## Subchapter C. QUALITY OF SERVICE.

#### §26.54. Service Objectives and Performance Benchmarks.

(a) This section establishes service objectives that should be provided by a dominant certificated telecommunications utility (DCTU), as applicable. The section outlines performance benchmark levels for each exchange. If service quality falls below the applicable performance benchmark for an exchange, that indicates a need for the utility to investigate, take appropriate corrective action, and provide a report of such activities to the commission. The objective service levels are based on monthly averages, except for dial service and transmission requirements, which are based on specific samples. DCTUs shall make measurements to determine the level of service quality for each item included in this section. Each DCTU shall provide the commission with the measurements and summaries for any of the items included herein on request of the commission. Records of these measurements and summaries shall be retained by the DCTU as specified by the commission.

## (b) One-party line service and voice band data.

- (1) One-party line service will be made available to all subscribers of local exchange service upon request.
- (2) All open wire transmission media shall be replaced with more reliable and better quality transmission media by the end of 1998, unless otherwise exempted by the commission. Any utility that obtained an exemption from this requirement shall file a report with the commission on the status of its open wire replacement program by June 1, 2000, and if all open wire replacement is not complete by that date, every three months thereafter until the replacement program is complete.
- (3) All switched voice circuits shall be adequately designed and maintained to allow transmission of at least 14,400 bits of data per second when connected through an industry standard modem (ITU-T V.32bis or equivalent) or a facsimile machine (ITU-T V.17 or equivalent).
- (c) The DCTU shall comply with the service quality objectives established below in providing the basic telecommunications service to its end-use customers. The DCTU shall file its service quality performance report on a quarterly basis. The report shall include its monthly performance for each category of performance objective and a summary of its corrective action plan for each exchange in which the performance falls below the benchmark. Additionally, the corrective action plan shall include, at a minimum, details outlining how the needed improvements will be implemented within three months and result in performance at or above the applicable benchmark.
  - (1) **Installation of service.** Unless otherwise provided by the commission:
    - (A) Ninety-five percent of the DCTU's service orders for installing primary service shall be completed within five working days, excluding those orders where a later date was specifically requested by the customer. Performance Benchmark Applicable for Corrective Action: If the performance is below 95% in any exchange area for a period of three consecutive months, the DCTU shall provide a detailed corrective action plan for such exchanges or wirecenters.
    - (B) Ninety percent of the DCTU's service orders for regular service installations shall be completed within five working days, excluding those orders where a later date was specifically requested by the customer. This includes orders for primary and other services, installations, moves, or changes, but not complex services. Performance Benchmark for Corrective Action: If the performance is below 90% in any exchange area for a period of three consecutive months the DCTU shall provide a detailed corrective action plan for such exchanges or wirecenters.
    - (C) Ninety-nine percent of the DCTU's service orders for service installations shall be completed within 30 days. Performance Benchmark for Corrective Action: If the performance is below 99% in any exchange area for a period of three consecutive

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months, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter.

- (D) One-hundred percent of the DCTU's service orders for service installations shall be completed within 90 days.
- (E) Each DCTU shall establish and maintain installation time commitment guidelines for the various complex services contained in its tariff. Those guidelines should be available for public review and should be applied in a nondiscriminatory manner.
- (F) The installation interval measurements outlined in subparagraphs (A) (D) and (H) of this paragraph shall commence with either the date of application or the date on which the applicant qualifies for service, whichever is later.
- (G) The DCTU shall provide to the customer a due date on which the requested installation or change shall be made. If a customer requests that the work be done on a regular working day later than that offered by the DCTU, then the customer's requested date shall be the commitment date. If a premises visit is required, the DCTU shall schedule an appointment period with the customer for morning or afternoon, not to exceed a four-hour time period, on the due date. If the DCTU is unable to keep the appointment, the DCTU shall attempt to notify the customer by a telephone call and schedule a new appointment. If unable to gain access to the customer's premises during the scheduled appointment period, the DCTU carrier representative shall leave a notice at the premises advising the customer how to reschedule the work.
- (H) Ninety percent of the DCTU's commitments to customers for the date of installation of service orders shall be met, excepting customer-caused delays. Performance Benchmark Applicable for Corrective Action: If the performance is below 90% in any exchange area for a period of three consecutive months, the DCTU shall submit a list of missed commitments to the commission and provide a detailed corrective action plan for such exchange or wirecenter.
- (I) The installation interval and commitment requirements of subparagraphs (A) (D) and (H) of this paragraph do not include service orders either to disconnect service or to make only record changes on a customer's account.
- (J) A held regrade order is one not filled within 30 days after the customer has made application for a different grade of service except where the customer requests a later date. In the event of the DCTU's inability to so fill such an order, the customer should be advised and told when the DCTU can fulfill the order. The number of held regrade orders shall not exceed 1.0% of the total number of customer access lines served.
- (2) **Operator-handled calls.** DCTUs shall maintain adequate personnel to provide an average operator answering performance as follows for each exchange on a monthly basis:
  - (A) Eighty-five percent of toll and assistance operator calls answered within ten seconds, or average answer time shall not exceed 3.3 seconds. Benchmark for Corrective Action: If the performance is either below 85% within ten seconds or if the average exceeds 3.3 seconds at any answering location in any given month, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter.
  - (B) Ninety percent of repair service calls shall be answered within 20 seconds or average answer time shall not exceed 5.9 seconds. Benchmark for Corrective Action: If the performance is below 90% within 20 seconds or the average answer time exceeds 5.9 seconds at any answering location for a period of five days within any given month, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter.

