

Rule 002

(Formerly EUB Directive 002)

Electric Distribution System Owner (Wire Owner) Service Quality and Reliability Performance, Monitoring, and Reporting Rules

The Alberta Utilities Commission (AUC/Commission) has approved this rule on January 2, 2008.

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1 (1) Definitions and Application

In these rules,

- (a) “Annual Report” means the annual quality of service measurement report;
- (b) “Commission” means the Alberta Utilities Commission;
- (c) “electric distribution system” has the meaning ascribed to the term in the EUA.
- (d) “EUA” means the *Electric Utilities Act*;
- (e) “MDM Performance Metrics” means the activities performed by meter data managers with respect to the collection and reporting of meter data, as defined in section 11 of the Settlement System Code
- (f) “Settlement System Code or SCC” means the Settlement System Code established by the AUC Settlement System Code Rules;
- (g) “Wire Owner” means the owner of an electric distribution system.

(2) These rules apply a Wire Owner under the Commission’s jurisdiction.

2 Measurement and Reporting Protocol

For the purpose of collecting data and reporting on performance in each of the categories established in Section 3, the Wire Owner must comply with the following information filing requirements:

- 1) Reporting periods shall be calendar quarters, with quarterly reports submitted to the Commission by the last day of the month following the end of each quarter (Quarterly Report), except for the measures detailed in Section 3, paragraphs 3.3 and 3.4, which must be reported annually as part of the Annual Report.
- 2) Submission of the Annual Report shall be due no later than the last day of February following the end of the calendar year.
- 3) For the purpose of preparing the Quarterly Report, performance results must be aggregated and reported as follows:
 - Performance results for the measures detailed in Section 3, paragraph 3.1, must be aggregated in accordance with the provisions of Section 12.2.1 of the Settlement System Code, and reported using the three most recent MDM Performance Metrics Reporting submissions.
 - Performance results for the measures detailed in Section 3, paragraphs 3.2 and 3.6 (if applicable), must be aggregated monthly and quarterly and reported as monthly and quarterly averages.

- Performance results for the measures detailed in Section 3, paragraph 3.5, must be aggregated monthly and quarterly and reported as monthly and quarterly averages.
- 4) For the purpose of preparing the Annual Report, performance results must be aggregated and reported as follows:
- Performance results for the measures detailed in Section 3, paragraph 3.1, must be aggregated in accordance with the provisions of Section 12.2.1 of the Settlement System Code, and reported using the twelve most recent MDM Performance Metrics Reporting submissions.
 - Performance results for the measures detailed in Section 3, paragraphs 3.2 and 3.6 (if applicable), must be aggregated monthly and annually and reported as monthly and annual averages.
 - Performance results for the measures detailed in Section 3, paragraphs 3.3, 3.4.1, 3.4.2, and 3.4.3, must be aggregated and reported as a five-year rolling average.
 - Performance results for the measures detailed in Section 3, paragraph 3.4.4, must be aggregated annually and reported as an analysis of the worst-performing circuits.
 - Performance results for the measures detailed in Section 3, paragraph 3.5 must be aggregated monthly and annually and reported as monthly and annual averages.

Quarterly and annual averages must be derived from raw data, not by averaging monthly averages.

- 5) Performance must be evaluated and reported to one decimal place for all performance categories unless otherwise specified. Actual performance must be rounded up when the second decimal place is 5 or more.
- 6) The Wire Owner must retain all of its reports that support the results for each of the performance categories for a period of not less than 24 months after the results are reported. The Wire Owner must provide these reports to the Commission upon request.
- 7) The Wire Owner must advise the Commission of any change to the Wire Owner's measurement protocol or to the internal reporting methods used to obtain the data measured related to this rule and provide an explanation for the change. The Wire Owner must report missing data or other events that could reasonably affect the quality of the data immediately after becoming aware of the missing data or events. Any data related to this rule that reflects significantly altered measurement procedures or internal data acquisition methods shall be subject to Commission review and approval.
- 8) If the Commission is satisfied that exceptional circumstances exist, the Commission may waive any applicable performance standard upon request by the Wire Owner. The burden shall be on the Wire Owner to demonstrate that its level

of preparedness and response was reasonable in light of the circumstances surrounding the failure to meet the standard.

