BY RESS and Courier

October 29, 2010

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge St., Suite 2700
Toronto, ON, M4P 1E4

Dear Ms. Walli:

RE: Initiative to Develop Electricity Distribution Reliability Standards
Board File No. EB-2010-0249

This submission is filed on behalf of a group of distributors in response to the October 7, 2010 letter (the "Letter") from the Ontario Energy Board ("Board") entitled "Initiative to Develop Electricity Distribution System Reliability Standards, EB-2010-0249". The group consists of Horizon Utilities, Hydro Ottawa, PowerStream, Toronto Hydro Electric System, and Veridian Connections (the "Distributors"). As requested in the Board Secretary's letter, we have enclosed three copies of this paper and filed electronically through the Board's web portal.

The Distributor's comments on the following pages are organized in the same manner as Attachment A of the Letter. The Issues identified by the Board are presented first, followed by the response of the Distributors. Following are the main points contained within these responses:

1. At this time, reliability is not a key issue for customers, as evidenced by the Board's own market research. LDCs understand the importance of and manage reliability; and this is achieved within the context of the current regulatory regime.

2. Current and upcoming additions to LDC assets, such as smart meters and smart grids, will facilitate further reliability data becoming available, potentially within the next three to five years. Such data may then be used to make better decisions related to changes to the regulatory regime. The Distributors suggest that now is not the time to pursue potentially costly regulatory changes.

3. At this time, the Board and LDCs should focus on ensuring consistent and accurate reliability reporting by more accurately defining the definitions and calculations of reliability measures and cause codes, developing sample calculations of statistics as examples for application by all utilities, and consider reporting interruption statistics by "cause code".

Thank you for the opportunity to comment on these issues. If you have any questions, please do not hesitate to contact any of the undersigned.

Yours truly,

Original signed on behalf of the Distributors by

George Armstrong
Manager of Regulatory Affairs and Key Projects
Veridian Connections Inc.

George Armstrong
Veridian Connections Inc.
(905) 427-9870 x2202
garmstrong@veridian.on.ca

Indy Butany-DeSouza
Horizon Utilities
(905) 317-4765
indy.butany@horizonutilities.com

Jane Scott
Hydro Ottawa
(613) 738-5499 x7499
janescott@hydroottawa.com

Colin Macdonald
PowerStream
(905) 532-4649
colin.macdonald@powerstream.ca

Colin McLorg
Toronto Hydro-Electric System Limited
(416) 542-2513
regulatoryaffairs@torontohydro.com

Attachment A
Issues for Discussion

a) Setting Reliability Requirements

1. What improvements could be made to the current system reliability regulatory regime in Ontario?

Response:
The existing regulatory regime for system reliability in Ontario should not be abandoned for a new regime with a new code. The customer survey commissioned by the Board and conducted by Pollara indicates that customers are generally satisfied with existing reliability performance levels and are generally neither willing to pay more for improved reliability nor pay less for diminished reliability. This survey also indicates that the customer's main focus is on electricity "costs". It therefore seems reasonable that customers would not be receptive to added costs for additional regulatory requirements for system reliability. Further, since customers are generally satisfied with the status quo on system reliability, LDCs ought to maintain these satisfaction levels by continuing to invest in assets that maintain this level of reliability.

Currently the Board uses a "Target" system for regulating reliability performance (with action plans required to be submitted when the target is not met) versus the "Monitoring" system or the "Penalty/Reward" system. The current Target system appears to be working well.

This does not mean that reasonable and inexpensive changes to the existing regulatory framework should not be considered. For example:

- *Targets in future could be based on a 5 year standard versus the current 3 year standard, as this would be a more accurate measure of average performance.*
- *LDCs are currently required to track (but not report) interruptions by "cause code" It would be relatively inexpensive for LDCs to report these cause code statistics as part of new requirements to give greater transparency to the origin of the interruptions.*
- *More work needs to be done to better define and standardize reliability measurements so as to improve measurement consistency across all LDCs.*
- *It might be appropriate to further investigate the reporting of "load or energy lost" during interruptions since frequency and duration statistics do not capture the fact that some customers consume much more electricity than others and are thus impacted to a greater degree. Further, it may be worth considering that “load lost” is preferable to “energy not supplied” (“ENS”) as ENS is more difficult to accurately determine during the individual steps of power restoration.*

2. In addition to SAIDI, SAIFI and CAIDI, what other system reliability measures could be used by Ontario distributors to more accurately monitor system reliability performance?

Response:
The industry should continue to focus on measures of "output" such as SAIDI, SAIFI, and CAIDI as opposed to measures of "input" like tree trimming expenses or other investments in reliability.

Another indicator that could be considered would be the amount of load or energy interrupted as previously explained in response to issue 1.

At this time, the use of MAIFI would be costly and impractical to implement across the province since many LDCs do not currently have this capability (i.e. SCADA monitoring of all their feeders or automatic re-closers).