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- (C) Eighty-five percent of directory assistance calls shall be answered within ten seconds or the average answer time shall not exceed 5.9 seconds. Benchmark for Corrective Action: If the performance is either below 85% within ten seconds or if the average answer time exceeds 5.9 seconds at any answering location in any given month, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter.
- (D) An "answer" shall mean that the operator, interactive voice system, or representative, is ready to render assistance and/or ready to accept information necessary to process the call. An acknowledgment that the customer is waiting on the line shall not constitute an "answer."
- (E) DCTUs may measure answer time on a toll center or operating unit basis in lieu of measuring answer time in each exchange unless specifically requested by the commission
- (3) **Local dial service.** Sufficient central office capacity and equipment shall be provided to meet the following requirements:
  - (A) dial tone within three seconds on 98% of calls. For record-keeping and reporting purposes, 96% in three seconds during average busy season and/or busy hour shall be acceptable as complying with this requirement;
  - (B) completion of 98% of intraoffice calls (those calls originating and terminating within the same central office building) without encountering an equipment busy condition (blockage) or equipment failure;
  - (C) for every switch that serves customers, the availability factor for stored program controlled digital and analog switching facilities shall be 99.99%, or the total unscheduled outage for each switch shall not exceed 53 minutes per year.
  - (D) A report detailing the cause and proposed corrective action for the local dial service measures, for any exchange that falls below the established performance objective level, must be submitted to the commission.

## (4) Local interoffice dial service.

- (A) Each DCTU shall provide and maintain interoffice trunks on its portion of the local exchange service network so that 97% of the interoffice local calls excluding calls between central offices in the same building are completed without encountering equipment busy conditions or equipment failures. For DCTUs' testing, record-keeping, and reporting purposes, DCTUs are not required to separate local dial service results from local interoffice dial service results unless specifically requested by the commission.
- (B) The availability factor for stored program controlled digital and analog switching and interoffice transmission facilities for end-to-end transmission shall be 99.93%, or the total unscheduled outage shall not exceed 365 minutes per year.
- (C) A report detailing the cause and proposed corrective action for the local dial service measures, for any exchange that falls below the established performance objective level, must be submitted to the commission.
- (5) **Direct distance dial service.** Engineering and maintenance of the trunk and related switching components in the toll network shall permit 97% completion on properly dialed calls, without encountering failure because of blockages or equipment irregularities. A report detailing the cause and proposed corrective action for the direct distance dial service measure, for any exchange that falls below the established performance objective level, must be submitted to the commission.

#### (6) Customer trouble reports.

(A) The DCTU that serves more than 10,000 access lines shall maintain its network service in a manner that it receives no more than three customer trouble reports on a

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company-wide basis, excluding customer premises equipment (CPE) reports, per 100 customer access lines per month (on average). Performance Benchmark Applicable for Corrective Action: If the customer trouble report exceeds 3.0% (three per 100 access lines) for a large exchange or 6.0% (six per 100 access lines) for a smaller exchange for three consecutive months, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter. For purposes of this section, a large exchange is defined as serving 10,000 or more access lines and a small exchange is defined as serving less than 10,000 access lines.

