on complaint calls that may be associated with these outage/disruptions.
- (k) **Customer Access Line Testing, renumbered Section 10.** Only housekeeping changes were made.
- (l) **Customer Access Lines and Wire Center Switching Equipment, renumbered Section 11.** The reference to pulse dialing was removed from this rule as it no longer applies.
- (m) **Special Service Access Lines, renumbered Section 12.** Only housekeeping changes were made.
- (n) **Large Telecommunications Utility Interconnectivity, renumbered Section 13.** Only housekeeping changes were made.
- (o) **Alternatives to these Telecommunications Standards, renumbered Section 14.** Only housekeeping changes were made.
- (p) **Remedies for Violation of this Standard, renumbered Section 15.** Only housekeeping changes were made.
- (q) **Exemption from these Rules, renumbered Section 16.** A new subsection was added to this rule that allows a company to apply for an exemption from service quality reporting if they meet service quality levels set forth in sections (4) through (8) of this rule for the 12 months prior to the month in which the petition is filed. This should be achievable by all companies that report and is an incentive to provide and maintain a system that meets the Commission rules. If a company fails to maintain the required level of service quality, the Commission could reverse the exemption and the company would resume reporting.

The large telecommunications utilities are not in favor of having to meet all standards prior to being able to apply for a waiver to report. They believe they should be able to ask for individual waivers for each standard meeting its objective for the 12 month period. Staff's response is that a piecemeal reporting practice would be complicated to manage and would prevent the reporting of crucial data that the PUC engineering staff requires to monitor the network to ensure adequate service.

Additionally, if this capability existed, a company could easily apply for a waiver on a wire center-by-wire center basis for those wire centers that met standards for a twelve month period and then shift resources, as required, to the remaining wire centers until all wire centers would be exempted. Unless serious violations occur, the company would not be required to report any service quality information for the exempted wire centers.

All companies are treated the same and all companies have the opportunity to be exempt from reporting. Staff agreed to exemptions for companies that meet and maintain all of the Commission standards for a one year period. This exemption was not intended to provide an avenue to whittle away the reporting of service quality data by a company. Staff does not support individual exemptions.

### **Changes that are OAR 860-023-0055 Specific**

The only rule specific change proposed for OAR 860-023-0055 is:

**Measurement and Reporting Requirements, Section 2.** Reference to the 1,000 access line minimum requirement to measure and report service quality data was deleted since, by definition, a Large Telecommunications Utility is in excess of 50,000 access lines.

### **Changes that are OAR 860-032-0012 Specific**

Staff recommends two changes that were specific to this rule.

**Measurement and Reporting Requirements, Section 2.** A new sentence was added to this section to clarify the calculation for total access lines served by a competitive telecommunications provider. The access line minimum threshold for reporting service quality measurements is currently set at 1,000 access lines. The underlying reason for this clarification is that as telecommunications providers have been added to the service quality reporting, Staff has received numerous inquiries, from potential new reporting entrants, asking the question, "to or not to include access lines provisioned through alternative technologies." Staff's

response to these types of inquiries has been that if the circuit method utilized, by the carrier, produces a voice component, to the end-user customer, then that voice component should be counted as a single access line, irrespective of any other services on that individual circuit. We included an example of the Digital Subscriber Line (DSL), as it is the most commonly known and currently popular method for producing a multi-function service delivery mechanism, for end-user customers among telecommunications providers. In proposing this rule, Staff intends to give the industry a common reply to a frequently asked question.

**Repair Clearing Time, Section 6.** A new sentence was added to subsection 6(b) relating to the minimum objective service level where the reporting competitive telecommunication provider must attain a standard of 95% to be in compliance with this section. Specifically, Staff presents an exclusionary clause to allow competitive service providers the opportunity to not “over-report” their service quality results. It is Staff’s intent, in addition to the exclusion contained in subsection (5)(I) of this rule, to make certain competitive telecommunication providers do not include those trouble reports caused solely by other telecommunications providers or utilities when calculating this service quality index.

### **Changes that are OAR 860-034-0390 Specific**

The only rule specific change proposed for OAR 860-034-0390 is:

**Measurement and Reporting Requirements, Section 2.** The rationale for this change is the same one used above in explaining the equivalent change to OAR 860-032-0012.

4. The following recommended changes (in italics) were made to the rules in attachment 2. These are changes to the published changes presented at the March 8, 2005 Public Meeting.

(a) A new definition for “Average Speed of Answer” was inserted. This definition better reflects the events being timed.

**(c) “Average Speed of Answer” – The average time that elapses between the time the call is directed to a representative and the time it is answered;**

(b) Subsection (7)(c)(A). The change was to clarify that the reported blockage was only for local and EAS traffic. Subsection 7(c)(A) was a housekeeping change to move the “extended area service (EAS)” to the first entry into the rules.

**(A) Local and extended area service (EAS) final trunk group blockages measured from each of its switches, regardless of the ownership of the terminating switch, that do if the carrier does not meet the objective service level for trunk group blocking ~~ingage~~. The switching system blocking report is required after a Commission-directed switching system blocking test is completed;**

**(B) Its tandem switch final trunk group blockages associated with EAS traffic;**

(c) Section (8)(b)(B) was changed to reflect Staff's intent that the average speed of answer time was "50 seconds or less" and not "less than 50 seconds."

**(B) The large Ttelecommunications carrierutility representatives shallmust answer at least 850 percent of calls within 20 seconds or have an average speed of answer time of 50 seconds or less.**

DATED this 12<sup>th</sup> day of April 2005.

Respectfully submitted,

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Irv Emmons  
Senior Telecommunications Engineer

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Rick Carter  
Senior Telecommunications Engineer

Attachments

**AR 492 Matrix**  
**Retail Telecommunications Service Rules**

**OAR 860-023-0055, OAR 860-032-0012 and OAR 860-34-0390**

**AR 492 Matrix for Proposed Changes to  
 Retail Telecommunications Service Rules  
 OAR 860-023-0055, OAR 860-0032-0012 and OAR 860-0034-0390**

<b>Rule</b>	<b>Section</b>	<b>Proposed Change</b>
All	All	Changed reference of Telecommunications Carrier to either Large Telecommunications Utility, Small Telecommunications utility or Competitive Telecommunications Provider, as appropriate for the different set of rules.
		The Secretary of State directed that new rules change the "shall" to "must" and remove any "and/or" references.
		Housekeeping changes that did not change original intent of the rule.
All	(1) Definitions	Added new definition for "Average Speed of Answer"
		Changed the "Commitment Date" to "Initial Commitment Date." The actual definition did not change.
		Changed the "Held Access Line Service Order" to "Held Order for Lack of Facilities" to better reflect the actual measurement. Moved the prerequisites sentence into the held order section instead of within the definition.
		Removed the "Telecommunications Carrier" definition as it is defined in statute.
		Other housekeeping changes as required.
All	(2) Measurement and Reporting Requirements	Reported numbers were rounded off; therefore a new requirement was added to report numbers with an accuracy of one number to the right of the decimal.
OAR 860-023-0055		Removed the 1,000 access line reference since a Large Telecommunications Utility, by definition, has more than 50,000 lines.
OAR 860-032-0012 OAR 860-034-0390		Clarified that all circuits to end users with a voice component be counted when calculating the access lines..
All	(3) Additional Reporting	Housekeeping changes only.



Rule	Section	Proposed Change
	Requirements.	
All	(4) Provisioning and Held Orders for Lack of Facilities	Clarified that the Held Order measurement was only for "Lack of Facilities."
		Clarified that the utility could change the initial commitment date only if requested by the customer and added the customer's need to meet prerequisites.
		Changed the "commitment date" to "initial commitment date."
		Clarified that "Held Orders" is a count of missed initial commitment dates during the month and not held orders at the end of the month.
All	(5) Trouble Reports	Clarified that Objective Service Level was based on the trouble report rate after approved trouble report exclusions.
		Added a reporting requirement for an explanation of troubles for those wire centers that are not meeting standard when the 2.0 trouble report rate threshold was exceeded.
		Added the reporting of the monthly wire center access line count. Also clarified that this count will include digital subscriber line counts.
All	(6) Blocked Calls	Clarified that all blocking measurements are required, regardless of the company that owns the terminating switch. A change from the proposed rules submitted by Staff further clarified that the blockage numbers required for these rules are for Local and extended area service (EAS) final trunk groups. This change is reflected in Attachment 2. Also information was provided on the required content of the blockage report.
		Removed reference to the system blocking report.
OAR 860-032-0012 OAR 860-023-0055	(8) Access to Representatives	Added "average speed of answer" as an alternative reporting measure.
		Reduced the "average answer time" threshold from 85% to 80%.

<b>Rule</b>	<b>Section</b>	<b>Proposed Change</b>
All	(9) Interruption of Service Notification	Added new section to set guidance on reporting of outages.
All	(10) Customer Access Line Testing	Housekeeping changes only.
All	(11) Customer Access Lines and Wire Center Switching Equipment	Deleted requirement for Network Control Signals.
All	(12) Special Service Access Lines	Housekeeping changes only.
All	(13) Interconnectivity	Housekeeping changes only.
All	(14) Alternatives to these Telecommunications Standards	Housekeeping changes only.
All	(15) Remedies for Violation of this Standard	Housekeeping changes only.
All	(16) Exemption from the Rules	Added a category for exemption that would allow a company, if approved by the Commission, to be exempt from service quality reporting if they met all service quality standards for one year.

**Proposed Changes to OAR 860-023-0055**

**Retail Telecommunications Service Standards for  
Large Telecommunications Utilities**

## 860-023-0055

### Retail Telecommunications Service Standards for Large Telecommunications Utilities

Every large telecommunications utility ~~shall~~must adhere to the following standards:

(1) Definitions.

(a) "Access Line" - A 4 KHz channel with dialing capability that provides local exchange telecommunications service extending from a telecommunications carrier's switching equipment to a point of termination at the customer's network interface;

(b) "Average Busy Season Busy Hour" - The hour ~~which~~that has the highest average traffic for the three highest months, not necessarily consecutive, in a 12-month period. The busy hour traffic averaged across the busy season is termed the average busy season busy hour traffic;

(c) "Average Speed of Answer" – The average time that elapses between the time the call is directed to a representative and the time it is answered;

(~~ed~~) "Blocked Call" - A properly dialed call that fails to complete to its intended destination except for a normal busy (60 interruptions per minute);

~~(d) "Commitment Date" – A date pledged by the telecommunications carrier to provide a service, facility, or repair action. This date is within the minimum time period set forth in these rules or a date determined by good faith negotiations between the customer and the telecommunications carrier;~~

(e) "Customer" - Any person, firm, partnership, corporation, municipality, cooperative, organization, governmental agency, or other legal entity that has applied for, been accepted, and is currently receiving local exchange telecommunications service;

(f) "Exchange" - Geographic area defined by maps filed with and approved by the Commission for the provision of local exchange telecommunications service;

(g) "Final Trunk Group" - A last-choice trunk group that receives overflow traffic and ~~which~~that may receive first-route traffic for which there is no alternative route;

(h) "~~Held-Access Line Service Order~~ for Lack of Facilities" - Request for access line service delayed beyond the initial commitment date due to lack of facilities. ~~An order requiring the customer to meet specific reasonable prerequisites (for example, line extension charges) shall be measured from the time the prerequisites have been met.~~ An access line service order includes an order for new service, transferred service, additional lines, or change of service;

(i) "Initial Commitment Date" – The initial date pledged by the telecommunications carrier to provide a service, facility, or repair action. This date

**is within the minimum time set forth in these rules or a date determined by good faith negotiations between the customer and the telecommunications carrier;**

(ij) “Network Interface” - The point of interconnection between the telecommunications carrier’s communications facilities and customer terminal equipment, protective apparatus, or wiring at a customer’s premises. The network interface **shall must** be located on the customer’s side of the telecommunications carrier’s protector;

(jk) “Retail Telecommunications Service” - A telecommunications service provided for a fee to customers. Retail telecommunications service does not include a service provided by one telecommunications carrier to another telecommunications carrier, unless the carrier receiving the service is the end user of the service;

(kl) “Tariff” - A schedule showing rates, tolls, and charges that the telecommunications carrier has established for a retail service;

~~—— (l) “Telecommunications Carrier” - Any provider of retail telecommunications services, except a call aggregator as defined in ORS 759.690. This rule does not apply to radio communications service, radio paging service, commercial mobile radio service, personal communications service, cellular communications service, or a cooperative corporation organized under ORS Chapter 62 that provides telecommunications services;~~

(m) “Trouble Report” - A report of a malfunction on existing lines, circuits, or features made up to and including the network interface, to a telecommunications carrier by or on behalf of that telecommunications carrier’s customer;

(n) “Wire Center” - A telecommunications carrier “wire center” is a facility where local telephone subscribers’ access lines converge and are connected to ~~a~~ **switching device which equipment that** provides access to the public switched network, including remote switching units and host switching units. A wire center does not include collocation arrangements in a connecting carrier’s wire center or broadband hubs that have no switching equipment.

(2) Measurement and Reporting Requirements. A **large** telecommunications ~~utility carrier that maintains 1,000 or more access lines on a statewide basis~~ must take the measurements required by this rule and report them to the Commission as specified. **Reported measurements must be reported to the first significant digit (one number should be reported to the right of the decimal point).** ~~A telecommunications carrier that maintains fewer than 1,000 access lines on a statewide basis need not take the required measurements and file the required reports unless ordered to do so by the Commission.~~

(3) Additional Reporting Requirements. The Commission may require a **large** telecommunications **carrier** utility to **provide** submit additional reports on any item covered by this rule.

(4) Provisioning and Held Orders **for Lack of Facilities**.: The representative of the **large** telecommunications **carrier** shall utility must give a **retail** customer an **initial** commitment date of not more than six business days after a request for access line service, unless a later date is determined through good faith negotiations between the customer and the **large** telecommunications **carrier** utility. **The large telecommunications utility may change the initial commitment date only if requested by the customer. The large telecommunications utility may take into account, when establishing the initial commitment date, the actual time required for the customer to meet prerequisites, for example, line extension charges or trench and conduit requirements. If** ~~Once~~ a request for service becomes a held order **for lack of facilities**, the serving **large** telecommunications **carrier** utility must, within five **business** days, send or otherwise provide the customer a written commitment to fill the order.

(a) Measurement:

(A) Commitments Met - A **large** telecommunications **carrier** shall utility must calculate the monthly percentage of commitments met for service, **based on the initial commitment date**, across its Oregon service territory. Commitments missed for reasons **solely** attributed to customers or another **carrier** shall telecommunications utility or competitive telecommunications provider may be excluded from the calculation of the "commitments met" results;

(B) Held Orders **for Lack of Facilities** - A **large** telecommunications **carrier** shall utility must determine the total monthly number of held orders, **due to lack of facilities, not completed by the initial commitment date during the reporting month** and the number of primary (initial access line) held orders, **due to lack of facilities**, over 30 days past the initial commitment date.

(b) Objective Service Level:

(A) Commitments Met - Each **large** telecommunications **carrier** shall utility must meet at least 90 percent of its commitments for service;

(B) Held Orders:

(i) The number of held orders for **the lack of facilities for** each **large** telecommunications **carrier** shall utility must not exceed the greater of two per wire center per month averaged over the **large** telecommunications **carrier** utility's Oregon service territory, or five held orders **for lack of facilities** per 1,000 inward orders;

(ii) The total number of primary held orders **for lack of facilities** in excess of 30 days past the initial commitment date **shall must** not exceed 10 percent of the total monthly held orders **for lack of facilities** within the **large** telecommunications **carrier utility**'s Oregon service territory.

(c) Reporting Requirement: Each **reporting large** telecommunications **carrier shall utility must** report monthly to the Commission the percentage of commitments met for service, total number of held orders **for lack of facilities**, and the total number of primary held orders **for lack of facilities** over 30 days past the initial commitment date.;

(d) Retention Requirement: Each **reporting large** telecommunications **carrier shall utility must** maintain records about held orders **for lack of facilities** for one year. The record **shall must** explain why each order is held and the **initial** commitment date.