While the Distributors agree with the intent of indicators that track reliability by feeder or circuit, it would be costly and impractical due to the frequently changing configuration of individual feeders in some major jurisdictions.

3. On what basis should a reliability requirement be established?

Response:
A reliability requirement should be:

- *based on measures of output (SAIDI, SAIFI, CAIDI) rather than measures of input (expenses or investments).*
- *reflective of the specific circumstances faced by individual utilities (distribution system configuration, geography, weather, customer density, customer willingness or ability to pay)*
- *reflective of the LDC's ability to affect measured reliability*

LDCs also need to meet the reliability expectations of customers in a manner that recognizes that there will always be some degree of trade-off between cost and benefits. This balancing act must measure not only the level of technical reliability but also how much the customer, on average, is willing to pay for a given level of service.

Further, there are many different types of customers with varied expectations and needs related to reliability and outage communications. For example, the impact of an outage will be influenced by the degree to which a customer's home or business may be affected by an interruption and the alternatives that may be available during the outage period. Moreover, customers with varied needs may be connected to a common feeder and therefore receiving exactly the same reliability performance. The PEG report does an excellent job of explaining these complex concepts in their section entitled "Service Quality Economics".

For these reasons, distributors must look beyond statistics in assessing reliability performance and use their experience and understanding of their customer base to prioritize system investments. Sound judgment needs to be applied to issues of this nature and this same judgment ought to prevail during the 'give and take' of a regulatory rate hearing, as is the current practice. In the view of the Distributors, a few simple indicators with a simple penalty and reward system would not satisfactorily capture all the complexities of meeting a range of customer reliability expectations.

4. Some jurisdictions have restoration standards that apply during major events. Would establishing such restoration standards for Ontario distributors be appropriate and effective?

Response:
As indicated by the PEG jurisdictional survey, restoration standards are typically used when a utility excludes "major events" from its' reported reliability statistics. Since these events would not be captured by the SAIDI and SAIFI statistics, it is useful in those circumstances to include a measure or standard of "restoration time".

In Ontario, however, LDCs do not exclude "major events" from their statistics. Major events are, therefore, included in utility SAIDI, SAIFI and CAIDI statistics. Accordingly, restoration time is already reflected in the SAIDI and CAIDI statistics that are reported to the Board.

Lastly, it would be very difficult to set restoration standards for the many different types of LDCs and different types of major events to which they would be exposed.

Rather than excluding major events in LDC reporting, the Distributors suggest that it would be more informative to report interruption statistics by cause code as indicated above.

5. Board audits have shown that the length of an outage is highly dependent on how quickly crews can arrive at the scene of the outage. The actual time to repair the system often comprises only a small portion of the length of the outage. Would establishing a standard related to crew response times be appropriate and effective?

Response:
Response time is currently captured in SAIDI and CAIDI statistics. It would be redundant to also have a separate statistic for response time. Further, response times vary greatly depending on the attributes of an LDC's service area (i.e. rural, urban, dense urban). If established, response time targets would therefore have to reflect such differences.

For some LDCs, partial power can be restored remotely (by sectionalizing distribution lines via remote-controlled switches) before the response crews can arrive at the scene. This would make the response time standard difficult to compare between utilities.

6. Surveys indicate that 82% of residential and 69% of business customers do not call in to report an outage. However, distributors' responses indicate that they still rely heavily on customer calls to know about an outage. As part of a program to improve reliability results, should distributors consider ways to improve or encourage customer reporting of outages? What other steps could be taken?

Response:
While LDCs do rely heavily on customer calls to identify outages, just one call is usually sufficient. There is no need to have the same interruption reported numerous times. Further, excessive calls can cause overloading of an LDC's phone system, which can result in dissatisfied customers if they cannot get through.

The Distributors do however recognize the importance of customer communication during interruptions, particularly for the purpose of providing an estimate of when power may be restored. This can be achieved with recorded messages for incoming phone calls, outbound recorded phone calls, news releases and website posting. The cause (other than forced or planned) is not usually available until the power is restored.

7. Surveys also indicate that improving distributor communication to customers during an outage, improves a customer's satisfaction and/or tolerance of an outage. Should the Board consider instituting requirements relating to improved communication? (For example, a distributor may be required to be able to inform customers about the cause of an outage and expected restoration time, within an hour of the outage)

Response:
The Distributors agree with the intent of this suggestion, however, it may be difficult to implement in practice. In some cases it is not possible to estimate the restoration time within one hour of the interruption commencing, particularly for major events. Moreover, the restoration time may vary for different areas of the outage, especially if it is restored in stages.

LDCs generally avoid issuing projected restoration times when restoration activity is not fully predictable, as is often the case. The provision of inaccurate or misleading information can increase customer aggravation as it may prompt them to make inappropriate business or personal decisions. The Distributors recommend that the Board not adopt this approach since any standard would be arbitrary and could place distributors in the untenable position of being required to report information that they would not and could not have within an arbitrarily chosen period of time.