- 9) The Wire Owner must initiate a meeting with the Commission at least once annually to discuss service quality issues, trends in service quality data reported by the Wire Owner, including any corrective action plans proposed by the Wire Owner to remedy failing performance standards, issues raised by customer complaints filed with the Commission, and other policy issues relating to customer service. Meetings may occur more frequently at the Commission's discretion.

3 Performance Categories and Standards

This section establishes the performance categories and, where applicable, the standards to be met by Wire Owners and outlines the information required by the Commission for it to accomplish its surveillance function with respect to service quality standards as provided for under this plan.

3.1 Meter Reading Performance Measures

The performance metric established by the Settlement System Code for entities having meter-reading responsibilities as outlined in Section 11.4 of the Settlement System Code have been adopted to measure and report meter-reading performance.

3.1.1 Percentage of Cumulative Meters with Readings Obtained Within the Data Collection Cycle Requirements of the Settlement System Code

This metric tracks the percentage of cumulative meters actually read within a given two-month period in relation to the total number of cumulative meters within the meter-reading responsibility of the Wire Owner. It must be calculated as follows:

$$\frac{\text{Number of cumulative meters with readings less than or equal to 65 days}}{\text{Number of cumulative meter sites in Wire Owner's meter-reading responsibility as at the last day of the second month}} \times 100\%$$

The standard, as established by section 11.4.1.1 of the Settlement System Code, states that at least one meter reading from 100% of cumulative meters shall be obtained every two months using one of the approved meter reads as defined in section 11.4.1.2 of the Settlement System Code. If a Wire Owner is unable to comply with the standard, then they must document the reasons and be able to provide upon request.

Performance must be reported as a percentage number without decimal places.

No standard will be in effect for this performance measure at this time as the Commission will undertake further discussions on the standard set out above with the Wire Owners.

3.2 Work Completion Performance Measures

The data source for the work completion measurement must be the Wire Owner's work management system or similar tracking system. The Wire Owner must track the requested work or service orders by service category. The list of the service categories includes the services that the Settlement System Code requires the Wire Owner to perform. Appendix A lists the work completion measures currently identified for purposes of the plan.

3.2.1 Percentage of Retailer-Requested Work Completed Within the Suggested Timing Notification Requirements of the *Settlement System Code*

This metric tracks, by service category, the percentage of retailer-initiated requests for fieldwork service completed within the timing notification requirements proposed by the Settlement System Code.

The performance information is to be provided in chart form, with the percentage of work completed within the proposed timing notification requirements established by the Settlement System Code indicated for each of the service categories identified.

3.3 Worker Safety Performance Measures

The performance indices developed by the Canadian Electricity Association (CEA) must be adopted to measure worker safety performance. The current CEA definitions for determining worker safety performance measures are adopted.

3.3.1 All Injury/Illness Frequency Rate

This measure is defined as the total number of medical aid injuries, disabling injuries, and fatalities experienced by the Wire Owner in a calendar year multiplied by 200 000 and divided by the number of employee exposure hours worked in a calendar year. The All Injury/Illness Frequency Rate must be reported as a five-year rolling average, calculated in accordance with the CEA requirements and definitions.

$$\frac{(\text{Disabling Injuries} + \text{Medical Aid Injuries} + \text{Fatalities}) \times 200\,000}{\text{Total Hours Worked by Wire Owner's Employees per Calendar Year}}$$

Injury/illness cases are the total number of incidents that result in the employee missing work or requiring medical attention as a result of an injury sustained while performing work for the Wire Owner. Injury/illness cases are recorded in the Wire Owner's accident log, which is maintained by the Wire Owner's employee safety department.

3.3.2 Motor Vehicle Accident Frequency Rate

This measure is defined as the number of recordable accidents experienced by the Wire Owner for a calendar year multiplied by 1 000 000 and divided by the number of kilometres driven. A recordable accident is any occurrence involving a Wire Owner's vehicle that results in death, injury, or property damage, unless the vehicle is

properly parked. The Motor Vehicle Accident Frequency Rate must be reported as a five-year rolling average, calculated in accordance with the CEA requirements and definitions.

$$\frac{\text{Number of Recordable Accidents} \times 1\,000\,000}{\text{Kilometres Driven}}$$

3.4 Reliability Performance Measures

The performance indices developed by the CEA must be adopted to measure electric distribution system performance and reliability.