(5) Trouble Reports. Each **large** telecommunications **carrier shall utility must** maintain an accurate record of all reports of malfunction made by its customers.

(a) Measurement: A **large** telecommunications **carrier shall utility must** determine the number of customer trouble reports that were received during the month. The **large** telecommunications **carrier shall utility must** relate the count to the total working access lines within a reporting wire center. A **carrier large telecommunications utility** need not report those trouble reports that were caused by circumstances beyond its control. The approved trouble report exclusions are:

(A) Cable Cuts: **A large telecommunications utility may take A** ~~an~~ exclusion ~~may be taken~~ if the "buried cable location" (locate) was either not requested or was requested and was accurate. If a **carrier large telecommunications utility** or a **carrier the utility**'s contractor caused the cut, the exclusion can only be used if the locate was accurate and all general industry practices were followed;

(B) Internet Service Provider (ISP) Blockage: If an ISP does not have enough access trunks to handle peak traffic;

(C) Modem Speed Complaints: An exclusion may be taken if the copper cable loop is tested at the subscriber location and the objective service levels in **Paragraphs (9)(b)(A), (B), and (C) section 10 of this rule** were met;

(D) No Trouble Found: Where no trouble is found, one exemption may be taken. If a repeat report of the same trouble is received within a 30-day period, it and subsequent reports **shall must** be counted;

(E) New Feature or Service: Trouble reports related to a customer's unfamiliarity with the use or operation of a new (within 30 days) feature or service;

(F) No Access: An exclusion may be taken if a repair appointment was kept and the copper based access line at the nearest accessible terminal met the objective service levels in **Paragraphs (9)(b)(A), (B) and (C) section 10 of this rule**. If a repeat trouble

report is received within the following 30-day period, it and subsequent reports **shall** be counted;

(G) Subsequent Tickets/Same Trouble/Same Household: Only one trouble report for a specific complaint from the same household **shall** be counted within a 48-hour period. All repeat trouble reports after the 48-hour period **shall** be counted;

(H) Non-Regulated ~~and~~/or Deregulated Equipment: Trouble associated with such equipment **shall** not be counted;

(I) Trouble with Other Telecommunications Utilities or Providers: A trouble report caused solely by another carrier telecommunications utility or competitive telecommunications provider;

(J) Weather: Trouble reports cannot be excluded for normal Oregon weather. Unusual weather conditions **shall** be considered on an individual case basis. Trouble reports received for damage caused by lightning strikes can be excluded if all accepted grounding, bonding, and shielding practices were followed by the carrier large telecommunications utility at the damaged location; **and**

(K) Other exclusions: As approved by the Commission.

(b) Objective Service Level: A large telecommunications carrier utility **must** maintain service so that the monthly trouble report rate, after approved trouble report exclusions, does not exceed two per 100 working access lines per wire center more than three times during a sliding 12-month period;

(c) Reporting Requirement: Each reporting large telecommunications carrier **shall utility must** report monthly to the Commission:

(A) the trouble report rate by wire center;

(B) and the specific reason(s) a wire center meeting standard (did not exceed 2.0 for more than three of the last 12 months) exceeded a trouble report rate of 3.0 per 100 working access lines during the reporting month;

(C) The reason(s) a wire center not meeting standard, after the exclusion adjustment, exceeded 2.0 per 100 access lines during the reporting month; and

(D) Provide the retail access line count for each wire center. Basic telephone service that is part of a Digital Subscriber Line (DSL) must be included in this reported number;

(d) Retention Requirement: Each reporting large telecommunications carrier **shall utility must** maintain a record of reported trouble in such manner that it can be forwarded to the Commission upon the Commission's request. The large telecommunications carrier **shall utility must** keep all records for a period of one year. The record of reported trouble **shall** contain as a minimum:

(A) Telephone number;



(B) Date and time received;  
(C) Time cleared;  
(D) Type of trouble reported;  
(E) Location of trouble; and  
(F) Whether or not the present trouble was within 30 days of a previous trouble report.

(6) Repair Clearing Time: This standard establishes the clearing time for all trouble reports from the time the customer reports the trouble to the **large telecommunications carrier utility** until the ~~carrier resolves the problem~~ **trouble is resolved**. The ~~carrier shall~~ **large telecommunications utility must** provide each customer making a network trouble report with a commitment time when the **large telecommunications carrier utility** will repair or resolve the problem.

(a) Measurement: The **large telecommunications carrier utility must** calculate the percentage of trouble reports cleared within 48 hours for each repair center;

(b) Objective Service Level: A **large telecommunications carrier utility must** monthly clear at least 95 percent of all trouble reports within 48 hours of receiving a report. This requirement will not apply in situations of natural disasters or other emergencies when approved by the Commission;

(c) Reporting Requirement: Each ~~reporting large~~ **large telecommunications carrier utility must** report monthly to the Commission the percentage of trouble reports cleared within 48 hours by each repair center;

(d) Retention Requirement: None.

(7) Blocked Calls. A **large telecommunications carrier utility must** engineer and maintain all intraoffice, interoffice, and access trunking and associated switching components to allow completion of all dialed calls made during the average busy season busy hour without encountering blocking or equipment irregularities in excess of levels listed in subsection (b) of this ~~section~~ **rule**.

(a) Measurement:

(A) The **large telecommunications carrier utility must** collect traffic data; that is, peg counts and usage data generated by individual components of equipment or by the wire center as a whole, and calculate blocking levels of the interoffice final trunk groups;

(B) System blocking ~~will be~~ **is** determined by special testing at the wire center. **PUC Commission** Staff or a **carrier telecommunications utility** technician will place test calls to a predetermined test number, and the total number of attempted calls and the number of completed calls will be counted. The percent of completion of the calls ~~shall~~ **must** be calculated.

(b) Objective Service Level:

(A) A **large** telecommunications ~~carrier shall~~**utility must** maintain interoffice final trunk groups to allow 99 percent completion of all dialed calls during the average busy season busy hour without block~~ing~~**age** (P.01 grade of service); **and**

(B) A **large** telecommunications ~~carrier shall~~**utility must** maintain its switch operation so that 99 percent of all properly dialed calls ~~shall~~**must** not experience block~~ing~~**age** during any normal busy hour.

(c) Reporting Requirement: Each ~~reporting large~~ telecommunications ~~carrier shall~~**utility must** report **monthly** to the Commission:

**(A) Local and extended area service (EAS) final trunk group blockages measured from each of its switches, regardless of the ownership of the terminating switch, that do if the carrier does not meet the objective service level for trunk group block~~ing~~age. The switching system blocking report is required after a Commission-directed switching-system blocking test is completed;**

**(B) Its tandem switch final trunk group blockages associated with EAS traffic;**

**(C) Any known cause for the blockage and actions to bring the trunks into standard; and**

**(D) Identity of the competitive telecommunications provider or telecommunications utility, if other than the reporting large telecommunications utility, responsible for maintaining those final trunk groups not meeting standard.**

(d) Retention Requirement: Each ~~reporting large~~ telecommunications ~~carrier shall~~**utility must** maintain records for one year.

(8) Access to **Large** Telecommunications ~~Carrier~~**Utility** Representatives. This rule sets the allowed time for **large** telecommunications ~~carrier~~**utility** business office or repair service center representatives to answer customer calls.

(a) Measurement:

(A) Direct Representative Answering: A **large** telecommunications ~~carrier shall~~**utility must** measure the answer time from the first ring at the **large** telecommunications ~~carrier~~**utility** business office or repair service center;

(B) Driven, Automated, or Interactive Answering System: The option of transferring to the **large** telecommunications ~~carrier~~**utility** representative ~~shall~~**must** be included in the initial local service-screening message. The **large** telecommunications ~~carrier shall~~**utility must** measure the answering time from the point a call is directed to its representatives; **e.g. leave the Voice Response unit;**

(C) Each **large** telecommunications ~~carrier shall~~**utility must** calculate;

(i) ~~as the~~ monthly percentage of the total calls attempted **to be placed** to the business office and repair service center, **and** the number of calls answered by representatives within 20 seconds; or

(ii) **the average speed of answer time for the total calls attempted to be placed to the business office and repair service center.**

(b) Objective Service Level:

(A) No more than 1 percent of calls to the **large** telecommunications **carrier utility** business office or repair service center ~~shall~~**may** encounter a busy signal.

(B) **The large telecommunications carrier utility** representatives ~~shall~~**must** answer at least **85** percent of calls within 20 seconds **or have an average speed of answer time of 50 seconds or less.**

(c) Reporting Requirement:

(A) Each **large** telecommunications ~~carrier shall~~**utility must** report monthly to the Commission ~~the percentage of calls answered within 20 seconds for both the business office and repair service center,~~ **an exception report if busy signals were encountered in excess of 1 percent for either the business office or repair service center; and**

(B) Each **large** telecommunications ~~carrier shall~~**utility must** report monthly to the Commission ~~an exception report if busy signals were encountered in excess of 1 percent for either the Business Office or Repair Service Center,~~ **the percentage of calls answered within 20 seconds or the average speed of answer time for both the business office and repair service center. Once a method of measurement is reported by the provider, that method can only be changed with permission of the Commission.**

(d) Retention Requirement: None.

(9) **Interruption of Service Notification. A large telecommunications utility must report significant outages that affect customer service. These interruptions could be caused by switch outage, cable cut, or major work that would affect customers.**

(a) **Measurement: The large telecommunications utility must notify the Commission when an interruption occurs that exceeds the following thresholds:**

(A) **Cable or electronic outages lasting longer than 30 minutes that affect 50 percent or more of in-service lines of a central office (host or remote).**

(B) **Toll or Extended Area Service isolation lasting longer than 30 minutes that affects 50 percent or more of in-service lines.**

(C) **Isolation of a central office (host or remote) from the E-911 emergency dialing code or isolation of a Public Safety Answering Position (PSAP).**

(D) Isolation of a wire center for more than ten minutes.

(E) Outage of the Business Office or Repair Center access system lasting longer than 15 minutes.

(b) Objective Service Level: Not applicable.

(c) Reporting Requirement: A large telecommunications utility must report service interruptions to the Commission engineering staff by telephone, by facsimile, by electronic mail, or personally. This initial report should be communicated to the Commission as soon as the company representative receives field notification and the report should provide the locations of the outage, estimated impact, services interrupted, and the estimated time to restore. The large telecommunications utility should provide updated information when significant events occur, including when the outage is restored. The large telecommunications utility must send the final report no later than five business days following the corrective action. The large telecommunications utility must provide, as a minimum, facility, incident date, system down time, estimated number of customers affected, services affected, outage description, outage cause, and corrective action taken.

(d) Retention Requirement: None.

(910) Customer Access Line Testing: All customer access lines ~~shall~~must be designed, installed, and maintained to meet the levels in subsection (b) of this ~~rule~~section.

(a) Measurement: Each large telecommunications ~~carrier shall~~utility must make all loop parameter measurements at the network interface, or as close as access allows;

(b) Objective Service Level: Each access line ~~shall~~must meet the following levels:

(A) Loop Current: The serving wire center loop current, when terminated into a 400-ohm load, ~~shall~~must be at least 20 milliamperes;

(B) Loop Loss: The maximum loop loss, as measured with a 1004-hertz tone from the serving wire center, ~~shall~~must not exceed 8.5 decibels (dB);

(C) Metallic Noise: The maximum metallic noise level, as measured on a quiet line from the serving wire center, ~~shall~~must not exceed 20 decibels above referenced noise level - C message weighting (dBrnC);

(D) Power Influence: As a goal, power influence, as measured on a quiet line from the serving wire center, ~~shall~~must not exceed 80 dBrnC.

(c) Reporting Requirement: A large telecommunications ~~carrier shall~~utility must report measurement readings as directed by the Commission;

(d) Retention Requirement: None.

(101) Customer Access Lines and Wire Center Switching Equipment. All combinations of access lines and wire center switching equipment ~~shall~~must be capable

of accepting and correctly processing at least the following network control signals from the customer premise equipment. The wire center **shall**must provide dial tone and maintain an actual measured loss between interoffice and access trunk groups.

(a) Measurement: Each ~~reporting~~large telecommunications ~~carrier~~shallutility **must** make measurements at or to the serving wire center;

(b) Objective Service Level:

~~—(A) Network Control Signals. The network shall be capable of accepting and processing the following control signals: dial pulse of 8 to 12 pulses per second and 58 to 64 percent break; and tone pulsing at 50 milliseconds Dual Tone Multi Frequency (DTMF) on and 50 milliseconds DTMF off;~~

~~(B)~~ **(A)** Dial Tone Speed. Ninety-eight percent of originating average busy hour call attempts **shall**must receive dial tone within three seconds;

~~(C)~~ **(A)** A large telecommunications ~~carrier~~shallutility **must** maintain all interoffice and access trunk groups so that the actual measured loss (AML) in no more than 30 percent of the trunks deviates from the expected measured loss (EML) by more than 0.7 dB and no more than 4.5 percent of the trunks deviates from EML by more than 1.7 dB.

(c) Reporting Requirement: None;

(d) Retention Requirement: None.

~~(12)~~ **(11)** Special Service Access Lines. All special service access lines **shall**must meet the performance requirements specified in applicable large telecommunications ~~carrier~~utility tariffs or contracts.

~~(123)~~ **(122)** Large Telecommunications ~~Carrier~~Utility Interconnectivity. A large telecommunications ~~carrier~~utility connected to the facilities of another telecommunications ~~carrier~~shallutility or **competitive telecommunications provider** **must** operate its system in a manner that will not impede either ~~telecommunications~~ ~~carrier~~company's ability to meet required standards of service. A large telecommunications ~~carrier~~shallutility **must** report interconnection operational problems promptly to the Commission.

~~(134)~~ **(133)** Alternatives to these Telecommunications Standards. A large telecommunications ~~carrier~~utility whose normal methods of operation do not provide for exact compliance with these rules may file for a variance from, or waiver of, one or more of these rules if it specifically indicates the alternative standards to be applied or indicates which standards would be waived.

~~(145)~~ **(144)** Remedies for Violation of this Standard:

(a) If ~~the Commission believes that~~ a large telecommunications ~~carrier~~utility subject to this rule has **failed to meet a minimum** ~~violated one or more of its~~ service

quality standards, the Commission **shall**~~must~~ require the large telecommunications utility to submit a plan for improving performance as provided in ORS 759.450(5) [~~1999 Oregon Laws Chapter 1093~~]. The Commission may seek penalties against the carrier~~large telecommunications utility~~ as provided in ORS 759.450(5);

(b) In addition to the remedy provided under ORS 759.450(5), if the Commission believes that a large telecommunications carrier~~utility~~ subject to this rule has violated one or more of its service standards, the Commission **shall**~~must~~ give the large telecommunications carrier~~utility~~ notice and an opportunity to request a hearing. If the Commission finds a violation has occurred, the Commission may require the large telecommunications carrier~~utility~~ to provide the following relief to the affected customers:

(A) An alternative means of telecommunications service for violations of subsection (4)(b)(B) of this standard~~rule~~;

(B) Customer billing credits equal to the associated non-recurring and recurring charges of the large telecommunications carrier~~utility~~ for the affected service for the period of the violation; and

(C) Other relief authorized by Oregon law.

(~~156~~) Exemption from these rules.

(a) A large telecommunications carrier~~utility~~ may petition the Commission for an exemption, in whole or in part, from these rules.

(b) The Commission may grant an exemption including, but not limited to, the following circumstance: If the Commission determines that effective competition exists in one or more exchanges, it may exempt all competitive telecommunications providers and telecommunications carriers~~utilities~~ providing telecommunications services in those exchanges from the requirements of this rule, in whole or in part. In making this determination, the Commission **shall**~~will~~ consider:

(A) The extent to which the service is available from alternative providers in the relevant exchange or exchanges;

(B) The extent to which the services of alternative providers are functionally equivalent or substitutable at comparable rates, terms, and conditions;

(C) Existing barriers to market entry;

(D) Market share and concentration;

(E) Number of suppliers;

~~(F)~~ Price to cost ratios;

~~(G)~~ Number of suppliers;

~~(F)~~ Price ~~d~~emand side substitutability (for example, customer perceptions of competitors as viable alternatives); and

(H) Any other factors deemed relevant by the Commission.