8. What other issues should the OEB consider when developing formal system reliability requirements?

Response:
As was stated by participants at the stakeholder conference, SAIDI, SAIFI and CAIDI are not currently being calculated consistently across all utilities. More work needs to be done to accurately define the calculation of these statistics as well as the interruption

“cause codes”. Provision of sample calculations of these statistics would be useful. Work to this effect should be a focus for the near future.

b) Setting Performance Targets

1. What types of approaches should be considered for setting a performance target for reliability metrics?

Response:
The Distributors recommend that cost and customer satisfaction are important elements to be considered in setting LDC targets. The same general rules should apply to all LDCs on monitoring, measuring and reporting. However, each LDC should have its own specific set of targets that reflect the specific nature of the utility including distribution system configuration, geography and weather and customer expectations.

Reporting by cause code could lead to new targets in the future for planned versus unplanned interruptions.

2. Should the Board establish a province-wide performance target for each measure or individual targets for each distributor?

Response:
Moving to Ontario standardized targets would be inappropriate for two reasons.

1. *it would not reflect the impacts of the different geographic service territories of the various LDCs; and,*

2. *It would not reflect the varying needs of customers served by individual utilities and these customers’ willingness or ability to pay for reliability. "One size" simply does not "fit all". Further, as indicated by the PEG Survey of other jurisdictions, for the vast majority of U.S. utilities that had targets, these targets were based on their own historical performance and not based on inter-utility benchmarks.*

The Board should continue with individual targets for each LDC that reflects the distribution system configuration, diversity of geography, weather and customer expectations. Ontario LDCs have already constructed their systems and developed operating practices that accommodate the expectations of their own customers. Moving to a single set of targets across the province could result in some LDCs incurring significant additional cost to improve statistics that would be seen as unnecessary by their customers. It could also result in lower targets for some LDCs where customers prefer the current higher performance, and targets.

3. Should different targets be set for different classes of customers? (For example, should a higher target or different target be in place for large users vs. residential customers?)

Response:
Setting different targets for different classes of customers assumes that it is possible to measure performance for each of these classes. In the vast majority of cases, distribution feeders and circuits include a mix of residential, commercial, industrial and large use customers. Considerable work would be required to integrate customer information systems with operating systems to identify which types of individual customers are affected during an interruption. This may be more practical to implement in the future as smart meter data is further developed to provide added operational information for individual customers (see final item on smart meters).
In addition, there are issues of customer fairness and controversy around setting different performance targets for different classes of customers.

c) Normalizing Results

1. What approaches should distributors use to normalize results for force majeure and other major events?

Response:
One approach is to segregate major events from the statistics and report on them separately. Another approach is to include major events in statistics but explain them and their significance in some detail.

The Distributors suggest that it would be preferable and more informative to report reliability statistics that include interruptions by Cause Code. The full information provided would make normalization of statistics unnecessary.

2. Would the IEEE Standard 1366 be the most effective way to recognize the impact that force majeure or major events have on system reliability performance?

Response: The IEEE Standard 1366 appears to be a well accepted and widespread mechanism for recognizing major events. However, serious flaws have been identified in the process. Other alternatives include the recognition of major events that affect more than 5% or 10% of customers.

The Distributors believe that reporting by Cause Code would be the most effective method to recognize the impact of force majeure and major events and would make the normalization of statistics unnecessary.

3. If not the IEEE Standard, what other approach should be considered as a way to recognize the impact that force majeure or major events have on system reliability performance?

Response:
As an alternative to IEEE Standard 1366, we could segregate those events that affect more than 5% or 10% of an LDC's customers.

Also, as stated previously, the Distributors believe that reporting by Cause Code would be the most effective method to recognize the impact of force majeure or major events and would make the normalization of statistics unnecessary.

4. To what degree will smart metering data impact the ability to monitor reliability performance?

Response:
Smart Meter data will have a profound impact on the ability to monitor reliability performance. Once the information systems are developed, smart meter information will be able to accurately track outages, and may do so by individual customer. LDCs would know and be able to report on how many customers experienced interruptions by varying frequency (e.g. 12 customers had 15 or more interruptions, 100 had 5 to 15 interruptions, 10,000 had 1 to 5 interruptions, etc.) and how many customers experienced interruptions by varying duration (5 customers had interruptions lasting more than 5 hours, 20 customers had interruptions lasting 1 to 5 hours, 10,000 customers had interruptions of less than 1 hour, etc.). Remedies could easily be targeted to specific customers or groups of customers.

As was stated at the Board's stakeholder conference, LDCs in the Province of Ontario are on the cusp of a major change in the amount of information available for the purpose of accurately gauging reliability levels. The Distributors encourage the Board to refrain from pursuing comprehensive and potentially expensive changes to the regulatory framework at this time since to do so would be premature.