The Commonwealth of Massachusetts

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

INVESTIGATION INTO SERVICE QUALITY GUIDELINES
D.T.E. 04-116

FOURTH SET OF INFORMATION REQUESTS OF
THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY
TO ALL ELECTRIC LOCAL DISTRIBUTION COMPANIES

Pursuant to 220 C.M.R. 1.06(6)(c), the Department of Telecommunications and Energy ("Department") hereby submits the following information request(s) to all electric local distribution companies ("LDCs") with respect to Investigation into Service Quality Guidelines, D.T.E. 04-116.

INSTRUCTIONS

The following additional instruction applies to this set of Information Requests.

1. Please serve a copy of the responses on Mary Cottrell, Secretary of the Department, one copy to the Service List, and one copy of the responses to Jody M. Stiefel, Hearing Officer. Submit copies of the Company's responses to the information requests to the Department by **10:00 a.m., July 14, 2005**. In addition to filing, all non-proprietary responses should be submitted by e-mail to dte.efiling@state.ma.us , jody.stiefel@state.ma.us, and to the e-mail address of any party required to be served.

Requests

DTE-LDC 4-1 Do the current system wide SQ measures permit pockets of poor performance in terms of SAIDI, SAIFI, and CAIDI? If so, explain how such poor performing pockets can be identified, reduced, and eliminated.

DTE-LDC 4-2 Is it feasible for the current SQ measures SAIDI, SAIFI, and CAIDI to be at circuit level instead of at a system-wide level. Will this capture pockets of poor performance? If so, please describe:

(a) how can such change be undertaken; and
(b) what would be the advantage and disadvantage to the customers and to the distribution companies?

DTE-LDC 4-3 If the answer to DTE LDC 4-2 is no, please provide an alternative to DTE-LDC 4-2 that captures poorly performing circuits.

DTE-LDC 4-4 Please refer to Attachment A: Problem Circuit Remediation Index (PCRI).

(a) Would this proposed penalty measure improve the performance of problem circuits?

(b) What improvements could be made to the proposed program to enhance it?

(c) Is there an alternative method of improving performance of poorly performing circuits?

(d) The Department has allocated 45 percent of the potential penalty pool to SAIDI and SAIFI in Docket 99-84. If the Department was to approve the PCRI program, what percentage of the potential penalty pool should be allocated to PCRI?

DTE-LDC 4-5 Please refer to Attachment B: Major Safety Incident Index (MSII).

(a) Is it feasible for the Department to substitute this new MSII penalty measure for its existing Lost Work Time Accident measure for Electric Distribution Companies?

(b) What improvements could be made to the proposed program?

(c) If the Department were to approve the MSII penalty measure, what percentage of the potential penalty pool should be allocated to the MSII measure?

DTE-LDC 4-6 Do the Companies have any alternative penalty measures that would accomplish the goals of PCRI and MSII? Describe.

Attachment A: Problem Circuit Remediation Index (PCRI)

The purpose of this penalty measure is to improve the circuit quality of the worst performing circuits in any electric distribution company's service area.

Definitions

Worst performing circuits are defined as an electric distribution company's ten worst performing circuits within its entire service area, as reported in the Company's annual service quality report to the Department. The service area of a utility is an electric distribution Company's entire service territory.

Calculation of the Index

The Company shall calculate an index of circuit reliability. Circuit reliability will be defined as:

$$\frac{\text{Circuit SAIFI} * \text{Circuit SAIDI}}{\text{Number of Circuit Customers}}$$

This index will be calculated for all of an electric distribution company's circuits, including the worst ten circuits as indicated in the Company's last annual SQ Report to the Department. The Company will then compare the mean circuit reliability of the ten worst circuits to the mean circuit reliability of the remaining circuits. If the mean of the worst ten circuits falls more than one standard deviation from the mean of the remaining circuits, the Company will be subject to a monetary penalty.[1]

The worst ten circuits for a given year will continue to "age" until the circuit reliability index falls within the one standard deviation deadband. The same set of "worst circuits" for a given year will continue to be subject to penalty until they fall within one standard deviation of the remaining circuits of the company. That is, once chosen as "worst circuits" for that particular year, those designated circuits continue to be monitored until they fall, on average, within one standard deviation of all of the remaining circuits. When they fall within one standard deviation of the mean of the remaining circuits, that group shall be retired. This means, for each year there will be a new group of worst performing circuits. For example, in the second year, an additional group of the ten worst circuits will be selected, in the third year ten more circuits, and so on.[2]

All penalty calculations will be arrived at utilizing the current penalty formula introduced by the Department in Docket 99-84.

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[1] Companies will be subject to the penalty except for year 1.

[2] No duplicates will appear on the list of any consecutive classes.

Attachment B: Major Safety Incident Index (MSII)

This index is designed to track the major safety problems that may characterize the day-to-day operations of an electric distribution company. Included would be stray voltage incidents, explosions, and other threats to safety.

Definitions

A Major Safety Incident is described as follows:

Any incident, including accidents as defined in G.L. c. 164, § 95, occurring in the conduct of the day-to-day business operations of the utility that leads to: (1) human injury that requires the attention of a physician; (2) injuries to domesticated animals or livestock, or (3) property damage exceeding $5,000.

Injury to domesticated animals or livestock is defined as a health or bodily effect stemming from an incident or event connected with the operations of the utility that requires the attention of a veterinarian.

Property is defined as a possession of any person or entity that suffered damage exceeding $5,000 from an incident or event in the estimation of the utility company.

Calculation of the Index

The frequency of these incidents are to be tallied and a total arrived at quarterly and then accumulated to arrive at an annual total.

The first year of the gathering and calculation of the index will be for the purpose of developing a four-quarter benchmark for each company. Quarterly data will be integrated into the benchmark following each year of collection and reporting to the Department. Data will be integrated into the benchmark calculation for up to 20 quarters.

After Year 2, each company will be required to compare its annual performance to its mean, accumulated benchmark performance. If a company's performance for any year exceeds one standard deviation from its previous mean performance, the Company will be subject to a monetary penalty. The penalty calculation will be arrived at utilizing the current penalty formula introduced by the Department in D.T.E. 99-84.