(c) When a **large** telecommunications **carrierutility** petitions the Commission for exemption under this provision, the Commission **shall** provide notice of the petition to all relevant **competitive telecommunications providers and** telecommunications **carriersutilities** providing the applicable service(s) in the exchange(s) in question. **The Commission will provide s**Such notified **competitive telecommunications providers and** telecommunications **carriersutilities will be provided** an opportunity to submit comments in response to the petition. The comments may include requests that, following the Commission's analysis outlined above in **Ssubsection (156)(b)(A)-(H)**, the commenting **competitive telecommunications provider or** telecommunications **carrierutility** be exempt from these rules for the applicable service(s) in the relevant exchange(s).

**(d) The Commission may grant a large telecommunications utility's petition for an exemption from service quality reporting requirements if the large telecommunications utility meets all service quality objective service levels set forth in sections (4) through (8) of this rule for the 12 months prior to the month in which the petition is filed.**

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Public Utility Commission.]

Stat. Auth.: ORS Ch. 183, 756 & 759

Stats. Implemented: ORS 756.040, 759.035, 759.240 & 759.450

Hist.: PUC 164, f. 4-18-74, ef. 5-11-74 (Order 74-307); PUC 23-1985, f. & ef. 12-11-85 (Order No. 85-1171); PUC 1-1997, f. & ef. 1-7-97 (Order No. 96-332) PUC 13-2000, f. & ef. 6-9-00 (Order No. 00-303); PUC 13-2001, f. & ef. 5-25-01 (Order No. 01-428); PUC 7-2002, f. & ef. 2-26-02 (Order No. 02-102)

## **Proposed Changes to OAR 860-032-0012**

# **Retail Telecommunications Service Standards for Competitive Telecommunications Provider**



## Telecommunications Service Standards

### 860-032-0012

#### Retail Telecommunications Service Standards for Competitive Telecommunications Providers

Every **large** telecommunications utility, as defined in ORS 759.005 that is not partially exempt from regulation under ORS 759.040, **and maintains more than 50,000 access lines on a statewide basis must** ~~shall~~ adhere to the standards in OAR 860-023-0055. Every **small** telecommunications utility, as defined in ORS 759.005 ~~and that is~~ partially exempt from regulation under ORS 759.040, **and that maintains 50,000 or less access lines on a statewide basis must** ~~shall~~ adhere to the standards in OAR 860-034-0390. Every competitive ~~local exchange carrier~~ **telecommunications provider, as defined in section (1)(1) of this rule, shall** ~~that maintains more than 1,000 access lines on a statewide basis, must~~ adhere to the following service standards:

(1) Definitions.

(a) "Access Line" - A 4 KHz channel with dialing capability that provides local exchange telecommunications service extending from a telecommunications carrier's switching equipment to a point of termination at the customer's network interface;

(b) "Average Busy Season Busy Hour" - The hour ~~which~~ **that** has the highest average traffic for the three highest months, not necessarily consecutive, in a 12-month period. The busy hour traffic averaged across the busy season is termed the average busy season busy hour traffic;

**(c) "Average Speed of Answer" - The average time that elapses between the time the call is directed to a representative and the time it is answered;**

(ed) "Blocked Call" - A properly dialed call that fails to complete to its intended destination except for a normal busy (60 interruptions per minute);

~~(d) "Commitment Date" - A date pledged by the telecommunications carrier to provide a service, facility, or repair action. This date is within the minimum time period set forth in these rules or a date determined by good faith negotiations between the customer and the telecommunications carrier;~~

(e) "Customer" - Any person, firm, partnership, corporation, municipality, cooperative, organization, governmental agency, or other legal entity that has applied for, been accepted, and is currently receiving local exchange telecommunications service;

(f) "Exchange" - Geographic area defined by maps filed with and approved by the Commission for the provision of local exchange telecommunications service;

(g) "Final Trunk Group" - A last-choice trunk group that receives overflow traffic and ~~which~~ **that** may receive first-route traffic for which there is no alternative route;

(h) ~~“Held Access Line Service Orders for Lack of Facilities”~~ - Request for access line service delayed beyond the initial commitment date due to lack of facilities. ~~An order requiring the customer to meet specific reasonable prerequisites (for example, line extension charges) shall be measured from the time the prerequisites have been met.~~ An access line service order includes an order for new service, transferred service, additional lines, or change of service;

(i) “Initial Commitment Date” – The initial date pledged by the telecommunications carrier to provide a service, facility, or repair action. This date is within the minimum time set forth in these rules or a date determined by good faith negotiations between the customer and the telecommunications carrier;

~~(j)~~ (i) “Network Interface” - The point of interconnection between the telecommunications carrier’s communications facilities and customer terminal equipment, protective apparatus, or wiring at a customer’s premises. The network interface shall~~must~~ be located on the customer’s side of the telecommunications carrier’s protector;

~~(k)~~ (j) “Retail Telecommunications Service” - A telecommunications service provided for a fee to customers. Retail telecommunications service does not include a service provided by one telecommunications carrier to another telecommunications carrier, unless the carrier receiving the service is the end user of the service;

~~(l)~~ (k) “Tariff” - A schedule showing rates, tolls, and charges that the telecommunications carrier has established for a retail service;

~~(l) “Telecommunications Carrier” – Any provider of retail telecommunications services, except a call aggregator as defined in ORS 759.690. This rule does not apply to radio communications service, radio paging service, commercial mobile radio service, personal communications service, cellular communications service, or a cooperative corporation organized under ORS Chapter 62 that provides telecommunications services;~~

(m) “Trouble Report” - A report of a malfunction on existing lines, circuits, or features made up to and including the network interface, to a telecommunications carrier by or on behalf of that telecommunications carrier’s customer;

(n) “Wire Center” - A telecommunications carrier “wire center” is a facility where local telephone subscribers’ access lines converge and are connected to ~~a~~ switching device which equipment that provides access to the public switched network, including remote switching units and host switching units. A wire center does not include collocation arrangements in a connecting carrier’s wire center or broadband hubs that have no switching equipment;

(2) Measurement and Reporting Requirements. A competitive telecommunications carrier provider that maintains 1,000 or more access lines on a statewide basis must take the measurements required by this rule and report them to the Commission as specified. **Basic telephone service that is provisioned through alternative technologies, as an example Digital Subscriber Line (DSL), will be included in the calculation of total access lines. Reported measurements will be reported to the first significant digit (one number will be reported to the right of the decimal point).** A competitive telecommunications carrier provider that maintains fewer than 1,000 access lines on a statewide basis need not take the required measurements and file the required reports unless ordered to do so by the Commission.

(3) Additional Reporting Requirements. The Commission may require a competitive telecommunications carrier provider to ~~provide~~**submit** additional reports on any item covered by this rule.

(4) Provisioning and Held Orders **for Lack of Facilities.** The representative of the competitive telecommunications carrier ~~shall~~**provider must** give a retail customer an initial commitment date of not more than six business days after a request for access line service, unless a later date is determined through good faith negotiations between the customer and the competitive telecommunications carrier provider. **The competitive telecommunications provider may change the initial commitment date if requested by the customer. The competitive telecommunications provider may take into account, when establishing the initial commitment date, the actual time required for the customer to meet prerequisite, for example, line extension charges or trench and conduit requirements. If a request. Once a request** for service becomes a held order **for lack of facilities**, the serving competitive telecommunications carrier provider must, within five business days, send or otherwise provide the customer a written commitment to fill the order.

(a) Measurement:

(A) Commitments Met - A competitive telecommunications carrier ~~shall~~**provider must** calculate the monthly percentage of commitments met for service, **based on the initial commitment date**, across its Oregon service territory. Commitments missed for reasons solely attributed to customers or another carrier ~~shall~~**telecommunications utility or competitive telecommunications provider may** be excluded from the calculation of the “commitments met” results;

(B) Held Orders **for Lack of Facilities** - A competitive telecommunications carrier ~~shall~~**provider will** determine the total monthly number of held orders, **due to lack of facilities, not completed by the initial commitment date during the reporting**

month and the number of primary (initial access line) held orders, due to lack of facilities, over 30 days past the initial commitment date.

(b) Objective Service Level:

(A) Commitments Met - Each competitive telecommunications ~~carrier shall~~ provider must meet at least 90 percent of its commitments for service;

(B) Held Orders:

(i) The number of held orders for the lack of facilities for each competitive telecommunications ~~carrier shall~~ provider must not exceed the greater of two per wire center per month averaged over the competitive telecommunications ~~carrier~~ provider's Oregon service territory, or five held orders, for lack of facilities per 1,000 inward orders;

(ii) The total number of primary held orders, for lack of facilities, in excess of 30 days past the initial commitment date ~~shall~~ must not exceed 10 percent of the total monthly held orders for lack of facilities within the competitive telecommunications ~~carrier~~ provider's Oregon service territory.

(c) Reporting Requirement: Each ~~reporting~~ competitive telecommunications ~~carrier shall~~ provider must report monthly to the Commission the percentage of commitments met for service, total number of held orders for lack of facilities, and the total number of primary held orders for lack of facilities over 30 days past the initial commitment date;

(d) Retention Requirement: Each ~~reporting~~ competitive telecommunications ~~carrier shall~~ provider must maintain records about held orders for lack of facilities for one year. The record ~~shall~~ must explain why each order is held and the initial commitment date.

(5) Trouble Reports. Each competitive telecommunications ~~carrier shall~~ provider must maintain an accurate record of all reports of malfunction made by its customers.

(a) Measurement: A competitive telecommunications ~~carrier shall~~ provider must determine the number of customer trouble reports that were received during the month. The competitive telecommunications ~~carrier shall~~ provider must relate the count to the total working access lines within a reporting wire center. A ~~carrier~~ competitive telecommunications provider need not report those trouble reports that were caused by circumstances beyond its control. The approved trouble report exclusions are:

(A) Cable Cuts: A competitive telecommunications provider may take an exclusion ~~may be taken~~ if the "buried cable location" (locate) was either not requested or was requested and was accurate. If a ~~carrier~~ competitive telecommunications provider or a ~~carrier~~ competitive telecommunications provider's contractor caused the cut, the

exclusion can only be used if the locate was accurate and all general industry practices were followed;

(B) Internet Service Provider (ISP) Blockage: If an ISP does not have enough access trunks to handle peak traffic;

(C) Modem Speed Complaints: An exclusion may be taken if the copper cable loop is tested at the subscriber location and the objective service levels in **Paragraphs (9)(b)(A), (B), and (C) section (10) of this rule** were met;

(D) No Trouble Found: Where no trouble is found, one exemption may be taken. If a repeat report of the same trouble is received within a 30-day period, it and subsequent reports **shall must** be counted;

(E) New Feature or Service: Trouble reports related to a customer's unfamiliarity with the use or operation of a new (within 30 days) feature or service;

(F) No Access: An exclusion may be taken if a repair appointment was kept and the copper based access line at the nearest accessible terminal met the objective service levels in **Paragraphs (9)(b)(A), (B), and (C) section (10) of this rule**. If a repeat trouble report is received within the following 30-day period, it and subsequent reports **shall must** be counted;

(G) Subsequent Tickets/Same Trouble/Same Household: Only one trouble report for a specific complaint from the same household **shall must** be counted within a 48-hour period. All repeat trouble reports after the 48-hour period **shall must** be counted;

(H) Non-Regulated ~~and~~/or Deregulated Equipment: Trouble associated with such equipment **shall must** not be counted;

(I) Trouble with Other **Telecommunications Utilities or Providers**: A trouble report caused solely by another **carrier telecommunications utility or competitive telecommunications provider**;

(J) Weather: Trouble reports cannot be excluded for normal Oregon weather. Unusual weather conditions **shall must** be considered on an individual case basis. Trouble reports received for damage caused by lightning strikes can be excluded if all accepted grounding, bonding, and shielding practices were followed by the **carrier competitive telecommunications provider** at the damaged location; **and**

(K) Other exclusions: As approved by the Commission.

(b) Objective Service Level: A **competitive telecommunications carrier shall provider must** maintain service so that the monthly trouble report rate, **after approved trouble report exclusions**, does not exceed two per 100 working access lines per wire center more than three times during a sliding 12-month period;

(c) Reporting Requirement: Each **reporting competitive telecommunications carrier shall provider must** report monthly to the Commission;

(A) ~~the~~ Trouble report rate by wire center; and  
(B) ~~the~~ specific reason(s) a wire center ~~meeting standard (did not exceed 2.0 for more than three of the last twelve months)~~ exceeded a trouble report rate of 3.0 per 100 working access lines, ~~during the reporting month;~~

(C) The reason(s) a wire center not meeting standard, after the exclusion adjustment, exceeded 2.0 per 100 access lines during the reporting month; and

(D) Provide the retail access line count for each wire center. Basic telephone service that is part of a Digital Subscriber Line (DSL) will be included in this reported number.

(d) Retention Requirement: Each reporting competitive telecommunications ~~carrier shall~~ provider must maintain a record of reported trouble in such manner that it can be forwarded to the Commission upon the Commission's request. The competitive telecommunications ~~carrier shall~~ provider must keep all records for a period of one year. The record of reported trouble ~~shall~~ must contain as a minimum:

- (A) Telephone number;
- (B) Date and time received;
- (C) Time cleared;
- (D) Type of trouble reported;
- (E) Location of trouble; and
- (F) Whether or not the present trouble was within 30 days of a previous trouble report.

(6) Repair Clearing Time: This standard establishes the clearing time for all trouble reports from the time the customer reports the trouble to the competitive telecommunications ~~carrier~~ provider until the ~~carrier resolves the problem~~ trouble is resolved. The competitive telecommunications ~~carrier shall~~ provider must provide each customer making a network trouble report with a commitment time when the competitive telecommunications ~~carrier~~ provider will repair or resolve the problem.

(a) Measurement: The competitive telecommunications ~~carrier shall~~ provider must calculate the percentage of trouble reports cleared within 48 hours for each repair center;

(b) Objective Service Level: A competitive telecommunications ~~carrier~~ shall provider must monthly clear at least 95 percent of all trouble reports within 48 hours of receiving a report. Trouble reports attributed solely to customers or another carrier may be excluded from the calculation of the "repair clearing time" results; ~~†~~ This requirement will not apply in situations of natural disasters or other emergencies when approved by the Commission;

(c) Reporting Requirement: Each ~~reporting~~**competitive** telecommunications ~~carrier shall~~**provider must** report monthly to the Commission the percentage of trouble reports cleared within 48 hours by each repair center;

(d) Retention Requirement: None.

(7) Blocked Calls. A **competitive** telecommunications ~~carrier shall~~**provider, so equipped, must** engineer and maintain all intraoffice, interoffice, and access trunking and associated switching components to allow completion of all dialed calls made during the average busy season busy hour without encountering blocking or equipment irregularities in excess of levels listed in subsection (7)(b) of this ~~section~~**rule**.

(a) Measurement:

(A) The **competitive** telecommunications ~~carrier shall~~**provider must** collect traffic data; that is, peg counts and usage data generated by individual components of equipment or by the wire center as a whole, and calculate block~~ing~~**age** levels of the interoffice final trunk groups;

(B) System block~~ing~~**age will be** determined by special testing at the wire center. **PUC Commission** Staff or a **carrier competitive telecommunications provider** technician will place test calls to a predetermined test number, and the total number of attempted calls and the number of completed calls will be counted. The percent of completion of the calls ~~shall~~**must** be calculated.

(b) Objective Service Level:

(A) A **competitive** telecommunications ~~carrier shall~~**provider, so equipped, must** maintain interoffice final trunk groups to allow 99 percent completion of all dialed calls during the average busy season busy hour without block~~ing~~**age** (P.01 grade of service);

(B) A **competitive** telecommunications ~~carrier shall~~**provider, so equipped, must** maintain its switch operation so that 99 percent of all properly dialed calls ~~shall~~**must** not experience block~~ing~~**age** during any normal busy hour.