3.4.1 System Average Interruption Frequency Index (SAIFI)

This measure pertains to distribution-related interruptions and is defined as the average number of times that a customer is interrupted during a year. It is determined by dividing the total annual number of customers interrupted by the average number of customers served during the year. A customer interrupted is considered to be one interruption to one customer and includes all sustained interruptions, planned and unplanned, regardless of the cause. Performance must be calculated as follows:

$$\frac{\text{Annual Total Number of Customer Interruptions}}{\text{Average Number of Customers Served During the Year}}$$

Performance must be reported to two decimal places.

3.4.2 Customer Average Interruption Duration Index (CAIDI)

This measure pertains to distribution-related interruptions and measures the average length of time required to restore service to a customer affected by an interruption. It is determined by dividing the total duration of all service interruptions in a year by the number of customer service interruptions in that year. Performance must be calculated as follows:

$$\frac{\text{Total Customer-Hours of Interruptions}}{\text{Total Customer Interruptions}}$$

Performance must be reported to two decimal places.

3.4.3 System Average Interruption Duration Index (SAIDI)

This measure pertains to distribution-related interruptions and is defined as the average interruption duration time for customers that experience an interruption during the year. It is determined by dividing the total duration of all service interruptions in a year by the average number of customers served during the year. Performance must be calculated as follows:

Annual Total Customer-Hours of Interruptions
Average Number of Customers Served During the Year

Performance must be reported to two decimal places.

3.4.4 Worst-Performing Circuits on the System

For each calendar year, the Wire Owner must identify the top 3% of worst performing circuits on its system based on the Wire Owner's formalized evaluation process for determining worst-performing circuits. The Wire Owner must identify the factors underlying the poor performance of these circuits and report annually to the Commission the actions that are being considered or have been implemented to improve the reliability of these circuits. All circuits that have been identified according to this standard must be monitored each year over a five-year period to determine the effectiveness of the improvement measures and to identify further measures that may be required.

3.5 Call Answer Performance Measures

The Wire Owner's call centre is a centralized facility that is either established or outsourced by the Wire Owner to handle calls and other inquiries between customers and the Wire Owner's customer service representatives. Calls to an outage or emergency call centre are to be excluded from the calculations of call answer performance.

Data for call answer performance measures must be obtained from monitoring applications used on the Wire Owner's telephone switch and, if applicable, the Wire Owner's interactive voice response (IVR) system. The reports available on the phone switch include the historical number of calls that have been transferred by the IVR to the Wire Owner's call centre automated call distribution (ACD).

3.5.1 Call Answering Service Level

This measure tracks the percentage of attempted calls that within 30 seconds successfully reach a Wire Owner's representative who is ready to accept or provide information. The data include all calls transferred from the IVR to the call centre ACD. The measure must be calculated as a monthly average as follows:

$$\frac{\text{Number of Calls Reaching Wire Owner's Representative Within 30 Seconds}}{\text{Number of Attempts to Reach a Wire Owner's Representative}}$$

The minimum performance standard for Call Answering Service Level is 70%.

3.5.2 Abandon Rate

This measure tracks the percentage of all attempted calls to reach a Wire Owner's representative that are abandoned after being transferred from the IVR to the call centre ACD. The measure must be calculated as a monthly average as follows:

$$\frac{\text{Number of All Calls Abandoned}}{\text{Number of Attempts to Reach a Wire Owner's Representative}}$$

The performance for this standard must not exceed 5%.

3.6 Customer Satisfaction Measures

3.6.1 Percentage of Customer Satisfaction Following Customer-Initiated Contact with the Wire Owner

For this measure, the Wire Owner must report the level of customer satisfaction using the results from its internal customer satisfaction survey process or using the results from the survey process of an independent third-party agency. Wire Owners that conduct surveys on an ongoing basis throughout the year must report the results quarterly. Wire Owners that conduct surveys on an annual basis must report the results as part of the Annual Report. The Wire Owner must use the sampling method described in Appendix B. The survey instrument must be a telephone questionnaire using survey questions provided by the Commission in addition to any questions that the Wire Owners may add.

The minimum performance standard for this customer performance measure is 75% of customers satisfied with their last transaction with the Wire Owner.

3.6.2 Complaint Response

A complaint is a written or verbal expression of grievance or dissatisfaction from a customer about a decision, action taken, or failure to act by the Wire Owner that

- was received by the Commission, or
- was not resolved by the Wire Owner's customer service representative after the initial customer contact and needed to be escalated internally by the Wire Owner.