- (B) The DCTU that serves 10,000 or less access lines shall maintain its network service in a manner that it receives no more than six customer trouble reports on a company-wide basis, excluding customer premises equipment (CPE) reports, per 100 customer access lines per month (on average). Performance Benchmark Applicable for Corrective Action. If the customer trouble report exceeds 6.0% (six per 100 access lines) per exchange for three consecutive months, the DCTU shall provide a detailed corrective action plan for such exchange or wire center.
- (C) The DCTU shall provide to the customer a commitment time by which the trouble will be cleared. If a premises visit is required, the DCTU shall schedule an appointment period with the customer for the morning or afternoon, not to exceed a four-hour time period. When the DCTU cannot keep an appointment, the DCTU shall attempt to notify the customer by a telephone call and schedule a new appointment. If unable to gain access to the customer's premises during the scheduled appointment period, the DCTU representative shall leave a notice at the premises advising the customer how to reschedule the work.
- (D) At least 90% of out-of-service trouble reports on service provided by a DCTU shall be cleared within eight working hours, except where access to the customer's premises is required but not available or where interruptions are caused by unavoidable casualties and acts of God affecting large groups of customers. Performance Benchmark Applicable for Corrective Action: If the performance is below 90% in any exchange area for a period of three consecutive months, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter.
- (E) Each DCTU shall establish procedures to insure the prompt investigation and correction of trouble reports so that the percentage of repeated trouble reports on residence and single line business lines does not exceed 22% of the total customer trouble reports on those lines. Performance Benchmark Applicable for Corrective Action: If repeat reports exceed 22% of the total customer trouble report in any exchange for three consecutive months, the DCTU shall provide a detailed corrective action plan for such exchange or wirecenter.
- (7) **Transmission requirements.** All voice-grade trunk facilities shall conform to accepted transmission design factors and shall be maintained to meet the following objectives when measured from line terminals of the originating central office to the line terminals of the terminating central office. A periodic report for central offices or exchanges as requested by the commission staff shall be provided by the DCTU, in order to demonstrate compliance with the following objectives.
  - (A) Interoffice local exchange service calls. Excluding calls between central offices in the same building, 95% of the measurements on the network of a DCTU should have from two to ten decibels loss at 1000+20 hertz and no more than 30 decibels above reference noise level ("C" message weighting).

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- (B) Direct distance dialing. Ninety-five percent of the transmission measurements should have from three to 12 decibels loss at 1000+20 hertz and no more than 33 decibels above reference noise level ("C" message weighting).
- (C) Subscriber lines. All newly constructed and rebuilt subscriber lines shall be designed for a transmission loss of no more than eight decibels from the serving central office to the customer premises network interface. All subscriber lines shall be maintained so that transmission loss does not exceed ten decibels. Subscriber lines shall in addition be constructed and maintained so that metallic noise does not exceed 30 decibels above reference noise level ("C" message weighting) on 90% of the lines. Metallic noise shall not exceed 35 decibels above reference noise level ("C" message weighting) on any subscriber line.
- (D) PBX, key, and multiline trunk circuits. PBX, key, and multiline trunk circuits shall be designed and maintained so that transmission loss at the subscriber station does not exceed eight decibels. If the PBX or other terminating equipment is customerowned and if transmission loss exceeds eight decibels the DCTU's responsibility shall be limited to providing a trunk circuit with no more than five decibels loss from the central office to the point of connection with customer facilities.
- (E) Impulse Noise Limits. The requirements for impulse noise limits shall be as follows:
  - (i) For switching offices, the noise level count shall not exceed five pulses above the threshold in any continuous five minute period on 50% of test calls. The reference noise level threshold shall be less than: 54 dBrnC for Crossbar switch, 59 dBrnC for step-by-step switch, and 47 dBrnC for electronic or digital switch.
  - (ii) For trunks, the noise level count shall not exceed five pulses above the threshold in any continuous five minute period on 50% of trunks in a group. The reference noise level threshold shall be less than 54 dBrnCO for voice frequency trunks, and 62 dBrnCO for digital trunks.
  - (iii) For loop facilities, the noise level count shall not exceed 15 pulses above the threshold in any continuous 15 minute period on any loop. The reference noise level threshold shall be less than 59 dBrnC when measured at central office (CO), or referred to CO through 1004 Hz loss.