(c) Reporting Requirement: Each ~~reporting~~**competitive** telecommunications ~~carrier shall~~**provider must** report **monthly** to the Commission:

**(A) Local and extended area service (EAS) final trunk group blockages measured from each of its switches, regardless of the ownership of the terminating switch, that do if the carrier does not meet the objective service level for trunk group block~~ing~~age. The switching system blocking report is required after a Commission-directed switching system blocking test is completed;**

**(B) Its tandem switch final trunk group blockages associated with EAS traffic;**

(C) Any known cause for the blockage and action to bring the trunks into standard; and

(D) Identity of the competitive telecommunications provider or telecommunications utility, if other than the reporting competitive telecommunications provider, responsible for maintaining those final trunk groups not meeting standard.

(d) Retention Requirement: Each ~~reporting competitive~~ telecommunications ~~carrier shall provider must~~ maintain records for one year.

(8) Access to Competitive Telecommunications Carrier Provider Representatives. This rule sets the allowed time for competitive telecommunications ~~carrier provider B~~ business ~~O~~ office or ~~R~~ repair ~~S~~ service ~~C~~ center representatives to answer customer calls.

(a) Measurement:

(A) Direct Representative Answering: A competitive telecommunications ~~carrier shall provider must~~ measure the answer time from the first ring at the competitive telecommunications ~~carrier provider~~ business office or repair service center;

(B) Driven, Automated, or Interactive Answering System: The option of transferring to the competitive telecommunications ~~carrier provider~~ representative ~~shall must~~ be included in the initial local service-screening message. The competitive telecommunications ~~carrier shall provider must~~ measure the answering time from the point a call is directed to its representatives; e.g., leaves the Voice Response Unit;

(C) Each competitive telecommunications ~~carrier shall provider must~~ calculate, (i) the as a monthly percentage of the total calls attempted to be placed to the business office and repair service center, and the number of calls answered by representatives within 20 seconds; or

(ii) the average speed of answer time for the total calls attempted to be placed to the business office and repair service center.

(b) Objective Service Level:

(A) No more than 1 percent of calls to the competitive telecommunications ~~carrier provider~~ business office or repair service center ~~shall may~~ encounter a busy signal.

(B) The competitive T telecommunications ~~carrier provider~~ representatives ~~shall must~~ answer at least ~~85~~80 percent of calls within 20 seconds or have an average speed of answer time of 50 seconds or less;

(c) Reporting Requirement:

(A) Each competitive telecommunications ~~carrier shall provider must~~ report monthly to the Commission ~~the percentage of calls answered within 20 seconds for~~



**both the business office and repair service center an exception report if busy signals were encountered in excess of 1 percent for either the business office or repair service center; and**

(B) Each **competitive telecommunications carrier shall provider must** report monthly to the Commission **an exception report if busy signals were encountered in excess of 1 percent for either the Business Office or Repair Service Center the percentage of calls answered within 20 seconds or the average speed of answer time for both the business office and repair service center. Once a method of measurement is reported by the provider, that method can only be changed with permission of the Commission.**

(d) Retention Requirement: None.

**(9) Interruption of Service Notification. A competitive telecommunication provider must report significant outages that affect customer service. These interruptions could be caused by switch outage, cable cut, or major work that would affect customers.**

**(a) Measurement: The competitive telecommunications providers must notify the Commission when an interruption occurs that exceeds the following thresholds:**

**(A) Cable or electronic outages lasting longer than 30 minutes that affect 50 percent or more of in-service lines of a central office (host or remote).**

**(B) Toll or Extended Area Service isolation lasting longer than 30 minutes that affects 50 percent or more of in-service lines.**

**(C) Isolation of a central office (host or remote) from the E-911 emergency dialing code or isolation of a Public Safety Answering Position (PSAP).**

**(D) Isolation of a wire center for more than ten minutes.**

**(E) Outage of the Business Office or Repair Center access system lasting longer than 15 minutes.**

**(b) Objective Service Level: Not applicable.**

**(c) Reporting Requirement: A competitive telecommunications provider must report service interruptions to the Commission engineering staff by telephone, by facsimile, by electronic mail, or personally. This initial report should be communicated to the Commission as soon as the company representative receives field notification and the report should provide the location of the outage, estimated impact, services interrupted, and the estimated time to restore. The competitive telecommunications provider should provide updated information when significant events occur, including when the outage is restored. The competitive telecommunications provider must send the final report no later than five business days following the corrective action. The competitive telecommunications provider**

**must provide, as a minimum, facility, incident date, system down time, estimated number of customers affected, services affected, outage description, outage cause, and corrective action taken.**

**(d) Retention Requirement: None**

**(910) Customer Access Line Testing:** All customer access lines **shall must** be designed, installed, and maintained to meet the levels in subsection (b) of this **rulesection**.

(a) Measurement: Each **competitive** telecommunications **carrier shall provider,** **so equipped, must** make all loop parameter measurements at the network interface, or as close as access allows;

(b) Objective Service Level: Each access line **shall must** meet the following levels:

(A) Loop Current: The serving wire center loop current, when terminated into a 400-ohm load, **shall must** be at least 20 milliamperes;

(B) Loop Loss: The maximum loop loss, as measured with a 1004-hertz tone from the serving wire center, **shall must** not exceed 8.5 decibels (dB);

(C) Metallic Noise: The maximum metallic noise level, as measured on a quiet line from the serving wire center, **shall must** not exceed 20 decibels above referenced noise level - C message weighting (dBrnC);

(D) Power Influence: As a goal, power influence, as measured on a quiet line from the serving wire center, **shall must** not exceed 80 dBrnC;

(c) Reporting Requirement: A **competitive** telecommunications **carrier shall provider must** report measurement readings as directed by the Commission;

(d) Retention Requirement: None.

**(101) Customer Access Lines and Wire Center Switching Equipment.** All combinations of access lines and wire center switching equipment **shall must** be capable of accepting and correctly processing at least the following network control signals from the customer premise equipment. The wire center **shall must** provide dial tone and maintain an actual measured loss between interoffice and access trunk groups.

(a) Measurement: Each **reporting competitive** telecommunications **carrier shall provider, so equipped, must** make measurements at or to the serving wire center;

(b) Objective Service Level:

~~(A) Network Control Signals. The network shall be capable of accepting and processing the following control signals: dial pulse of 8 to 12 pulses per second and 58 to 64 percent break; and tone pulsing at 50 milliseconds Dual Tone Multi Frequency (DTMF) on and 50 milliseconds DTMF off;~~

~~(B) Dial Tone Speed. Ninety-eight percent of originating average busy hour call attempts shall must receive dial tone within three seconds;~~

(~~C~~B) A competitive telecommunications ~~carrier shall~~provider, so equipped, **must** maintain all interoffice and access trunk groups so that the actual measured loss (AML) in no more than 30 percent of the trunks deviate from the expected measured loss (EML) by more than 0.7 dB and no more than 4.5 percent of the trunks deviates from EML by more than 1.7 dB.

(c) Reporting Requirement: ~~None~~.

(d) Retention Requirement: None.

(112) Special Service Access Lines. All special service access lines ~~shall~~**must** meet the performance requirements specified in applicable competitive telecommunications ~~carrier~~provider tariffs or contracts.

(123) Competitive Telecommunications ~~Carrier~~Provider Interconnectivity. A competitive telecommunications ~~carrier~~provider connected to the facilities of another competitive telecommunications ~~carrier~~provider or telecommunications utility ~~shall~~**must** operate its system in a manner that will not impede either ~~telecommunications carrier~~company's ability to meet required standards of service. A competitive telecommunications ~~carrier shall~~provider must report interconnection operational problems promptly to the Commission.

(134) Alternatives to these Telecommunications Standards. A competitive telecommunications ~~carrier~~provider whose normal methods of operation do not provide for exact compliance with these rules may file for a variance from, or waiver of, one or more of these rules if it specifically indicates the alternative standards to be applied or indicates which standards would be waived.

(145) Remedies for Violation of this Standard:

(a) If ~~the Commission believes that~~ a competitive telecommunications ~~carrier~~provider subject to this rule has ~~violated one or more of its~~failed to meet a minimum service quality standards, the Commission ~~shall~~**must** require the competitive telecommunications ~~carrier~~provider to submit a plan for improving performance as provided in ORS 759.450(5) [~~1999 Oregon Laws, Chapter 1093~~]. The Commission may seek penalties against the ~~carrier~~competitive telecommunications provider as provided in ORS 759.450(5);

(b) In addition to the remedy provided under ORS 759.450(5), if the Commission believes that a competitive telecommunications ~~carrier~~provider subject to this rule has violated one or more of its service standards, the Commission ~~shall~~**must** give the competitive telecommunications ~~carrier~~provider notice and an opportunity to request a hearing. If the Commission finds a violation has occurred, the Commission may require the competitive telecommunications ~~carrier~~provider to provide the following relief to the affected customers:

(A) An alternative means of telecommunications service for violations of subsection (4)(b)(B) of this standard rule;

(B) Customer billing credits equal to the associated non-recurring and recurring charges of the competitive telecommunications carrier provider for the affected service for the period of the violation; and

(C) Other relief authorized by Oregon law.

(156) Exemption from these Rules.

(a) A competitive telecommunications carrier provider may petition the Commission for an exemption, in whole or in part, from these rules;

(b) The Commission may grant an exemption including, but not limited to, the following circumstance: If the Commission determines that effective competition exists in one or more exchanges, it may exempt all competitive telecommunications carrier providers and telecommunications utilities providing telecommunications services in those exchanges from the requirements of this rule, in whole or in part. In making this determination, the Commission shall will consider:

(A) The extent to which the service is available from alternative providers in the relevant exchange or exchanges;

(B) The extent to which the services of alternative providers are functionally equivalent or substitutable at comparable rates, terms, and conditions;

(C) Existing barriers to market entry;

(D) Market share and concentration;

(E) Number of suppliers;

(F) Price to cost ratios;

(G) Price dDemand side substitutability (for example, customer perceptions of competitors as viable alternatives); and

(H) Any other factors deemed relevant by the Commission.

(c) When a competitive telecommunications carrier provider petitions the Commission for exemption under this provision, the Commission shall must provide notice of the petition to all relevant competitive telecommunications carriers providers and telecommunications utilities providing the applicable service(s) in the exchange(s) in question. The Commission will provide sSuch notified competitive telecommunications carriers providers and telecommunications utilities will be provided an opportunity to submit comments in response to the petition. The comments may include requests that, following the Commission's analysis outlined above in subSection (156)(b)(A)-(H), the commenting competitive telecommunications carrier provider and telecommunications utility be exempt from these rules for the applicable service(s) in the relevant exchange(s).

**(d) The Commission may grant a competitive telecommunications provider's petition for an exemption from service quality reporting requirements if the competitive telecommunications provider meets all service quality objective service levels set forth in sections (4) through (8) of this rule for the 12 months prior to the month in which the petition is filed.**

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Public Utility Commission.]

Stat. Auth.: ORS Ch. 183, 756 & 759

Stats. Implemented: ORS 756.040, 759.020, 759.030 & 759.050

Hist.: PUC 5-1991, f. & cert. ef. 4-3-91 (Order No. 91-395); PUC 4-2000, f. & ef. 2-9-00 (Order No. 00-068); PUC 13-2001, f. & ef. 5-25-01 (Order No. 01-428); PUC 7-2002, f. & ef. 2-26-02 (Order No. 02-102)

**Proposed Changes to OAR 860-034-0390**

**Retail Telecommunications Service Standards for  
Small Telecommunications Utilities**

**Telecommunications Service Standards for  
Small Telecommunications Utilities**

**860-034-0390**

**Retail Telecommunications Service Standards for Small Telecommunications Utilities**

Every small telecommunications utility **shall** adhere to the following standards:

(1) Definitions.

(a) "Access Line" - A 4 KHz channel with dialing capability that provides local exchange telecommunications service extending from a telecommunications carrier's switching equipment to a point of termination at the customer's network interface;

(b) "Average Busy Season Busy Hour" - The hour ~~which~~**that** has the highest average traffic for the three highest months, not necessarily consecutive, in a 12-month period. The busy hour traffic averaged across the busy season is termed the average busy season busy hour traffic;

**(c) "Average Speed of Answer" – The average time that elapses between the time the call is directed to a representative and the time it is answered;**

**(ed)** "Blocked Call" - A properly dialed call that fails to complete to its intended destination except for a normal busy (60 interruptions per minute);

~~(d) "Commitment Date" – A date pledged by the telecommunications carrier to provide a service, facility, or repair action. This date is within the minimum time period set forth in these rules or a date determined by good faith negotiations between the customer and the telecommunications carrier;~~

(e) "Customer" - Any person, firm, partnership, corporation, municipality, cooperative, organization, governmental agency, or other legal entity that has applied for, been accepted, and is currently receiving local exchange telecommunications service;

(f) "Exchange" - Geographic area defined by maps filed with and approved by the Commission for the provision of local exchange telecommunications service;

(g) "Final Trunk Group" - A last-choice trunk group that receives overflow traffic and ~~which~~**that** may receive first-route traffic for which there is no alternative route;

(h) "Held ~~Access Line Service~~ **Orders for Lack of Facilities**" - Request for access line service delayed beyond the **initial** commitment date due to lack of facilities. ~~An order requiring the customer to meet specific reasonable prerequisites (for example, line extension charges) shall be measured from the time the prerequisites have been met.~~ An access line service order includes an order for new service, transferred service, additional lines, or change of service;

**(i) “Initial Commitment Date” – The initial date pledged by the telecommunications carrier to provide a service, facility, or repair action. This date is within the minimum time set forth in these rules or a date determined by good faith negotiations between the customer and the telecommunications carrier;**

**(ij)** “Network Interface” - The point of interconnection between the telecommunications carrier’s communications facilities and customer terminal equipment, protective apparatus, or wiring at a customer’s premises. The network interface **shall must** be located on the customer’s side of the telecommunications carrier’s protector;

**(jk)** “Retail Telecommunications Service” - A telecommunications service provided for a fee to customers. Retail telecommunications service does not include a service provided by one telecommunications carrier to another telecommunications carrier, unless the carrier receiving the service is the end user of the service;

**(kl)** “Tariff” - A schedule showing rates, tolls, and charges that the telecommunications carrier has established for a retail service;

**(l) “Telecommunications Carrier” – Any provider of retail telecommunications services, except a call aggregator as defined in ORS 759.690. This rule does not apply to radio communications service, radio paging service, commercial mobile radio service, personal communications service, cellular communications service, or a cooperative corporation organized under ORS Chapter 62 that provides telecommunications services;**

**(m)** “Trouble Report” - A report of a malfunction on existing lines, circuits, or features made up to and including the network interface, to a telecommunications carrier by or on behalf of that telecommunications carrier’s customer;

**(n)** “Wire Center” - A telecommunications carrier “wire center” is a facility where local telephone subscribers’ access lines converge and are connected to ~~a~~ **switching device which equipment that** provides access to the public switched network, including remote switching units and host switching units. A wire center does not include collocation arrangements in a connecting carrier’s wire center or broadband hubs that have no switching equipment;

**(2) Measurement and Reporting Requirements. A small telecommunications carrier utility that maintains 1,000 or more access lines on a statewide basis must take the measurements required by this rule and report them to the Commission as specified. Basic telephone service that is provisioned through alternative technologies, as an example Digital Subscriber Line (DSL), will be included in the calculation of total access lines. Reported measurements will be reported to the first significant digit (one number will be reported to the right of the decimal point. A small telecommunications carrier utility that maintains fewer than 1,000 access lines on a**



statewide basis need not take the required measurements and file the required reports unless ordered to do so by the Commission.

(3) Additional Reporting Requirements. The Commission may require a **small telecommunications carrier utility** to **provide submit** additional reports on any item covered by this rule.

(4) Provisioning and Held Orders **for Lack of Facilities**: The representative of the **telecommunications carriers small telecommunications utility** shall give a **retail customer an initial** commitment date of not more than six business days after a request for access line service, unless a later date is determined through good faith negotiations between the customer and the **small telecommunications carrier utility**. **The small telecommunications utility may change the initial commitment day only if requested by the customer. The small telecommunications utility may take into account, when establishing the initial commitment date, the actual time required for the customer to meet prerequisites, for example, line extension charges or trench and conduit requirements. Once** a request for service becomes a held order, the serving **small telecommunications carrier utility** must, within five **business** days, send or otherwise provide the customer a written commitment to fill the order.

