

January 10, 2022

Ms. Nancy Marconi Acting Registrar Ontario Energy Board 2300 Yonge Street, 26th Floor Toronto, ON M4P 1E4

Dear Ms. Marconi

Re: Reliability and Power Quality Review

Ontario Energy Board File Number: EB-2021-0307

In its letter of November 30, 2021, the Ontario Energy Board (OEB) announced that it was launching a comprehensive review of reliability and power quality in the Ontario electricity sector. In that letter, the OEB asked for input from stakeholders on the issues that should be addressed as part of the review and the approach that should be taken to address those issues.

To assist stakeholders in providing input to the Reliability and Power Quality Review (RPQR), the OEB provided a set of questions relating to specific issues. Oakville Hydro Electricity Distribution Inc.'s (Oakville Hydro's) responses to those questions are provided as Appendix A to this letter.

Oakville Hydro appreciates the opportunity to provide its input to the RPQR and looks forward to participating in the RPQR consultations.

Sincerely,

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# Reliability and Power Quality Review - EB-2021-0307

### **Responses to Stakeholder Questions**

# **Utility Accountability**

- 1. OEB staff's assessment of distributors' reported data suggests that there may be a significant gap in reporting between transmitters, host distributors and embedded distributors in terms of delivery point/loss of supply outages. Outages reported under loss of supply and major events account for more than 50% of the total number of outages in the province.
  - a) What type of improvements to transmission and/or distribution reporting and/or performance expectations should be considered to increase utilities' responsibilities for loss of supply events?

Hydro One should be required to report loss of supply outages by sub-category or cause code for each LDC. LDCs have no visibility into the cause of a loss of supply outage and therefore they cannot effectively plan for system investments to mitigate the impact of loss of supply events on their local distribution systems.

Oakville Hydro notes that loss of supply outages may be attributed to third parties other than transmitters and that LDCs may have limited visibility and/or control over outages resulting from actions of these third parties.

With respect to reporting on major events, LDCs are required to report on the steps that they have taken to mitigate the impact of climate change on their distribution system in their Distribution System Plan (DSP). In addition, when reporting a major event to the OEB, LDCs must indicate what actions, if any, will be taken to be prepared for, or mitigate, such major events in the future. Additional reporting on major events is, in Oakville Hydro's view, not required.

However, to ensure consistency, Oakville Hydro suggests that when assessing whether an outage meets the definition of substantial number of customers were affected and whether it took significantly longer to restore service than normal, all LDCs should use the IEEE Standard 1366 approach.

b) What are stakeholders' views on the appropriate form of incentives to drive reliability performance?

In Oakville Hydro's view, priority should be given to projects that maintain or improve reliability if aligned with customer preferences.

Oakville Hydro also suggests that introducing provincial reliability standards established by the OEB that measure an LDCs performance against its peers would provide a greater incentive than the current framework which measures an LDCs performance against itself. Oakville Hydro

recognizes that there will be challenges and limitations in establishing peer groups due to the differences in the various service areas.

- 2. OEB staff's assessment of reported Major Events suggests that distributors have very different interpretations of what constitutes a "Major Event", which affects overall reliability performance scores.
  - a) Should the OEB revise its Major Event reporting requirements to achieve a common understanding among distributors regarding the type of outages and events that should be reported under the Major Event category?

In Oakville Hydro's view, it would be helpful to have the OEB revise its major event reporting requirements to achieve a common understanding among distributors regarding the type of outages and events that should be reported under the major event category. The current definition of a major event seems to imply that weather events are the only outage events that can be considered major events.

Oakville Hydro suggests that events that are beyond the control of the distributor such as local disasters (e.g. a train derailment) or the premature failure of long-life assets are beyond the control of the distributor and clarity on whether these types of failures are considered major events would be helpful to distributors.

b) Should the OEB review the effectiveness of outage restorations?

In Oakville Hydro's view, reporting on the effectiveness of an outage would increase regulatory burden without adding substantive value. As part of good utility practice, LDCs evaluate their effectiveness in restoring electricity after an outage. Additional measures or reporting requirements in addition to SAIDI and SAIFI are not necessary.

- 3. OEB staff's assessment of historical outage data has also suggested that there are inconsistent approaches between distributors in terms of reporting outages (e.g., different interpretations between "Adverse Weather" and "Tree Contacts" defined in RRR).
  - a) What is the best approach to ensure consistent outage cause reporting across the sector?

Oakville Hydro suggests that amendments to the Electricity Reporting And Record Keeping Requirements to include specific examples for reporting outages by cause code could increase consistency in reporting.

The OEB may wish to explore opportunities to leverage the work that the CEA Service Continuity Committee has done in developing a guideline for outage reporting by cause code.

# **Monitor Utility Performance**

- 1. The current performance evaluation (i.e., service area level SAIFI & SAIDI) does not support benchmarking across the industry due to the different characteristic of each utility (such as size and locations).
- 2. What would be required to ensure successful distributor reliability benchmarking across the sector?
  - a) To enable successful distributor reliability benchmarking across the sector, LDC peer groups or econometric modelling would be required. Some of the factors that differentiate LDC service areas would include:
    - i. Underground/overhead wires
    - ii. Rural/urban
    - iii. Weather (e.g. annual precipitation, wind speed, etc.)
    - iv. Feeder loading / asset utilization
    - v. Number of customers
- 3. Power quality and momentary outages can have a significant impact on customers. The OEB has seen an increase in customer concerns regarding these issues.
  - a) Should the OEB establish reporting requirements to monitor utility performance in relation to momentary outages and power quality issues?

IEEE Std 1564-2014 Guide for Voltage Sag Indices is a standard that identifies appropriate voltage sag indices and characteristics of electrical power and supply systems as well as the methods for their calculation. Voltage sag indices are one way of quantifying the performance of electric power and supply systems<sup>1</sup>. However, the introduction of a measure such as SARFI may be costly, and consideration should be given to whether the MAIFI is adequate at this time.

It should be noted that, as LDCs increase automation, the number of momentary outages may increase as outages are restored promptly thereby reducing SAIFI.

#### **Customer Specific Reliability**

- 1. Given customers' expectations are changing because of an increasing reliance on a reliable system, should the OEB develop customer-focused reliability measures that can provide greater transparency on the level of service individual customers are receiving?
  - a) Information on customer would assist in system planning. However, Oakville Hydro does not currently have the systems in place to enable this level of granularity. Should the OEB mandate a customer-focused reliability measure, Oakville Hydro recommends that a deferral account be

<sup>&</sup>lt;sup>1</sup>Overview of IEEE STD 1564-2014, Guide for Voltage Sag Indices, Daniel Sabin and Math Bollen.

approved to allow LDCs to recover the incremental capital and operating costs associated with implementation.

- 2. Along with creating customer-focused reliability standards, should the OEB consider consequences when reliability performance expectations are not met? (e.g., customer compensation when reliability falls below acceptable level)?
  - a) Oakville Hydro suggests that any study of the implications of compensating customers when reliability falls below an acceptable level should consider the established risk profile included in rates. Oakville Hydro has no further comments at this time.

# **Utility Planning**

- 3. How should reliability data be enhanced to support effective utility planning and rate setting? Are there any established methodologies to quantify the value, from a reliability perspective, added by transmission and/or distribution investments?
  - a) As discussed previously, a customer-focused reliability measure would support effective utility planning.