A request for information about the Wire Owner is not considered a complaint for the purposes of this rule.

If the complaint is in writing and is referred to the Wire Owner by the Commission, the Wire Owner must prepare a report, including supporting documentation, outlining the Wire Owner's understanding of the nature of the complaint, the customer's expected outcome, the findings of the Wire Owner, and the actions taken or to be taken by the Wire Owner to satisfy the customer's expectations (Complaint Report).

The Wire Owner must provide Complaint Reports to the Commission according to the following standards:

- i. 80% of the complaints directed to the Wire Owner in any given month must be investigated and a Complaint Report provided within 14 calendar days of receipt of the complaint; and

- ii. 100% of the complaints directed to the Wire Owner in any given month must be investigated and a Complaint Report provided within 30 calendar days of receipt of the complaint.

If the Wire Owner needs additional time to fully resolve a complaint and provide a Complaint Report, the Wire Owner must request a specific additional time for response within the initial 30-day period and provide a full resolution of the complaint within the requested additional time.

If a verbal complaint is received by the Commission, the Commission will notify the Wire Owner of the information forming the basis of the complaint and provide the Wire Owner with an opportunity to investigate the accuracy of the information and provide its findings to the Commission. Thereafter, the Commission will make a determination to either dismiss the complaint or to refer it to the Wire Owner to address.

If the complaint is made directly to the Wire Owner, either verbally or in writing, the Wire Owner must investigate the matter using methods reasonable under the circumstances.

The Wire Owner must report the actual number of complaints investigated in a given month, as well as the number of complaints for which the Wire Owner did not provide a resolution to the complainant within 30 days of the escalation of the complaint.

Resolution, in the context of customer complaints, means that the Wire Owner has examined the complainant's claims, conducted any necessary investigation, and done one of the following:

- a) taken the action the customer requests;
- b) taken an action the customer and the Wire Owner agree is an acceptable compromise;
- c) provided the customer with information that demonstrates that the situation complained of is not reasonably within the control of the Wire Owner; or
- d) refused to take action the customer requested and communicated that refusal, including reasons, to the customer.

Appendix A Work Completion Performance Measures

This list represents service categories that the Wire Owner has the responsibility for performing in accordance with the Settlement System Code and that must be monitored and reported upon under this plan:

- a) Change in Metering Configuration at a Site (SMC Transactions)
- b) Energize Site (ENC Transactions)
- c) De-Energize Site (DEC Transactions)
- d) Off-cycle Meter Reads/Re-read Meters (ROC Transactions)

Appendix B Customer Satisfaction Survey Design

Customer Satisfaction Survey Following Customer-Initiated Contact with the Wire Owner

The focus of the Customer Satisfaction Survey is on residential, farm, irrigation, and small commercial customers who have recently contacted their Wire Owner. The survey will be limited to customers who contacted the Wire Owner through the company's call centre, the use of e-mail, or the Internet via the Wire Owner's Web site.

The Customer Satisfaction Survey is to include either a monthly or an annual study of customer contacts made with the Wire Owner within, at most, 30 days after the Wire Owner/customer interaction has taken place. The Wire Owner will select a random sample from its database of all customer contacts. The study must achieve a minimum of 400 completed interviews with Wire Owners each year. The recommended sample size of 400 is designed to have a $\pm 5\%$ sampling error at the 95% confidence level.

The Wire Owner must attempt to reach the person who contacted the Wire Owner. Customers who have been surveyed within the past 12 months shall be excluded from the survey, as shall customers who earlier indicated that they do not wish to be surveyed. Finally, through a survey question, any customer who has been employed by the Wire Owner within the past two years or whose household contains someone who has been employed by the Wire Owner within the past two years shall not be included in the survey. If the customer who contacted the Wire Owner is not available, up to two callbacks shall be completed in order to obtain the customer's opinion.

The survey must include questions to measure access to the Wire Owner, employee courtesy, employee knowledge, promptness and timeliness of the Wire Owner's response, and customer satisfaction with the interaction.

The survey questions must include those developed by the Commission. As part of the survey process, the questionnaire may be revised in the future if it is determined that the revision is necessary and results in better information. The Wire Owner is permitted to incorporate its own questions into the transaction survey, but the Commission survey questions must be asked first, followed by the Wire Owner-specific questions.