(a) Measurement:

(A) Commitments Met - A **small telecommunications carrier utility shall must** calculate the monthly percentage of commitments met for service, **based on the initial commitment date**, across its Oregon service territory. Commitments missed for reasons **solely** attributed to customers or another **carrier telecommunications utility or competitive telecommunications provider shall may** be excluded from the calculation of the "commitments met" results;

(B) Held Orders **for Lack of Facilities** - A **small telecommunications carrier utility shall must** determine the total monthly number of held orders, **due to lack of facilities, not completed by the initial commitment date during the reporting month** and the number of primary (initial access line) held orders, **due to lack of facilities** over 30 days past the initial commitment date.

(b) Objective Service Level:

(A) Commitments Met - Each **small telecommunications carrier utility shall must** meet at least 90 percent of its commitments for service;

(B) Held Orders:

(i) The number of held orders for **the lack of facilities for** each **small telecommunications carrier shall utility must** not exceed the greater of two per wire center per month averaged over the **small telecommunications carrier utility's** Oregon service territory, or five held orders **for lack of facilities** per 1,000 inward orders;

(ii) The total number of primary held orders for lack of facilities in excess of 30 days past the initial commitment date **shall must** not exceed 10 percent of the total monthly held orders for lack of facilities within the small telecommunications carrier utility's Oregon service territory.

(c) Reporting Requirement: Each reportingsmall telecommunications carrier shall utility must report monthly to the Commission the percentage of commitments met for service, total number of held orders for lack of facilities, and the total number of primary held orders for lack of facilities over 30 days past the initial commitment date;

(d) Retention Requirement: Each reportingsmall telecommunications carrier shall utility must maintain records about held orders for one year. The record **shall must** explain why each order is held and the initial commitment date.

(5) Trouble Reports. Each small telecommunications carrier shall utility must maintain an accurate record of all reports of malfunction made by its customers.

(a) Measurement: A small telecommunications carrier shall utility must determine the number of customer trouble reports that were received during the month. The small telecommunications carrier shall utility must relate the count to the total working access lines within a reporting wire center. A carriersmall telecommunications utility need not report those trouble reports that were caused by circumstances beyond its control. The approved trouble report exclusions are:

(A) Cable Cuts: ~~An~~ small telecommunications utility may take an exclusion ~~may be taken~~ if the "buried cable location" (locate) was either not requested or was requested and was accurate. If a carriersmall telecommunications utility or ~~the~~ carrier utility's contractor caused the cut, the exclusion can only be used if the locate was accurate and all general industry practices were followed;

(B) Internet Service Provider (ISP) Blockage: If an ISP does not have enough access trunks to handle peak traffic;

(C) Modem Speed Complaints: An exclusion may be taken if the copper cable loop is tested at the subscriber location and the objective service levels in **Paragraphs (9)(b)(A), (B), and (C) section (10) of this rule** were met;

(D) No Trouble Found: Where no trouble is found, one exemption may be taken. If a repeat report of the same trouble is received within a 30-day period, it and subsequent reports **shall must** be counted;

(E) New Feature or Service: Trouble reports related to a customer's unfamiliarity with the use or operation of a new (within 30 days) feature or service;

(F) No Access: An exclusion may be taken if a repair appointment was kept and the copper based access line at the nearest accessible terminal met the objective service levels in **Paragraphs (9)(b)(A), (B), and (C) section (10) of this rule**. If a repeat trouble

report is received within the following 30-day period, it and subsequent reports **shall** be counted;

(G) Subsequent Tickets/Same Trouble/Same Household: Only one trouble report for a specific complaint from the same household **shall** be counted within a 48-hour period. All repeat trouble reports after the 48-hour period **shall** be counted;

(H) Non-Regulated ~~and~~/or Deregulated Equipment: Trouble associated with such equipment **shall** not be counted;

(I) Trouble with Other Telecommunications Utilities or Providers: A trouble report caused solely by another carrier telecommunications utility or competitive telecommunications provider;

(J) Weather: Trouble reports cannot be excluded for normal Oregon weather. Unusual weather conditions **shall** be considered on an individual case basis. Trouble reports received for damage caused by lightning strikes can be excluded if all accepted grounding, bonding, and shielding practices were followed by the ~~carrier~~small telecommunications utility at the damaged location; **and**

(K) Other exclusions: As approved by the Commission.

(b) Objective Service Level: A small telecommunications carrier ~~shall~~utility must maintain service so that the monthly trouble report rate, after approved trouble report exclusions, does not exceed two per 100 working access lines per wire center more than three times during a sliding 12-month period;

(c) Reporting Requirement: Each ~~reporting~~small telecommunications carrier ~~shall~~utility must report monthly to the Commission,

(A) the trouble report rate by wire center;

(B) and the specific reason(s) a wire center meeting standard (did not exceed 2.0 for more than three of the last 12 months) exceeded a trouble report rate of 3.0 per 100 working access lines during the reporting month;

(C) The reason(s) a wire center not meeting standard, after the exclusion adjustment, exceeded 2.0 per 100 access lines during the reporting month; and

(D) Provide the retail access line count for each wire center. Basic telephone service that is part of a Digital Subscriber Line (DSL) will be included in this reported number.

(d) Retention Requirement: Each ~~reporting~~small telecommunications carrier ~~shall~~utility must maintain a record of reported trouble in such manner that it can be forwarded to the Commission upon the Commission's request. The small telecommunications carrier ~~shall~~utility must keep all records for a period of one year. The record of reported trouble shall contain as a minimum:

(A) Telephone number;

(B) Date and time received;

(C) Time cleared;  
(D) Type of trouble reported;  
(E) Location of trouble; and  
(F) Whether or not the present trouble was within 30 days of a previous trouble report.

(6) Repair Clearing Time: This standard establishes the clearing time for all trouble reports from the time the customer reports the trouble to the **small telecommunications carrier utility** until the **carrier resolves the problem trouble is resolved**. The **small telecommunications carrier shall utility must** provide each customer making a network trouble report with a commitment time when the **small telecommunications carrier utility** will repair or resolve the problem.

(a) Measurement: The **small telecommunications carrier shall utility must** calculate the percentage of trouble reports cleared within 48 hours for each repair center;

(b) Objective Service Level: A **small telecommunications carrier shall utility must** monthly clear at least 95 percent of all trouble reports within 48 hours of receiving a report. This requirement will not apply in situations of natural disasters or other emergencies when approved by the Commission;

(c) Reporting Requirement: Each **reporting small telecommunications carrier shall utility must** report monthly to the Commission the percentage of trouble reports cleared within 48 hours by each repair center;

(d) Retention Requirement: None.

(7) Blocked Calls. A **small telecommunications carrier shall utility must** engineer and maintain all intraoffice, interoffice, and access trunking and associated switching components to allow completion of all dialed calls made during the average busy season busy hour without encountering blocking or equipment irregularities in excess of levels listed in subsection (b) of this **section rule**.

(a) Measurement:

(A) The **small telecommunications carrier shall utility must** collect traffic data; that is, peg counts and usage data generated by individual components of equipment or by the wire center as a whole, and calculate blocking levels of the interoffice final trunk groups;

(B) System blocking **will be** determined by special testing at the wire center. **PUC Commission** Staff or a **carrier telecommunications utility** technician will place test calls to a predetermined test number, and the total number of attempted calls and the number of completed calls will be counted. The percent of completion of the calls **shall must** be calculated.

(b) Objective Service Level:

(A) A small telecommunications ~~carrier shall~~utility must maintain interoffice final trunk groups to allow 99 percent completion of all dialed calls during the average busy season busy hour without block~~ing~~age (P.01 grade of service);

(B) A small telecommunications ~~carrier shall~~utility must maintain its switch operation so that 99 percent of all properly dialed calls ~~shall~~must not experience block~~ing~~age during any normal busy hour.

(c) Reporting Requirement: Each ~~reporting~~small telecommunications ~~carrier shall~~utility must report monthly to the Commission:

(A) Local and extended area service (EAS) final trunk group blockages measured from each of its switches, regardless of the ownership of the terminating switch, that do if the carrier does not meet the objective service level for trunk group block~~ing~~age; The switching system blocking report is required after a Commission-directed switching system blocking test is completed;

(B) Its tandem switch final trunk group blockages associated with EAS traffic;

(C) Any known cause for the blockage and actions to bring the trunks into standard; and

(D) Identity of the competitive telecommunications provider or telecommunications utility, if other than the reporting small telecommunications utility, responsible for maintaining those final trunk groups not meeting standard.

(d) Retention Requirement: Each ~~reporting~~small telecommunications ~~carrier shall~~utility must maintain records for one year.

(8) Access to Small Telecommunications ~~Carrier~~Utility Representatives. Small telecommunications utilities are not required to measure or report repair center and sales office access times to the Commission.

(9) Interruption of Service Notification. A small telecommunications utility must report significant outages that affect customer service. These interruptions could be caused by switch outage, cable cut, or major work that would affect customers.

(a) Measurement: The small telecommunications utility must notify the Commission when an interruption occurs that exceeds the following thresholds:

(A) Cable or electronic outages lasting longer than 30 minutes that affect 50 percent or more of in-service lines of a central office (host or remote).

(B) Toll or Extended Area Service isolation lasting longer than 30 minutes that affects 50 percent or more of in-service lines.

(C) Isolation of a central office (host or remote) from the E-911 emergency dialing code or isolation of a Public Safety Answering Position (PSAP).

(D) Isolation of a wire center for more than ten minues.

**(E) Outage of the Business Office or Repair Center access system lasting longer than 15 minutes.**

**(b) Objective Service Level: Not applicable.**

**(c) Reporting Requirement: A small telecommunications utility must report service interruptions to the Commission engineering staff by telephone, by facsimile, by electronic mail, or personally. This initial report should be communicated to the Commission as soon as the company representative receives field notification and the report should provide the location of the outage, estimated impact, services interrupted, and the estimated time to restore. The small telecommunications utility should provide updated information should be provided when significant events occur, including when the outage is restored. The small telecommunications utility must send the final report no later than five business days following the corrective action. The small telecommunications utility must provide, as a minimum, facility, incident date, system down time, estimated number of customers affected, services affected, outage description, outage cause, and corrective action taken.**

**(d) Retention Requirement: None**

**(910) Customer Access Line Testing:** All customer access lines **shall must** be designed, installed, and maintained to meet the levels in subsection (b) of this **rule section**.

(a) Measurement: Each **small** telecommunications **carrier shall utility must** make all loop parameter measurements at the network interface, or as close as access allows;

(b) Objective Service Level: Each access line **shall must** meet the following levels:

(A) Loop Current: The serving wire center loop current, when terminated into a 400-ohm load, **shall must** be at least 20 milliamperes;

(B) Loop Loss: The maximum loop loss, as measured with a 1004-hertz tone from the serving wire center, **shall must** not exceed 8.5 decibels (dB);

(C) Metallic Noise: The maximum metallic noise level, as measured on a quiet line from the serving wire center, **shall must** not exceed 20 decibels above referenced noise level - C message weighting (dBmC);

(D) Power Influence: As a goal, power influence, as measured on a quiet line from the serving wire center, **shall must** not exceed 80 dBmC;

(c) Reporting Requirement: A **small** telecommunications **carrier shall utility must** report measurement readings as directed by the Commission;

(d) Retention Requirement: None.

**(101) Customer Access Lines and Wire Center Switching Equipment.** All combinations of access lines and wire center switching equipment **shall must** be capable of accepting and correctly processing at least the following network control signals from

the customer premise equipment. The wire center **shall** provide dial tone and maintain an actual measured loss between interoffice and access trunk groups.

(a) Measurement: Each **reporting** small telecommunications **carrier** **shall** **utility** **must** make measurements at or to the serving wire center;

(b) Objective Service Level:

~~(A) Network Control Signals. The network shall be capable of accepting and processing the following control signals: dial pulse of 8 to 12 pulses per second and 58 to 64 percent break; and tone pulsing at 50 milliseconds Dual Tone Multi Frequency (DTMF) on and 50 milliseconds DTMF off;~~

~~(AB) Dial Tone Speed. Ninety-eight percent of originating average busy hour call attempts shall receive dial tone within three seconds;~~

~~(BC) A small telecommunications carrier utility shall maintain all interoffice and access trunk groups so that the actual measured loss (AML) in no more than 30 percent of the trunks deviate from the expected measured loss (EML) by more than 0.7 dB and no more than 4.5 percent of the trunks deviates from EML by more than 1.7 dB.~~

(c) Reporting Requirement: None;

(d) Retention Requirement: None.

(12) Special Service **Access** Lines. All special service access lines **shall** **must** meet the performance requirements specified in applicable **small** telecommunications **carrier** **utility** tariffs or contracts.

(13) **Small** Telecommunications **Carrier** **Utility** Interconnectivity. A **small** telecommunications **carrier** **utility** connected to the facilities of another telecommunications **carrier** **utility** or **competitive telecommunications provider** **shall** **must** operate its system in a manner that will not impede either telecommunications **carrier** **company**'s ability to meet required standards of service. A **small** telecommunications **carrier** **shall** **utility** **must** report interconnection operational problems promptly to the Commission.

(14) Alternatives to these Telecommunications Standards. A **small** telecommunications **carrier** **utility** whose normal methods of operation do not provide for exact compliance with these rules may file for a variance from, or waiver of, one or more of these rules if it specifically indicates the alternative standards to be applied or indicates which standards would be waived.

(15) Remedies for Violation of this Standard:

(a) If ~~the Commission believes that~~ a **small** telecommunications **carrier** **utility** subject to this rule ~~has violated one or more of its~~ **failed to meet a minimum** service **quality** standards, the Commission **shall** **must** require the **small** telecommunications **carrier** **utility** to submit a plan for improving performance as provided in ORS

759.450(5) [~~1999 Oregon Laws, Chapter 1093~~]. The Commission may seek penalties against the ~~carriers~~small telecommunications utility as provided in ORS 759.450(5);

(b) In addition to the remedy provided under ORS 759.450(5), if the Commission believes that a small telecommunications ~~carrier~~utility subject to this rule has violated one or more of its service standards, the Commission ~~shall~~must give the small telecommunications ~~carrier~~utility notice and an opportunity to request a hearing. If the Commission finds a violation has occurred, the Commission may require the small telecommunications ~~carrier~~utility to provide the following relief to the affected customers:

(A) An alternative means of telecommunications service for violations of subsection (4)(b)(B) of this standard rule;

(B) Customer billing credits equal to the associated non-recurring and recurring charges of the small telecommunications ~~carrier~~utility for the affected service for the period of the violation; and

(C) Other relief authorized by Oregon law.

(~~156~~) Exemption from these Rules.

(a) A small telecommunications ~~carrier~~utility may petition the Commission for an exemption, in whole or in part, from these rules;

(b) The Commission may grant an exemption including, but not limited to, the following circumstance: If the Commission determines that effective competition exists in one or more exchanges, it may exempt all competitive telecommunications providers and telecommunications ~~carriers~~utilities providing telecommunications services in those exchanges from the requirements of this rule, in whole or in part. In making this determination, the Commission ~~shall~~will consider:

(A) The extent to which the service is available from alternative providers in the relevant exchange or exchanges;

(B) The extent to which the services of alternative providers are functionally equivalent or substitutable at comparable rates, terms, and conditions;

(C) Existing barriers to market entry;

(D) Market share and concentration;

(E) Number of suppliers;

(F) Price to cost ratios;

(G) Price d~~D~~emand side substitutability (for example, customer perceptions of competitors as viable alternatives); and

(H) Any other factors deemed relevant by the Commission.

(c) When a small telecommunications ~~carrier~~utility petitions the Commission for exemption under this provision, the Commission ~~shall~~must provide notice of the petition to all relevant competitive telecommunications ~~carriers~~providers and



**telecommunications utilities** providing the applicable service(s) in the exchange(s) in question. **The Commission will provide s**Such notified **competitive telecommunications carriers providers and telecommunications utilities will be provided** an opportunity to submit comments in response to the petition. The comments may include requests that, following the Commission's analysis outlined above in **Subsection (156)(b)(A)-(H)**, the commenting **competitive telecommunications carrier provider or telecommunications utility** be exempt from these rules for the applicable service(s) in the relevant exchange(s).

