	CA-NP-432
	(1 <sup>st</sup> Revision)
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Requests for Information	NP 2008 GRA

1 2 3 4 5	Q.	In the Fortis Inc. 2006 Annual Report (page 22), it is stated "The Company once again exceeded performance standards set by the Ontario Energy Board ("OEB") with respect to response times, service connections and telephone response statistics." What are these performance standards and on what basis were they established?
6 7 8 9 10 11	A.	In 2000, the Ontario Energy Board ("OEB") implemented Performance Based Regulation ("PBR"). In 2005, the OEB implemented a first revision to the Electricity Distribution Rate Handbook (the "Handbook") that contains the policies, guidelines and procedures to be used for establishing unbundled distribution rates for the PBR plan. <sup>1</sup>
12 13 14 15 16		On September 11, 2007 the OEB re-established the Working Group on the Review of Service Quality Regulation (Board File No. RP-2003-0190). The working group will reassess the appropriate service quality indicators to be used as inputs into the incentive regulation plan established by the OEB.
17 18 19 20		The Handbook effectively displaces the need for hearings to establish customer rates. Attachment A includes the performance standards which were set out in Chapter 15 of the revised Handbook. <sup>2</sup>

<sup>1</sup> 

Compliance with the Rate Handbook is a condition of licence for all electricity distribution utilities in Ontario. The May 2005 revision of the Electricity Distribution Rate Handbook made no change to the Service Quality 2 Regulation section with the exception of the underground cable locates indicator.

**Performance Standards in Chapter 15 of the Handbook** 

# Chapter 15

# **15 Service Quality Regulation**

# 15.0 Introduction

This chapter provides the definitions and reporting requirements of distribution service quality indicators, and the minimum standards set for the service quality indicators. In accordance with Section 2.1.4 of the Board's Reporting and Record-keeping Requirements, a distributor is required to report, by January 31, its service quality and reliability performance for the previous calendar year. A list of the service quality metrics that a distributors is required to measure and report on are provided in Table 15-1.

Table 15.1 Service Quality Indicators		
Customer Service	Service Reliability	
Connection of new services Underground cable locates	System average interruption duration index	
Appointments Telephone accessibility	System average interruption frequency index	
Written response to enquiries Emergency response	Customer average interruption duration index	

As part of its application for 2006 distribution rates, an applicant must file in Schedule 15-1 a summary of its annual service quality performance for 2002 to 2004.

The service quality indicators, the associated monitoring and reporting requirements and the minimum standards (where applicable) are described below. These standards represent the minimum acceptable performance levels. An distributor should continue to establish its operating performance at levels no less than the minimum standards, taking into consideration the needs and expectations of its customers.

In the absence of consistent historical service quality data, it was not possible to identify service degradation during first generation PBR. The Board has initiated an Service Quality Regulation review (RP-2003-0190) that may determine thresholds for service degradation and what regulatory actions should be taken to deal with instances of degraded service. As a result, no revisions to the SQIs will be made for the 2006 rate application process. With the exception of the underground cable

locates section, the rest of this Chapter largely repeats the material from the 2000 Handbook.

# 15.1 Customer Service Performance Indicators

A customer service indicator measures direct contact with the customer. In setting the customer service standards, minimum standard guidelines are provided that are intended to maintain customer service quality, while providing a distributor with flexibility to set service levels to the demands of their customers above the minimum guidelines. A distributors is expected to achieve the minimum standards for a specified percentage of the time.

#### 15.1.1 Connection of New Services

The connection of new services indicator measures the percentage of requests that are met within the required minimum performance standard.

As a minimum performance standard for the connection of new universal services, new low voltage (<750 volts) services must be connected within 5 working days from the day on which all conditions of service are satisfied, including electrical safety inspection, at least 90% of the time. New high voltage (>750 volts) service must be connected within 10 working days from the day on which all conditions of service are satisfied, including electrical safety inspection, at least 90% of the time.

