



Ontario Energy Board

Commission de l'énergie de l'Ontario

Distribution System Reliability – Phase Two

January 11, 2013

Objective of Phase One (2010/11)

- Review of existing practices in Ontario for collecting and using reliability data, jurisdictional research, stakeholder consultation.
- Goal to implement formal system reliability standards.
- Board determined that further consultations were needed to address data consistency issues.

Objective of Phase Two

- Address issues relating to the quality and consistency of reliability data. (i.e. – improve existing definitions)
- Consider new reporting (RRR) requirements for:
 - Normalization of data.
 - Cause of outages.
 - Customer specific measures.
 - Worst Performing Circuits.

- Written Comments on Board Staff questions. (8 submissions)
- Reliability Data Working Group (10 distributor and 2 stakeholder representatives)
- Working Group met for 3 sessions in February and March 2012.
- Staff draft proposals presented to WG in Summer 2012.

Improving Current Reliability Definitions

- Agreement that current definitions leave room for too much discretion and individual distributor judgement.
- Suggest use CEA or IEEE definitions where possible and provide specific examples as a guide.
- Define customer as metered service where there is an active account at a specific location. (IEEE)
- Define interruption as a loss of service to one or more customers connected to the system. (IEEE)

Improving Current Reliability Definitions

- Start-time is when first call from the customer is received, or any other method available.
- Use “step restoration” time periods when determining end-time of outage.
- Staff also proposed that distributors be required to report when new processes, definitions, technologies, etc. have impacted reported performance results.

Normalizing Data

- General belief that both the “IEEE Major Event Methodology”, and the “10% of Customer’s Affected” approaches are flawed.
- Both approaches look only to the number of customer’s affected and not to the cause of the event.
- Suggestion that normalization should be based on interruptions caused by factors out of the distributor’s control or normal operating conditions.

Normalizing Data

- Staff proposal included a normalization approach based on events that were out of distributor's control.
- Still concerns that such an approach is not sufficiently defined to be consistently applied by all distributors.

Cause of Outages

- In Phase One, stakeholders suggested LDC's report on interruptions caused by events within their control.
- Concerns that the current list of causes are not precise enough to be useful.
- If normalized data is based on uncontrollable events, then reporting on causes may no longer be necessary.

Customer Specific Measures

- Consumer concern that current reliability measures are engineering focused and do not equate to customer satisfaction.
- Examples currently used by some distributors are:
 - Customers Experiencing Multiple Interruptions
 - Customers Experiencing Long Duration Interruptions
- LDC's expressed concern that few have the ability to track performance at that level of detail.
- Staff supported idea of customer specific measures, but see the ability to track such information may be beyond most LDC's abilities.

Worst Performing Feeder

- Concern that a WPF measure is an operational tool not a reliability measure. Also not good for targeting investment programs.
- Some circuits could always be a WPF due to their geographic locations. LDC's should not be penalized for that.
- Concern that this measure would increase the amount of data to be tracked and reported.
- Due to day to day reconfiguration, clear direction would be needed on how to calculate # of customers.

Worst Performing Feeder

- Staff proposed that LDC's report the top 5% worst performing feeders, based on customer-hours of interruptions.
- Staff also recommended that LDC's report the number of times the identified feeder has qualified as WPF over the past 5 years.
- Feedback that reporting should be the greater of 1% or 10 feeders rather than the top 5% worst performing.