**(d) The Commission may grant a small telecommunications utility's petition for an exemption from service quality reporting requirements if the small telecommunications utility meets all service quality objective service levels set forth in sections (4) through (8) of this rule for the 12 months prior to the month in which the petition is filed.**

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Public Utility Commission.]

Stat. Auth.: ORS Ch. 183, 756 & 759

Stats. Implemented: ORS 756.040, 759.035, 759.045, 759.240 & 759.450

Hist.: PUC 6-1993, f. & ef. 2-19-93 (Order No. 93-185); PUC 2-1997, f. & ef. 1-7-97 (Order No. 96-332); PUC 3-1999, f. & ef. 8-10-99 (Order No. 99-468); PUC 13-2000, f. & ef. 6-9-00 (Order No. 00-303); PUC 13-2001, f. & ef. 5-25-01 (Order No. 01-428); PUC 7-2002, f. & ef. 2-26-02 (Order No. 02-102)

## **NARUC White Paper**

### **Table Comparing the NARUC Recommended Levels with the Existing Oregon Standards**

#### **Comprehensive Table by State**

## **NARUC SERVICE QUALITY WHITE PAPER**

### **March 5, 2004**

#### **NARUC Service Quality Subgroup "Service Quality White Paper"**

#### **I. INTRODUCTION**

The Telecommunications Act of 1996 ("1996 Act") called for sweeping changes in the way telephone services are delivered. The 1996 Act focused primarily on ensuring Universal Service and opening markets to competition. Furthermore, the 1996 Act, specifically noted that one of the intended effects of the primary focus was to promote higher quality service to American telecommunications consumers.<sup>1</sup>

In 1998, the NARUC Technology Policy Subgroup introduced a "Service Quality White Paper", which was adopted in Convention, November 11, 1998. Since that time there have been many advances in technology that have helped to improve service quality.

This paper suggests that it may be appropriate to revisit the service quality metrics proposed in the 1998 White Paper, to better reflect the level of performance that telephone providers have been able to achieve due in part to these technological advances.<sup>2</sup> Periodic and consistent reporting of these metrics will insure that consumers are receiving appropriate quality of service and it will at least identify areas of concern. Publicizing service quality performance results will both draw attention to potential problem areas before consumers are substantially impacted and provide a strong incentive for carriers to improve quality year after year.

The Service Quality Subgroup suggests in this White Paper that telecommunications carriers should continue to provide Service Quality measurements to the FCC and their respective State

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<sup>1</sup> As stated in the preamble, the purpose of the 1996 Act is "to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies."

<sup>2</sup> Since 1987, the FCC has collected operational data for the largest incumbent local exchange carriers in its Automated Reporting Management Information System (ARMIS) database. The ARMIS Report on Quality of Service collects data for residential and business lines in categories such as average installation intervals in days, percentage of local installation commitments met, initial trouble reports per 100 access lines, repeat out-of-service (OOS) trouble reports as a percentage of initial OOS trouble reports, and OOS repair intervals in hours. The 1993-2002 ARMIS quality of service data for residential lines served by major ILECs indicated that, in general, there has been an improvement in the performance of the RBOCs in 2001 and 2002 in those categories of service, especially when compared to their performance during the mid to late 90s. For further detail, see L. Pérez-Chavolla, "Summary and Analysis of FCC's ARMIS Quality of Service Data for Major ILECs: 1993 to 2002" (Columbus, OH: NRRI, December 2003).

Commissions, and that a report of these performance measures be made available to the public.<sup>3</sup> This will allow interested parties to assess current service quality levels among the States, and identify increasing or decreasing trends over time. It is this Subgroup's belief that the improvement in the carriers' service quality performance is not due solely to advances in technology. Improvements have come as a result of the diligence by the States in monitoring the carriers' service quality results.

The measures being suggested for inclusion are generally consistent, in both use and definition, among the States. However, the Service Quality Subgroup believes that greater effort is needed to make measurement practices more comparable between the States and individual carriers. Because carriers often have different interpretations of how they should measure service quality data, it is difficult to make meaningful comparisons of reported data among carriers. An effort to promote greater uniformity and consistency among carriers in how the data are measured is anticipated as a second white paper.

## **II. SERVICE QUALITY REPORTING IN GENERAL**

In March 1998, NARUC urged the collection of service quality data from incumbent local exchange carriers ("ILECs") and competitive local exchange carriers ("CLECs").<sup>4</sup> Because of the importance of monitoring the service quality trends in a timely manner, the Technology Policy Subcommittee recommended that ILECs and CLECs collect service quality data on a monthly basis and, report the monthly service quality data to federal and State regulatory commissions on a quarterly basis.<sup>5</sup> The Service Quality Subgroup recommends that reporting be more stringent as opposed to being relaxed and done on a monthly basis. However, many CLECs provide service via UNE-P or resale, so, for such CLECs, measuring their service quality data is really the service quality of the ILEC and would be redundant for some measures, such as Installations, Maintenance and Repair, and Network Performance. The Service Quality Subgroup would take the position that most of the following metrics would be used for measuring service quality results for ILECs as well as for CLECs that use their own facilities. However, there are other measures that are relevant to all service providers. These universally applicable measures of service quality relate to front office functions such as answering business and repair calls. Therefore, Answer Time measures for business and repair calls should apply to all providers.

## **III. PERFORMANCE DATA**

The Subgroup identified five major categories of performance data useful for measuring the quality of telecommunications service, including: 1. Installation, 2. Maintenance and repair, 3. Network performance, 4. Answer time performance, and 5. Customer perception. A brief description accompanies each recommended category. Key definitions are provided in Section IV of this White Paper.

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<sup>3</sup> The term "State Commission" is used as a general expression to refer to all Commissions, Utility Boards, Departments, and Regulatory Authorities in the United States, including its Territories, which regulate telecommunications services.

<sup>4</sup> See "Resolution Regarding a Federal Service Quality Reporting Program" (adopted by the NARUC Executive Committee on March 4, 1998).

<sup>5</sup> Resellers should indicate the incumbent LEC that provides the underlying telecommunications service.

## 1. INSTALLATION

Reporting data about the installation of basic service allows a State Commission to evaluate the adequacy of the carrier's telephone plant facilities and workforce and the carrier's success at meeting customer expectations.

### a) Installation orders for basic service

The number of all installation orders for basic service occurring where facilities are available during the reporting period should be reported. Installation orders should include new orders and transfer orders only. Reporting should be disaggregated into business and residential classifications and, where feasible, rural and urban wire centers.

### b) Installation orders for basic service completed within '3' working days

The number of installation orders for basic service completed within three (3) working days from when the order was placed by the customer should be reported.<sup>6</sup> The Service Quality Subgroup recognizes that other time periods may be required in some States, based on specific State regulations.<sup>7</sup> The NARUC 1992 Handbook proposed an objective level for this measure of ninety percent (90%) of installation orders completed within three (3) working days.<sup>8</sup> Based on actual ARMIS data being filed by the ILECs, the Service Quality Subgroup recommends a performance measure of ninety-five percent (95%) of installation orders completed within three (3) working days. This measurement should exclude orders where the customer has requested or agreed to an installation beyond the three (3) working days.

### c) Held Orders over 30 days

The number and percentage of orders for basic service that are delayed for more than thirty (30) calendar days from the receipt of the application for service should be reported. This measurement should

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<sup>6</sup> The NRRI report "Metrics Most Commonly Adopted by the States to Measure the Performance of Quality of Service Categories" indicates that the average objective level for installation of basic telecommunication service set by states currently monitoring this subcategory is ninety percent (90%) of primary installation orders completed within five (5) working days (L. Pérez-Chavolla, Columbus, OH: NRRI, September 2003, internal document). FCC's data on RBOCs' performance on average installation intervals in days shows that the average installation intervals for residential customers ranged, on average, from one to two days for the 1994-2002 period, based on aggregate data for each RBOC (NRRI, December 2003 Report, based on ARMIS Report 43-05).

<sup>7</sup> For a complete set of state-specific service quality measures, see L. Perez-Chavolla, "Survey of State Retail Telephone Quality of Service Standards: Organized by State" (Columbus, OH: NRRI, April 2003, Report 03-16s).

<sup>8</sup> In March of 1992 NARUC published its "Telephone Service Quality Handbook", which proposed model standards for evaluating the performance of telephone utilities in five categories of service: Installation of service, operator handled calls, network call completion, noise and transmission, and customer trouble reports. NARUC proposed both objective and surveillance levels for the different subcategories of service included under each of the five categories mentioned above.

exclude orders where the customer has requested an installation date beyond thirty (30) calendar days from receipt of the application for service. In some States, monitoring requests or orders with longer delays such as over sixty (60) or ninety (90) calendar days may be required, based on specific State regulations.

#### **d) Installation Commitments Met**

The number of installation commitments met and the total installation orders during the reporting period should be reported. Reporting should be at the wire center level, where feasible, and disaggregated into business and residential classifications and, where feasible, rural and urban wire centers. The NARUC 1992 Handbook proposed an objective level of ninety percent (90%) of commitments met. The Service Quality Subgroup recommends a performance measure of at least ninety-five (95%) of installation commitments met.<sup>9</sup>

## **2. MAINTENANCE & REPAIR**

Reporting data about the maintenance and repair of basic service allows a State Commission to evaluate the adequacy of the carrier's telephone plant facilities and workforce and the carrier's success at providing continual service for its customers.

#### **a) Trouble Reports**

The number of initial and repeat trouble reports occurring within the reporting period should be reported. Reporting should be at the wire center level, where feasible, and disaggregated into business and residential classifications and, where feasible, rural and urban wire centers.

Most telecommunications carriers have company procedures that dictate certain calls to the repair center not be counted as true "troubles." State Commissions have encountered significant discrepancies in the exceptions found in audits of telecommunications carriers. One carrier may have a list of twenty or more reasons for excluding a trouble ticket from the report, while another utility may have only two or three specified exceptions. In order to facilitate benchmarking carrier performance and analysis of service quality data consistently among different carriers, the Service Quality Subgroup suggests that telecommunications carriers simply pass along all trouble report data. By excluding the use of such exceptions, the Subgroup anticipates that the accuracy of the reported service quality data will increase, while the reporting burden on the carrier will decrease.

#### **1. Initial Trouble Reports**

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<sup>9</sup> The average objective level for installation commitments met set by the states is ninety-two percent (92%), based on the September 2003 NRRI report "Metrics Most Commonly Adopted by the States to Measure the Performance of Quality of Service Categories". The 1993-2002 ARMIS data for this category indicates that, on average, the aggregate performance of the major ILECs ranged from ninety-eight (98%) to ninety-nine percent (99%) (L. Pérez-Chavolla, "Summary and Analysis of FCC's ARMIS Quality of Service Data for Major ILECs: 1993 to 2002", p.1).

1.01 Report the total number of initial trouble reports during the reporting period.

2. Repeat Trouble Report

2.01 Report the total number of repeat trouble reports during the reporting period.

3. Access Lines

3.01 Total Number of Access Lines Served by the Reporting Carrier

4. Service standards for trouble reports

4.01 The NARUC 1992 Handbook proposed an objective level of six (6) reports per 100 access lines. Based on actual ARMIS data being filed by the ILECs, the Service Quality Subgroup recommends that States establish a standard trouble report rate of two (2) initial trouble reports per 100 access lines per month.<sup>10</sup>

4.02 The number of repeat trouble reports each month should not exceed ten (10%) percent of the total number of trouble reports received in the month.<sup>11</sup>

**b) Repair intervals**

The carrier's repair interval provides a measure of the adequacy of the carrier's operating procedures and workforce levels. Expected performance levels may vary according to the State and the

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<sup>10</sup> On average, the objective levels of the states monitoring this subcategory of service are set at five (5) initial reports per 100 access lines. As part of its ARMIS database, the FCC collects information on initial, subsequent and repeat trouble reports, as well as on OOS initial trouble reports and all other initial trouble reports. FCC's "ARMIS Preset Report 43-05" only provides data for total trouble reports, including both initial and repeat trouble reports. Based on this report, the annual performance of the RBOC's from 1993 to 2002 ranged from 1.36 to 3.49 reports per 100 access lines (ARMIS Report 43-05, Table II, Column (af), Rows 140, 141, 142). The number of initial trouble reports for each of the RBOCs is available in the FCC's "Paper Report 43-05". Based on data provided in the Paper Report, the RBOC's performance in 2002 ranged from 1.1 to 2.5 initial trouble reports per 100 residential access lines per month for MSAs and from 1.1 to 3.8 for Non-MSAs (L. Pérez-Chavolla, "Summary and Analysis of FCC's ARMIS Quality of Service Data for Major ILECs: 1993 to 2002", p. 2).

<sup>11</sup> FCC defines Repeat Trouble Reports as reports on service quality received within thirty days after the resolution of an initial trouble report on the same line. Initial trouble reports refer to quality of service complaints made by customers or end users to ILECs that have not been reported to the telephone provider within the previous thirty day period. In its preset reports, the FCC provides data on repeat trouble reports only as a percentage of initial out-of-service trouble reports. Based on data for the 1994-2002 period, the ILECs' average aggregate data for repeat trouble reports as a percentage of initial OOS reports ranged from 15.5 percent to 27.3 percent. In 2002, the companies' performance improved, with repeat trouble reports ranging from 16.4 percent to 20.1 percent of initial OOS reports (L. Pérez-Chavolla, "Summary and Analysis of FCC's ARMIS Quality of Service Data for Major ILECs: 1993 to 2002", p. 2).

size of the reporting carrier. Reporting should be at the wire center level, where feasible, and disaggregated into business and residential classifications and, where feasible, by rural and urban wire centers.

1. Number of Out-of-Service Troubles

1.01 Report the total number of out-of-service troubles in the reporting period.

2. Percentage of Out-of-Service troubles cleared in 24/48 hours

2.01 The report should state the percentage of troubles cleared within 24/48 hours. The 1992 NARUC Handbook proposed an objective level of ninety percent (90%) of out-of-service reports cleared within 24 hours. The Service Quality Subgroup recommends that ninety (90%) percent of all troubles should be cleared within 24 hours and ninety-eight (98%) percent of all troubles should be cleared within 48 hours.<sup>12</sup>

**c) Repair Commitments Met**

The number of repair commitments met measures the adequacy of the carrier's workforce and the efficiency of its maintenance and repair operations. The number of repair commitments met and the total number of repair orders during the reporting period should be reported. Reporting should be at the wire center level, where feasible, and disaggregated into business and residential classifications and, by rural and urban wire centers. The 1992 NARUC Handbook proposed an objective level of ninety percent (90%) repair commitments met. The Service Quality Subgroup recommends a performance measure of at least ninety-five percent ( $\geq 95\%$ ) of repair commitments met.<sup>13</sup>

**3. NETWORK PERFORMANCE**

The number and duration of switch outages and interoffice transmission facility outages indicate the level of the carrier's success at providing continual access to the full capabilities and benefits of the

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<sup>12</sup> The average objective level of the states monitoring this subcategory is eighty-seven percent (87%) of out-of-service reports cleared within 24 hours, based on the September 2003 NRRI report "Metrics Most Commonly Adopted by the States to Measure the Performance of Quality of Service Categories". The FCC collects information on OOS based on the intervals in hours it takes an ILEC to resolve an OOS report. The ARMIS data aggregated per ILEC for the 1994-2002 period illustrates that on average, the ILECs resolve OOS reports within 15.1 to 26.8 hours. As of 2002, the companies, as an aggregate, took from 13.9 hours to 22.5 hours to resolve an OOS report (L. Pérez-Chavolla, "Summary and Analysis of FCC's ARMIS Quality of Service Data for Major ILECs: 1993 to 2002", pp. 2-3).