The conditions of service that may need to be satisfied include the following:

- payment of connection fees
- signing of service contracts
- completion of distribution system extensions
- provision of adequate lead times for delivery of equipment
- receipt of an electrical safety inspection certificate

The distributor must monitor its performance monthly and report the information annually to the Board. The monthly information is to be reported as follows:

(1) number of new low voltage services connected

(2) number of new low voltage service connected within 5 working days

- (3) percentage of requests for new low voltage service met within 5 working days [((2\*100)/(1)]
- (4) number of new high voltage service connected
- (5) number of new high voltage service connected within 10 working days
- (6) percentage of requests for new high voltage service met within 10 working days [((5\*100)/(4)]

## 15.1.2 Underground Cable Locates

The underground cable locates indicator measures the percentage of requests for cable locates that are completed within the minimum performance standard.

The current minimum standard contained in the Board's service quality requirements is that underground cable locates must be completed within 5 working days of a customer's request, at least 90% of the time. For customers requesting a specific date, the locate must be completed within 5 working days of the requested date.

Since the service quality indicators were developed in 1999, Ontario Regulation 22/04 has been proclaimed in force, and Utility Advisory Council, working with the Electrical Safety Authority, has developed a "Guideline for Excavating in the Vicinity of Distribution Lines". The Regulation requires electricity distributors to respond to cable locate requests within a reasonable time. The Guideline indicates that the distributor shall make every reasonable effort to respond to notification requests and provide locates within 5 working days of notification. This five day standard may be shortened to two or three days as discussions at the Utility Advisory Council proceed.

Adherence to the standards set out in Regulation 22/04 is a legal requirement. The guidelines developed in consultation with the Utility Advisory Council received broad distributor input. Distributors are reminded that the Service Quality Indicators adopted by the Board represent minimum standards and were put in place by the Board to measure distributor performance over time. Under no circumstances should the SQIs be interpreted to suggest that the OEB is authorizing distributors to deviate from prevailing safety or engineering standards, standards set by law or standards contained in guidelines developed by other authorized regulatory agencies. The question of consistency between reported SQIs and technical and safety standards will be considered by the Board in its next review of its SQIs.

The cable locates included in this standard do not include emergency locates.

The distributor must monitor its performance monthly and report the information annually.

The monthly information is to be reported as follows:

- (1) number of cable locates requested
- (2) number of cable locates performed within 5 working days
- (3) percentage of requests met within 5 working days [((2\*100)/(1)]

# 15.1.3 Telephone Accessibility

The telephone accessibility indicator measures the percentage of incoming calls to the general enquiry telephone number answered within the minimum of the performance standard.

As a minimum standard, incoming calls to the general enquiry telephone number must be answered in person by an operator within 30 seconds, at least 65% of the time. The provision of a voice mailbox or answering machine does not constitute compliance with this measure.

The distributor must monitor its performance monthly and report the information annually.

The monthly information is to be reported as follows:

- (1) number of general enquiry telephone calls answered
- (2) number of general enquiry telephone calls answered within 30 seconds
- (3) percentage of general enquiry telephone calls answered within 30 seconds [((2\*100)/(1)]

# 15.1.4 Appointments Met

The appointments indicator measures the percentage of appointments at a customer's premises or work site that are met at the appointed time within the minimum performance standard.

As a minimum standard, when it is necessary to meet a customer at the customer's premises or work site to conduct utility business, customers must be offered a choice of morning or afternoon appointments. The appointments must be met at the

appointed time, at least 90% of the time. If the appointed time cannot be met, the distributor must notify the customer.

The distributor must monitor its performance monthly and report the information annually.

The monthly information is to be reported as follows:

- (1) number of appointments at a customer's premises or work site made
- (2) number of appointments at a customer's premises or work site kept at the appointed time
- (3) percentage of appointments at a customer's premises or work site made within minimum standard [((2\*100)/(1)]

#### 15.1.5 Written Responses to Enquiries

The written response to enquiries indicator measures the percentage of responses to enquiries that require written responses that are made within the minimum performance standard.

