

January 14, 2022

VIA RESS AND EMAIL

Ontario Energy Board
2300 Yonge Street, 27th Floor
P.O. Box 2319
Toronto, ON M4P 1E4
Attention: Nancy Marconi, Acting Registrar

Dear Ms. Marconi:

RE: EB-2021-0307 – OEB Reliability and Power Quality Review

The Ontario Energy Board (OEB) is launching a comprehensive review of the reliability and power quality in the Ontario electricity sector¹. Energy Storage Canada (ESC) supports the OEB's comprehensive reliability and power quality review (RPQR) and is pleased at the opportunity to provide preliminary responses to the initial issues identified by OEB staff.

Energy Storage Canada (ESC) is the national association for the energy storage industry in Canada. Our membership represents all players along the energy storage value chain – technology providers, project developers, investors and operators, utilities, electricity distribution companies and NGOs.

Background

Based on a review and analysis of distributor's reported data, OEB staff have identified a high-level set of issues for discussion with stakeholders focused on four areas:

- Enhancing utility accountability
- Customer-specific reliability
- Monitoring utility performance; and
- Supporting effective utility planning

Based on feedback received from stakeholders during the OEB's Policy Day², OEB staff is proposing to focus initially on initiatives that would increase accountability to customers through greater transparency and support the OEB's rate setting processes. OEB staff identified specific issues including: the need for enhanced reporting on major events and delivery point performance to provide greater accountability to customers for reliability performance; and the need for ensuring consistency in reporting across utilities to support benchmarking and implementing customer specific reliability measures.

¹ <https://www.oeb.ca/consultations-and-projects/policy-initiatives-and-consultations/reliability-and-power-quality>

² [Policy Day: Charting the Path to Top Quartile Regulator | Ontario Energy Board \(oeb.ca\)](#)

The OEB has requested comments from stakeholders on the initial issues identified including responses to questions identified by OEB staff. ESC general comments are below followed by high-level preliminary responses to the questions.

General Comments

The electricity sector is undergoing significant and far-reaching change that will impact many different aspects of the electricity system. Four key changes are important when considering reliability and power quality. First, climate change policy is expected to result in higher demand growth in the future primarily from fuel-switching electrification. Maintaining and enhancing reliability and power quality will be critical for existing and new loads on the system. Second, innovative and emerging technologies (e.g., energy storage) are offering customers new and exciting options to meet their energy needs. This means the electricity system will be used differently in the future resulting in new approaches to planning, design, construction and operation of the power system. Third, data collection and analysis capabilities have expanded rapidly due to technology advances. The advancements provide an opportunity for customers, utilities, regulators and stakeholders to understand the dynamics of reliability and power quality at a depth that was not available in the past. Finally, climate change is leading to more volatile and unpredictable weather patterns that will result in more significant reliability and power quality events. Power system planning and operation must adapt and utilize new approaches to ensure the power system can continue to play the critical role it does in Ontario's economy.

Energy storage is a critical component in meeting the challenges facing the electricity sector. Energy storage can increase the reliability and resilience of the electricity system for customers and utilities. For example, energy storage can cost-effectively improve customer reliability and power quality in locations that are difficult or expensive for traditional wires solutions to address. Further, behind-the-meter energy storage can offer reliability and power quality improvements directly to customers while also provide other valuable energy services to meet the customers unique requirements. ESC firmly believes that energy storage resources will play a pivotal role in maintaining and enhancing Ontario's reliability and power quality in the future and looks forward to participating in the OEB's RPQR consultation.

In ESC's view, a primary objective of the OEB's RPQR is establishing the access to open and transparent data on reliability and power quality standards for customers. The electricity system in Ontario is designed to a minimum standard. Customers and service providers require access to data and information to ensure that the standards are being met. Further, many customers may desire reliability and power quality at a level greater than the minimum standard which again requires further information on the capabilities and performance of the existing power system.

Response to OEB Staff Questions

Utility Accountability

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

As discussed in ESC's general comments, transparent and open data is critical for future reliability and power quality standards. ESC suggests that coordination between transmitters, host distributors and embedded distributors be used to ensure loss of supply/delivery outages are properly accounted for. For example, instead of recording an outage as only "loss of supply", the distributor and transmitter could coordinate to provide greater granularity on what causes the loss of supply (e.g., transmission circuit failure, protection and control event, etc.). At this time, ESC does not have a view on incentives for reliability performance

- 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. 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? Should the OEB review the effectiveness of outage restorations?

Climate change is resulting in more volatile weather patterns that can result in major events for distributor's reliability. ESC believes the OEB should investigate potential changes to Major Event reporting requirements and review effectiveness of outage restoration.

- 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). What is the best approach to ensure consistent outage cause reporting across the sector?

ESC has no comment.

Monitor Utility Performance

- 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). What would be required to ensure successful distributor reliability benchmarking across the sector?

ESC believes that open and transparent data that is standardized can help ensure successful distributor reliability benchmarking across the sector. The data can be used to establish additional performance evaluation criteria that provide clarity on performance. Further, non-wires solutions can offer distributors options to maintain or enhance reliability performance and should be investigated to address different characteristics of each utility.

- Power quality and momentary outages can have a significant impact on customers. The OEB has seen an increase in customer concerns regarding these issues. Should the OEB establish

reporting requirements to monitor utility performance in relation to momentary outages and power quality issues? What type of power quality issues should be and can be reported and monitored?

As more economic activities are electrified, the impact of momentary outages and power quality issues will increase. ESC supports the OEB establishing reporting requirements for both as part of a broader open and transparent data mitigation.

Customer Specific Reliability

- 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? 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)?

ESC firmly supports the OEB exploring customer-focused reliability standards and potential consequences for reliability performance expectations not being met.

Utility Planning

- 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?

ESC firmly supports enhancing reliability data to support effective utility planning and rate setting. ESC believes there are many established methodologies that could be explored to quantify the value of transmission and/or distribution investments.

Sincerely,

Justin W Rangooni

Justin W. Rangooni
Executive Director
Energy Storage Canada