<sup>13</sup> On average, the states monitoring this subcategory have set an objective level of ninety-two percent (92%) of repair commitments met, based on the report "Metrics Most Commonly Adopted by the States to Measure the Performance of Quality of Service Categories" (L. Pérez-Chavolla, NRRI, September 2003). The FCC does not collect information on this measure as part of its ARMIS database.



network. In addition, other indicators of network performance, such as trunk blockage, provide valuable information about the end-to-end performance of the public network. Reporting should be at the wire center level, where feasible, and disaggregated into business and residential classifications and, by rural and urban.

In any instance of a major outage there is a “customer service” obligation. It is imperative that State Commissions be aware of service outages. Therefore it is appropriate to include a recommendation requiring notification of a major outage. Language such as the following could be used, “Every utility shall inform the Commission, as soon as possible, of any specific outage occurrence or development, such as those caused by cable cuts, fire, flood, wind, or other Acts of God, that may result in a prolonged interruption of service for a substantial number of its customers in a wire center.”<sup>14</sup>

#### 4. ANSWER TIME PERFORMANCE

Companies use both automated systems and live attendants to answer customers’ calls. To capture the performance of all types of systems, the Subgroup recommends the following performance measures as a way to monitor answer time performance.<sup>15</sup>

Report the following measures for the business (including billing) and repair offices:

- a) Total calls attempted
- b) Total calls answered by Voice Recognition Units (VRU) or Automatic Call Directors (ACD)
- c) Total calls live-answered by attendants
- d) Total calls answered within twenty (20) seconds
- e) Total calls abandoned or dropped
- f) Average waiting time until calls are answered.
- g) Number of calls transferred to a live attendant more than twenty (20) seconds after the caller selects an option to do so and, when the caller does not select an option, the number of calls transferred to a live attendant more than twenty (20) seconds after the last option has been provided.

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<sup>14</sup> State rules for network performance usually provide a timeframe within which an outage is considered to be “prolonged”. A “prolonged outage” is typically defined as one with a duration exceeding one (1) to three (3) hours. “Substantial” is generally expressed in state rules as the percentage of access lines being affected and/or the percentage of customers affected, whichever is less. The percentages currently used in state rules to define “substantial number of customers” range from ten percent (10%) to twenty-five (25%) percent of access lines affected per exchange and/or up to twenty-five percent (25%) or a hundred (100) customers being affected (L. Pérez-Chavolla, “Survey of State Retail Telephone Quality of Service Standards: Organized by State”, April 2003). The Service Quality Subgroup recognizes that other definitions of prolonged and substantial may be required in some states, based on specific state regulations and policies.

<sup>15</sup> During its discussions, the Subgroup found wide variation in the manner in which Answer Time Performance is measured.

h) Number of total calls attempted where the caller received a busy signal

The 1992 NARUC Handbook proposed an objective level for business and repair office answer time of eighty-five percent (85%) of calls answered within twenty (20) seconds. The Service Quality Subgroup recommends that the objective levels for these measures be as follows:

- (1) Ninety percent (90%) or more of all calls attempted shall be answered within twenty (20) seconds, as measured on a monthly basis.<sup>16</sup>
- (2) Once a caller has selected the option to speak with a live representative, ninety percent (90%) or more of all calls shall be transferred to a live representative within twenty (20) seconds after the caller selects the option. If a caller does not select a menu option, ninety percent (90%) of all such calls shall be transferred to a live representative within twenty (20) seconds after the last menu option has been provided.
- (3) The number of callers who reach a busy signal shall not exceed three (3) percent.

Further, States should require that an automated call processing system provide the caller with the option to speak with a live representative within the first twenty (20) seconds of answering. A company should provide the live representative option by clearly directing the caller to take an affirmative action (i.e., select an entry on the telephone) or explaining that the caller will reach a live representative by default within twenty (20) seconds (i.e., be transferred when the caller does not select an option on the telephone).

## 5. CUSTOMER PERCEPTION

Performance data on installation, maintenance, and networks may not completely capture the consumers' experience with a telecommunications carrier. Consumer complaints and commission sponsored consumer surveys are two additional data sources for assessing consumer perceptions of the quality of service provided by telecommunications carriers.

### a) Consumer Complaints

The Service Quality Subgroup recommends that State Commissions collect and monitor the total number of consumer contacts received and, when feasible, disaggregate those contacts that were referred to the carrier for action and/or investigated by the State Commission. The Subgroup also recommends disaggregating the complaints by category of service (installation, maintenance and repair, access to

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<sup>16</sup> The average answer time set by the states to monitor answer time performance is eighty-six percent (86%) within thirty (30) seconds for business office answer time and eighty-seven percent (87%) within twenty-six (26) seconds for repair office. The most commonly adopted objective levels among the states monitoring these measures were ninety percent (90%) of calls to a business office answered within twenty (20) seconds, and eighty-five percent (85%) of calls to a repair office answered within twenty (20) seconds (L. Pérez-Chavolla, "Metrics Most Commonly Adopted by the States to Measure the Performance of Quality of Service Categories", September 2003). The FCC does not collect information on this measure as part of its ARMIS database.

repair and business offices, billing) and by type of customer (residential, business and, where feasible, rural and urban exchanges) to facilitate monitoring.

**b) Consumer Surveys**

Telephone surveys conducted by State Commissions can provide a greater amount of information for use in assessing customers' perceptions of telecommunication service quality. Such a survey should examine aspects of installation, repair, complaints and billing. The following are various components useful in determining a customer's level of satisfaction.

1. Installation

- a. Performance of the company in meeting the time frames the customer required for providing the service.
- b. Service requirement met by the agreed date.
- c. Information provided about the features of the service, either when the customer ordered it or when it was provided.
- d. Reliability of this service after it was first provided.
- e. How easy/difficult was it to contact the correct person or automated attendant that actually dealt with the customer's request.
- f. Overall service provided in this instance.

2. Repair

- a. How easy/difficult was it to contact the correct person or automated attendant to report this fault?
- b. Speed with which the fault was resolved.
- c. Reliability of the service after it was restored.
- d. On completion of the service repair, did the company or its contractors confirm with the customer that service was restored?
- e. Overall service provided in this instance.

3. Complaints

- a. How easy/difficult was it to contact the correct person or automated attendant to report the complaint?
- b. Manner in which the customer was dealt with by the first person he or she spoke with.
- c. Speed with which the customer's complaint was dealt.
- d. Customer satisfaction with the resolution to the complaint.
- e. Overall service provided in this instance.

4. Billing

- a. Timeliness of the arrival of the customer's bill after the billing date.

- b. Accuracy of the information contained in the bill.
- c. Information contained in the bill.
- d. Presentation of the bill, including ease of understanding.
- e. Overall service provided in this instance.

The customer's level of satisfaction should be measured using response categories ranking from very satisfied to very dissatisfied.<sup>17</sup> Survey results should include disaggregated information for residential and business customers and by exchange. The report should disclose information on sample size, confidence levels and margin of error.

If the survey results are going to be shared with customers, it would be useful to provide them with information on some factors that need to be taken into account when comparing the performance of telecommunication carriers, such as company size, type of customers they serve, as well as special quality of service requirements a company may have as part of its alternative regulation plan.

#### **IV. DEFINITIONS**

For the purposes of this white paper, the following definitions shall apply.

Access Line: A transmission path between end user terminal equipment and a switching center. Access lines to be counted include: residential, business, Centrex, ISDN, Payphone, and voicegrade PBX trunks.

Answer or Answered: A call is answered when the caller has reached the operator, service representative, or automated system that will assist the caller or accept the information necessary to process the call. An acknowledgement that the caller is waiting on the line, or a dropped call, does not constitute an answer.

Basic Service: The provision of access to the public switched network. Depending on the State, basic local exchange service may include the provision of one party line service, local/toll calling, local usage, tone dialing, emergency services, assistance services, telecommunications relay services, directory listings, privacy protections and non-published service.

Customer: Business and residential end users; does not include telecommunications service providers purchasing wholesale services or network elements.

Held Order: Requests or orders for basic local exchange service delayed over 30 calendar days because of telephone utility plant or workforce problems.

Initial Trouble Report: The first trouble report associated with a specific trouble on a subscriber line for which there is no pending trouble report. Installation Commitment Met: The provision of access to basic local exchange service to a customer on or before the commitment date and time offered to the customer by the carrier.

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<sup>17</sup> A response scale commonly used in surveys is called the Likert scale, which proposes a 1 to 5 scale, including the following categories: Strongly disagree, disagree, undecided, agree and strongly agree.

Metropolitan Statistical Areas: “[A] Core Based Statistical Area associated with at least one urbanized area that has a population of at least 50,000. The Metropolitan Statistical Area comprises the central county or counties containing the core, plus adjacent outlying counties having a high degree of social and economic integration with the central county as measured through commuting.” (Standards for Defining Metropolitan and Micropolitan Statistical Areas, 65 Fed. Reg. 82238 (Dec. 27, 2000)).

Objective level: The level of performance considered acceptable or satisfactory by a regulator that a telephone service operator is expected to provide to its customers.

Out-of-Service: A classification of a trouble report where the customer indicates either: (1) an inability to complete incoming or outgoing calls or (2) the presence of interference which causes connected calls to be incomprehensible.

Repair Commitment Met: A customer trouble report resolved by the carrier on or before the commitment date and time offered to the customer by the carrier.

Repeat Trouble Report: A customer reported trouble received on or before the 30th day following the resolution of an initial trouble on the same network access line.

Rural Area Wire Centers: All wire centers wholly outside a Metropolitan Statistical Area or other State designated urban area.

Subsequent Trouble Report: A trouble report received after an initial or repeat trouble report, but before the carrier has resolved the initial or repeat trouble report, notifying the carrier of the same specific trouble reported in the initial or repeat trouble report.

Trouble: Any indication that the network or any portion thereof is not functioning as designed.

Trouble Report: A record created by the carrier indicating the date and time a customer reports a trouble to the carrier.

Urban Wire Centers: All wire centers that include any portion of a Metropolitan Statistical Area or other State designated urban area.

**COMPARISON BETWEEN CURRENT OREGON RULES AND  
 NARUC WHITE PAPER RECOMMENDATIONS**

MEASUREMENT	OREGON MEASUREMENT	OREGON STANDARD	NARUC MEASUREMENT	NARUC STANDARD
<b>INSTALLATION OF SERVICE</b>				
<ul style="list-style-type: none"> <li>All installation orders for basic service where facilities are available</li> </ul>			Count.	Report.
<ul style="list-style-type: none"> <li>Installation orders for basic service completed within X working days</li> </ul>	Count orders that missed the commitment date with a maximum date of 6 business days or later date determined through good faith negotiations.	Standard is set at 2/wire center averaged across Oregon service territory or 5/1000 inward orders.	Count and calculate percentage. Excludes orders where the customer has requested an installation beyond the 3 working days.	95% within 3 working days.
<ul style="list-style-type: none"> <li>Held Orders over 30 days</li> </ul>	Count primary line orders that missed the commitment date for more than 30 days.	10% of the total held order standard	Count and calculate percentage of orders for basic service delayed. Excludes orders where the customer has requested an installation beyond the 3 working days.	No Standard.
<ul style="list-style-type: none"> <li>Installation Commitments Met</li> </ul>	Count and calculate percentage for provisioning commitments met for service across its Oregon service territory. Exclusions for misses attributed to customers or another carrier.	90% of installation commitments met.	Count and calculate percentage from installation commitments met and the total installation orders. <b>No exclusions.</b>	95% of installation commitments met.

Most of the following NARUC reporting recommended, where appropriate, a disaggregation of reported numbers into business and residential classifications and, where feasible, rural and urban wire centers. The NARUC white paper did not exempt carriers with less than 1,000 access lines from reporting; Oregon does.

MEASUREMENT	OREGON MEASUREMENT	OREGON STANDARD	NARUC MEASUREMENT	NARUC STANDARD
<b>MAINTENANCE &amp; REPAIR</b>				
<ul style="list-style-type: none"> <li>• Trouble Reports</li> </ul>	Count the number of trouble reports by wire center. Exclusions allowed.	The trouble report rate exceeding 2.0/100 working access lines per wire center more than three times during a sliding 12-month period.	Count the number of initial and repeat trouble reports by wire center. Report both numbers. Count the number of Access Lines Served. <b>No exclusions.</b>	2 initial trouble reports/100 lines per month. The number of repeat trouble reports each month should not exceed 10-percent of the total number of trouble reports received in the month.
<ul style="list-style-type: none"> <li>• Out-of-Service Troubles</li> </ul>			Count the total number of out-of-service troubles in the reporting period.	Report
<ul style="list-style-type: none"> <li>• Out-of-Service Troubles Cleared in 24/48 hours</li> </ul>	Calculate the percentage of trouble reports cleared within 48 hours for each repair center.	95% of all trouble reports shall be cleared within 48 hours of receiving a report.	Calculate the percent of troubles cleared within 24/48 hours.	90% of out-of-service troubles should be cleared within 24 hours and 98% of all troubles should be cleared within 48 hours.
<ul style="list-style-type: none"> <li>• Repair Commitments Met</li> </ul>			Count the number of repair commitments met and the total number of repair orders during the reporting period at the wire center level.	95% of repair commitments met.

MEASUREMENT	OREGON MEASUREMENT	OREGON STANDARD	NARUC MEASUREMENT	NARUC STANDARD
<b>NETWORK PERFORMANCE</b>				
<ul style="list-style-type: none"> <li>Switch Outages</li> </ul>			Number and duration of switch outages by wire center.	Notification of a major outage to the Commission.
<ul style="list-style-type: none"> <li>Interoffice Transmission Facility Outages</li> </ul>	Special testing by PUC staff or a carrier technician.	Maintain switch operation so that 99% of all properly dialed calls shall not experience blocking during any normal busy hour.	Number and duration of interoffice transmission facility outages by wire center.	Notification of a major outage to the Commission.
<ul style="list-style-type: none"> <li>Trunk Blockage</li> </ul>	Collect traffic data and calculate blocking levels of the interoffice final trunk groups.	Maintain interoffice final trunk groups to allow at least 99% completion of all dialed calls during the average busy season busy hour without blocking.	Collect traffic data and calculate blocking levels.	Report. No standard specified.
<ul style="list-style-type: none"> <li>Repair Commitments Met</li> </ul>			Count the number of repair commitments met and the total number of repair orders during the reporting period at the wire center level and calculate percentages.	95% of repair commitments met.



MEASUREMENT	OREGON MEASUREMENT	OREGON STANDARD	NARUC MEASUREMENT	NARUC STANDARD
<b>ANSWER TIME PERFORMANCE</b>				
<ul style="list-style-type: none"> <li>Total calls attempted.</li> </ul>			Count.	Report.
<ul style="list-style-type: none"> <li>Total calls answered by recorded information</li> </ul>			Count.	Report.
<ul style="list-style-type: none"> <li>Total calls live-answered by attendants.</li> </ul>			Count.	Report.
<ul style="list-style-type: none"> <li>Total calls answered within 20 seconds.</li> </ul>	Measure the answer time from the first ring at the telecommunications carrier business office or repair service center. Calculate percentage of total calls attempted. Option of transferring to a representative shall be included in the initial local service-screening message.	85% of all calls shall be answered within 20 seconds. The number of callers who reach a busy signal shall not exceed 1%.	Measure and calculate percentage.	90% of all calls shall be answered within 20 seconds. The number of callers who reach a busy signal shall not exceed 3%.
<ul style="list-style-type: none"> <li>Total calls abandoned or dropped.</li> </ul>			Count.	Report.
<ul style="list-style-type: none"> <li>Average waiting time until calls are answered.</li> </ul>			Measure and calculate average.	Report.
<ul style="list-style-type: none"> <li>Number of calls transferred to a live attendant more than 20 seconds after caller selects an option to do so or remains on the line without choosing an option for 20 seconds.</li> </ul>			Count.	Report.
<ul style="list-style-type: none"> <li>Number of total calls attempted where the caller received a busy signal.</li> </ul>			Count.	Report.