The minimum standard for responding to requests by a customer or an agent of the customer for written information relating to the customer's account, will be within 10 working days following receipt of the request. The written response time must be met at least 80% of the time.

The distributor must monitor its performance monthly and report the information annually.

The monthly information is to be reported as follows:

- (1) number of requests for written responses
- (2) number of requests for written responses provided within 10 working days
- (3) percentage of requests for written responses met within minimum standard [((2)\*100/(1)]

#### 15.1.6 Emergency Response

The emergency response indicator measures the percentage of emergency responses that are made within the minimum performance standard.

At a minimum, emergency trouble calls (e.g. fire, ambulance, police) will be responded to within 120 minutes in rural areas, and within 60 minutes in urban areas. The definition of rural and urban should correspond to the municipality's definition. The arrival of a qualified service person on site will constitute the response. The minimum standards must each be met at least 80% of the time.

The distributor must monitor its performance monthly and report the information annually.

The monthly information is to be reported as follows:

- (1) number of emergency calls for rural customers
- (2) number of emergency calls for rural customers at which qualified staff were on site within 120 minutes
- (3) percentage of emergency calls for rural customers met within 120 minutes [((2\*100)/(1)]
- (4) number of emergency calls for urban customers
- (5) number of emergency calls for urban customers at which qualified staff were on site within 60 minutes
- (6) percentage of emergency calls for urban customers met within 60 minutes [((5\*100)/(4)]

# 15.2 Service Reliability Indices

Service reliability indices measure system outage statistics. The monitoring and reporting of service reliability indices are intended to encourage distributors to maintain or improve the existing service reliability performance of its electrical distribution system.

# 15.2.1 System Average Interruption Duration Index (SAIDI)

SAIDI is an indicator of system reliability that expresses the length of outage customers experience in the year on average. All planned and unplanned interruptions of one minute or more should be used to calculate this index. It is defined as the total hours of power interruptions normalized per customer served, and is expressed as follows:

 $SAIDI = \frac{Total \ Customer \ Hours \ of \ Interruption}{Total \ Number \ of \ Customers \ Served}$ 

A distributor is required to monitor this index monthly and to report to the Board on an annual basis.

A distributor that has at least 3 years of data on this index should, at minimum, remain within the range of its historical performance.

The monthly information is to be reported as follows:

- (1) total customer-hours of interruptions
- (2) total number of customers served
- (3) SAIDI [(1)/(2)]

# 15.2.2 System Average Interruption Frequency Index (SAIFI)

SAIFI is an indicator of the average number of interruptions each customer experiences. All planned and unplanned interruptions of one minute or more should be used to calculate this index. It is defined as, the number of interruptions normalized per customer served, and it is expressed as follows:

 $SAIFI = \frac{Total \, Customer \, Interruptions}{Total \, Number \, of \, Customers \, Served}$ 

A distributor is required to monitor this index monthly and to report to the Board on an annual basis.

A distributor that has at least 3 years of data on this index should, at minimum, remain within the range of their historical performance.

The monthly information is to be reported as follows:

- (1) total number of customer interruptions
- (2) total number of customers served
- (3) SAIFI [(1)/(2)]

## 15.2.3 Customer Average Interruption Duration Index (CAIDI)

CAIDI is an indication of the speed at which power is restored. All planned and unplanned interruptions of one minute or more should be used to calculate this

index. It is defined as the average duration of interruptions in the year, and it is expressed as follows:

 $CAIDI = \frac{SAIDI}{SAIFI} = \frac{Total \ Customer \ Hours \ of \ Interruption}{Total \ Customer \ Interruptions}$ 

A distributor is required to monitor this index monthly and to report to the Board on an annual basis.