**SERVICE QUALITY STANDARDS BY STATE**

**Revised: 30 March 2004**

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Alabama	BellSouth	90% w/in 20 seconds	90% w/in 20 seconds	90% w/in 5 working days	NA	Not completed w/in 30 days	5 per 100 access lines	90% w/in 24 hours	Interoffice w/in local calling area 95% Intra-LATA Toll: 97%	98% w/in 3 seconds	APSC Telephone Rules T-21 (J), (M) and (N); and Alternative Regulatory Plan Order, Docket No. 24499, dated 09/20/95.
Alaska	Alaska Communications Systems	NA	NA	85% w/in 5 working days	NA	NA	6	100% w/in 48 hours if accessible by maintained highway; 100% w/in 5 days for all others	NA	NA	3 AAC 52.280 3 AAC 52.290

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Arizona	Qwest	80% w/in 20 seconds	80% w/in 20 seconds	Res: 10 working days Multi & Special: Reasonable time based on equipment availability	NA	NA	8	85% w/in 24 hours	NA	NA	Docket No. E-1051-93-183, Decision 59421 (Qwest's Arizona Service Quality Plan Tariff, Sections 2.2.3.A, 2.2.4.B, 2.4.3.B, 2.5.5.B, and 2.5.6.B)
Arkansas	SBC	NA	5 working day/in 20 seconds	5 working days	NA	30 days where facilities are not available. 90 WD if service outside base rate area and applicant pays excess construction	5 or less per wire center; exchanges with 2,000 lines or less are averaged over 3 months	95% w/in 24 hours; 100% w/in 5 days	NA	NA	Telecomm. Providers Rules 9.01, 10.01, 10.06 and 11.02.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
California	SBC	85% w/in 20 seconds; if ARU used then 95% w/in 15 seconds of selection or w/in 55 seconds if no selection	85% w/in 20 seconds; if ARU used then 95% w/in 15 seconds of selection or w/in 60 seconds if no selection	Primary lines: 90% w/in 3 days; Additional lines: 90% w/in 10 days	NA	NA	0 to 1,000 lines: 8; 1,001 to 2,999 lines: 6; 3,000+ lines: 4	90% w/in 24 hours	NA	NA	PUCC Rules Governing Telephone Service, Sections 3.1, 3.2, 3.4, 3.5, 3.7, 3.8, 3.14, and 3.15; and General Order 133-C, dated 06/18/98.
Colorado	Qwest	85% w/in 60 seconds	85% w/in 60 seconds	100% w/in 150 days	NA	The lesser of 50 or 5% for greater than 30 days	8 (three month rolling average)	85% w/in 24 hours	NA	NA	Docket No. 97A-540T, Colorado Price Plan, Attachment A, dated 02/02/99; Colorado Public Utilities Commission Administrative Rules 723-2-21 to 24 and 723-2-6
Connecticut	Verizon and SBC	NA	05/99 – 04/00: 15 seconds 05/00 – 04/01: 13 seconds	05/99 – 04/00: 98% w/in 5 days; 05/00 – 04/01: 99% w/in 5 days	NA	NA	05/99 – 04/00: .7; 05/00 – 04/01: .5	05/99 – 04/00: 85% w/in 24 hours; 05/00 – 04/01: 90% w/in 24 hours	NA	NA	Docket No. 97-06-02, Decision dated 08/26/98.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Delaware	Verizon	85% w/in 20 seconds	85% w/in 20 seconds	95% w/in 5 days	NA	Less than 20%	5	90% w/in 24 hours	NA	NA	PSC Regulation Docket No. 20, Order No. 3232: Findings, Opinion and Order dated 01/15/91; and CDR 10-800-020-5.
Florida	BellSouth	80% w/in 30 seconds; 95% w/in 15 seconds if ARU used; 95% w/in 55 seconds to live person if ARU used	90% w/in 30 seconds; 95% w/in 15 seconds if ARU used; 95% w/in 55 seconds to live person if ARU used	90% w/in 3 days	NA	NA	NA	95% cleared w/in 24 hours	NA	NA	Rules of Florida Public Service Commission, 25-4.066, .070 and .073.
Georgia	BellSouth	90% w/in 20 seconds; if ARU unit used: 90% w/in 40 seconds	90% w/in 20 seconds; If ARU unit used: 90% w/in 40 seconds	No construction: 85% w/in 5 days; Construction inside BRA: 85% w/in 30 days; Construction outside BRA: 85% w/in 60 days	NA	NA	0% to 20% of 2, 4 or 8 party: 6; 20 to 40% of 2, 4, or 8 party: 7; 40%+, 2, 4, or 8 party: 8	100% w/in 24 hours	NA	NA	Rules and Regulations of the State of Georgia, Rule 515-12-1-.14, .18, .19 and .23.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Idaho	Qwest	NA	NA	NA	NA	NA	NA	Emergencies: 90% w/in 16 hours Non-emergencies: 90% w/in 24 hours	NA	NA	Idaho Administrative Code 31.41.01.501 – 503
Illinois	SBC	NA	NA	95.44% w/in 5 days	NA	NA	2.66	95% cleared w/in 24 hours	NA	NA	Illinois Administrative Rules, Chapter 1, Subchapter f, Section 1730.535 and .540; and Dockets 92-0448 and 93-0239, Alternative Regulation Plan, dated 10/94. <i>(Copy of Alt Reg Plan being mailed.)</i>
Indiana	SBC	80% w/in 20 seconds	80% w/in 20 seconds	90% w/in 5 days	NA	NA	10	100% w/in 24 hours	NA	NA	170IAC 7-1.1-4, and 1-11
Iowa	Qwest	85% w/in 20 seconds; 100% w/in 40 seconds	85% w/in 20 seconds; 100% w/in 40 seconds	85% w/in 5 days; 95% w/in 10 days	NA	NA	4	85% w/in 24 hours 95% w/in 48 hours 100% w/in 72 hours	NA	NA	Iowa Administrative Code 199-22.5(10), 199-22.6(1), and 199-2.6(3)

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Kansas	SBC	NA	NA	NA	NA	NA	0 to 1,000 lines: 10; 1,001 to 10,000 lines: 8; 10,000+ lines: 6	100% w/in 30 hours	NA	NA	Docket No. 191,206-U, Order Setting Forth Quality of Service Plan, 12/24/96.
Kentucky	BellSouth	NA	100% w/in 20 seconds	90% w/in 5 days	NA	NA	8	85% w/in 24 hours	NA	NA	807 KAR 5:061, Sections 10, 22 and 25.
Louisiana	BellSouth	NA	NA	NA	NA	NA	NA	NA	NA	NA	General Order dated 04/19/97, Appendix B re Regulations for Competition in the Local Telecomm. Market, Sections 302 and 701; and Price Regulation Plan, Order No. U-17949-R, dated 02/06/92.
Maine	Verizon	69% w/in 20 seconds	NA	98.45% w/in commitment date	NA	NA	1.15	Residence: 78.9% w/in 24 hours; Business: 91% w/in 24 hours	NA	NA	Docket No. 94-123, Order dated 05/15/95; and Letter from Verizon dated 10/23/98

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Maryland	Verizon	90% w/in 20 seconds	NA	85% w/in 5 days	NA	NA	8 per wire center	100% w/in 8 working hours	NA	NA	Maryland Administrative Code Sections 20.45.04.08, 20.45.05.02, 20.45.05.03, and 20.45.05.09.
Massachusetts	Verizon	60% w/in 20 seconds	60% w/in 20 seconds	95% w/in 2 days or on customer requested date (whichever is later)	NA	Less than .005% over 30 days.	2.25	Residence: 60% w/in 24 hours; Business: 75% w/in 24 hours.	NA	NA	Left message at Commission for Verizon Price Cap Plan. (617) 305-3500.
Michigan	SBC	NA	100% w/in 25 seconds (monthly average)	90% by mutually agreeable date	NA	NA	6	100% w/in 36 hours (monthly average)	NA	NA	Michigan Public Service Commission, Order U-11040 dated 06/18/96.



STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Minnesota	Qwest	90% w/in 20 seconds	90% w/in 20 seconds	95% w/in 2 days or on date of customer request	NA	Less than .005% over 30 days	2.5	95% cleared w/in 24 hours	NA	NA	Modified Alternative Form of Regulation Plan for the State of Minnesota, Appendix B, Sections I.c.1 and 2a and Sections II.c.1 and 3, effective January 1, 1999.
Mississippi	BellSouth	NA	NA	95% w/in 10 days	NA	NA	3	75% w/in 36 hours	NA	NA	Rules and Regulations Governing Public Utility Service, Rules 35, 38 and 41; and Price Regulation Plan, Docket No. 95-UA-313 dated 11/01/95.
Missouri	SBC	100% w/in 15 seconds	100% w/in 15 seconds	90% w/in 5 days or on date of customer request	NA	NA	6	90% w/in 24 hours	NA	NA	4 CSR 240-32.080
Montana	Qwest	NA	NA	90% w/in 3 days	NA	Less than 10% over 3 days	6	90% w/in 24 hours	NA	NA	Montana Administrative Rules, Section 38.5.3331 to 38.5.3371.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Nebraska	Qwest	90% w/in 20 seconds	90% w/in 20 seconds	NA	NA	NA	6	NA	NA	NA	Nebraska Administrative Rules, Section 291-5-002.04, and 291-5-002.11.
Nevada	SBC	Standard being prepared	Standard being prepared	Standard being prepared	NA	Standard being prepared	Standard being prepared	Standard being prepared	NA	NA	Docket No. 97-9022, Stipulation Agreement dated 02/05/99.
New Hampshire	Verizon	NA	NA	NA	NA	NA	NA	NA	NA	NA	New Hampshire PUC Rules Section 404.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
New Jersey	Verizon	NA	85% w/in 20 seconds	75% w/in 5 days	NA	NA	8	NA	NA	NA	New Jersey Administrative Code Section 14:10-1.
New Mexico	Qwest	NA	NA	Primary Lines inside BRA: 100% w/in 15 days; Secondary Lines inside BRA: 100% w/in 30 days; Outside BRA: 100% w/in 30 days	NA	0 greater than 30 days	2	90% w/in 24 hours; 95% w/in 48 hours	NA	NA	Docket No. 96-86-TC, Draft Regulation (presumably adopted); Docket No. 95-515-TC, Qwest Exchange and Network Services Tariff, Section 2.2.2.A; Docket No. 94-192-TC, In the Matter of Held Orders of Qwest Communications

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
New York	Verizon	90% w/in 20 seconds	90% w/in 20 seconds	90% w/in 5 days	NA	NA	Manhattan: 85% of wire centers with 7 or less; Greater Metro: 79% of wire centers with 7 or less; All other: 83% of wire centers with 7 or less; Worst 10 wire centers: 3.1 to 3.5	Manhattan: 80% w/in 24 hours; Greater Metro: 76% w/in 24 hours; All other: 78% w/in 24 hours	NA	NA	Docket No. 92-C-0665: Performance-Based Incentive Regulatory Plans for New York, dated 06/16/95.
North Carolina	BellSouth	90% w/in 10 seconds	90% w/in 10 seconds	90% w/in 5 days	NA	Less than 0.1% greater 30 days	4.75	95% w/in 24 hours	NA	NA	Rules and Regulations of the North Carolina Utilities Commission, Rule R9-8.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
North Dakota	Qwest	NA	NA	NA		NA	NA	NA	NA	NA	None
Ohio	SBC	100% w/in 60 seconds; if ARU then connect to live person w/in 10 seconds	100% w/in 60 seconds; if ARU then connect to live person w/in 10 seconds	100% w/in 5 days		NA	3	100% w/in 24 hours	NA	NA	Case No. 96-1175-TP-ORD, Finding and Order, Attachment: Minimum Telephone Service Standards, Rule 4901:1-5-24.
Oklahoma	SBC	75% to 85% w/in 20 seconds	75% to 85% w/in 20 seconds	95% w/in 4 days	NA	100% w/in 30 days	0 to 300 lines: 12 301 to 2,000 lines: 9 2,001+ lines: 7	90% by end of next day	NA	NA	Oklahoma Corporation Commission Rules, Title 165, Chapter 55, Subchapter 13, Sections 1, 23 and 50.
Oregon	Qwest	85% w/in 20 seconds  Less than 1% experience busy indication	85% w/in 20 seconds  Less than 1% experience busy indication	90% w/in 6 days	90%	2 per wire center; 4 per 1,000 inward orders	2.0 per wire center (4 or more months in a 12 month rolling average)	95% w/in 48 hours	99%	98% w/in 3 seconds	Oregon Administrative Rules, Section 860-023-0055.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Pennsylvania	Verizon	85% w/in 20 seconds	85% w/in 20 seconds	Primary orders: 95% w/in 5 days Secondary orders: 90% w/in 20 days	NA	NA	5.5	Emergencies: 100% w/in 3 hours; Non-emergencies: 100% w/in 24 hours	NA	NA	The Pennsylvania Code Sections 52.63.57 to 52.63.59.
Rhode Island	Verizon	NA	100% w/in 14 seconds	88% w/in 5 days	NA	NA	4	60% w/in 24 hours	NA	NA	Docket 2370: Price Regulation Plan, Appendix B, dated 06/14/96.
South Carolina	BellSouth	NA	90% w/in 20 seconds	85% w/in 5 days	NA	NA	0 to 7,500 lines: 5; 7,500+ lines: 7	85% w/in 24 hours	NA	NA	South Carolina Administrative Code Section 103-663.1, 663.5, 663.6 and 663.7.
South Dakota	Qwest	NA	NA	NA	NA	NA	NA	NA	NA	NA	South Dakota Administrative Rules, Section 20:10:33.
Tennessee	BellSouth	NA	NA	0 to 3,000 lines: 75% w/in 5 days; 3,000+ lines: 85% w/in 5 days.	NA	NA	0 to 3,000 lines: 9.5; 3,001 to 14,000 lines: 6.5; 14,001+ lines: 6.	NA	NA	NA	Tennessee Administrative Code Section 1220-4-2-.15, 1220-4-2-.29(4), 1220-4-2-.35, and 1220-4-2-.39.
Texas	SBC	90% w/in 20 seconds	90% w/in 20 seconds	95% w/in 5 days	NA	Less than 1% over 30 days	6	90% w/in 8 hours	NA	NA	Texas Substantive Rules, Section 23.61.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Utah	Qwest	NA	NA	NA	NA	NA	NA	100% w/in 48 hours	NA	NA	Utah Public Service Commission Rules R746-340-5.
Vermont	Verizon	85% w/in 20 seconds	85% w/in 20 seconds	90% w/in 5 days	NA	NA	6	90% w/in 5 days	NA	NA	Docket No, 5903: Position Paper on Service Quality for Retail Telecomm. Services dated 04/04/97 (not yet adopted but adoption recommended 05/99)
Virginia	BellSouth	85% w/in 20 seconds	85% w/in 20 seconds	90% w/in 5 days	NA	NA	6	NA	NA	NA	20 VAC 5-400-80
Washington	Qwest	NA	80% w/in 30 seconds	90% w/in 5 days	NA	Less than 1% over 90 days	4	100% w/in 2 days	NA	NA	Washington Administrative Code, Sections 480-120-151, 480-120-510, 480-120-520 and 480-120-525.
West Virginia	BellSouth	NA	NA	100% w/in 5 days	NA	0% over 30 days	7	100% w/in 24 hours	NA	NA	150 CSR 6.2 to 6.6.

STATE	COMPANY	BUSINESS OFFICE RESPONSE	REPAIR OFFICE RESPONSE	PROVISIONING	COMMITMENTS MET	HELD ORDERS	TROUBLE REPORTS PER 100	OOS REPAIR	NETWORK CALL COMPLETION	DIAL TONE	CODE
Wisconsin	SBC	NA	100% w/in 10.75 to 13.14 seconds	100% w/in 2.92 to 3.57 days	NA	NA	18.29 to 22.36	100% w/in 10.99 to 13.43 hours	NA	NA	Docket No. 2180-T1-113: Findings of Fact, Conclusions of Law, and Final Order, Appendix D dated 11/20/97.
Wyoming	Qwest	85% w/in 20 seconds	85% w/in 20 seconds	100% w/in 5 days	NA	Less than 2% or 10 whichever is smaller	5	90% w/in 24 hours (averaged)	NA	NA	General Order 73, Record No. 3782, Notice of Intent to Adopt New Rules and Regulations and Notice of Additional Comment Period, 05/12/99.