	Table 15.2 Cause of Service Interruption		
Code	Cause		
0	Unknown/Other Customer interruptions with no apparent cause that contributed to the outage		
1	Scheduled Outage Customer interruptions due to the disconnection at a selected time for the purpose of construction or preventive maintenance		
2	Loss of Supply Customer interruptions due to problems in the bulk electricity supply system		
3	Tree Contacts Customer interruptions caused by faults resulting from tree contact with energized circuits		
4	Lightning Customer interruptions due to lightning striking the distribution system, resulting in an insulation breakdown and/or flash-overs		
5	<b>Defective Equipment</b> Customer interruptions resulting from equipment failures due to deterioration from age, incorrect maintenance, or imminent failures detected by maintenance		
6	Adverse Weather Customer interruptions resulting from rain, ice storms, snow, winds, extreme temperatures, freezing rain, frost, or other extreme weather conditions (exclusive of Code 3 and Code 4 events)		
7	Adverse Environment Customer interruptions due to equipment being subject to abnormal environments, such as salt spray, industrial contamination, humidity, corrosion, vibration, fire, or flowing (previously Code 9)		
8	Human Element Customer interruptions due to the interface of distributor staff with the system (previously Code 7)		
9	Foreign Interference Customer interruptions beyond the control of the distributor, such as animals, vehicles, dig-ins, vandalism, sabotage, and foreign objects (previously Code 8)		

A distributor that has at least 3 years of data on this index should, at minimum, remain within the range of their historical performance.

The monthly information is to be reported as follows:

- (1) total customer hours of interruptions (SAID!)
- (2) total number of customer interruptions (SAIFI)
- (3) CAIDI [(1)/(2)]

# 15.3 Cause of Service Interruption

Monitoring the cause(s) of outages, in addition to monitoring the system reliability indices, provides valuable information as to the remedial work required. A distributor should therefore maintain a record of the causes of the outages, at a minimum, in accordance with the list presented in Table 15.2.

While annual reporting of this information to the Board is not mandatory, the Board will expect the distributor to produce this information should a review of its service reliability be necessary.

The following cause codes have been updated to correspond with the Canadian Electrical Association's guidelines.

# Schedule 15-1: Service Quality and Reliability Performance 2002 to 2004

### Service Quality and Reliability Performance

A distributor is required to provide its summary annual performance for the years 2002 to 2004 inclusive for the reported service quality and reliability indicators. These statistics are the same as the annual statistics from a distributor's RRR section 2.1.4 filing for each report year. Where there have been changes in a distributor's structure, due to a merger, acquisition, or divestiture, the distributor is requested to provide its performance according to its actual structure at the time of its RRR filing. This may require the distributor to report the information on a separate schedule.

#### Service Quality Indicators

#### 1a. Connection of New Services – Low Voltage

#### Standard: 90% or better

2002	2003	2004

#### 1b Connection of New Services – High Voltage

#### Standard: 90% or better

2002	2003	2004	

#### 2 Underground Cable Locates

#### Standard: 90% or better

2002	2003	2004

#### 3 Appointments Met

#### Standard: 90% or better

2002	2003	2004

#### 4 Telephone Accessibility (Telephone Service Factor)

#### Standard: 65% or better

2002	2003	2004

#### 5 Written Responses to Enquiries

#### Standard: 80% or better

2002	2003	2004	

#### 6a Emergency Response - Urban

#### Standard: 80% or better

2002	2003	2004

#### 6b Emergency Response - Rural

#### Standard: 80% or better

2002	2003	2004

#### **Reliability Indicators**

7 SAIDI (System Average Interruption Duration Index)

Standard: Within the range of performance over the previous 3 years

2002	2003	2004

# 8 SAIFI (System Average Interruption Frequency Index)

Standard: Within the range of performance over the previous 3 years

2002	2003	2004	

9 CAIDI (Customer Average Interruption Duration Index)

Standard: Within the range of performance over the previous 3 years

2002	2003	2004