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Our File: EB20210307

Attn: Nancy Marconi, Acting Registrar

Dear Ms. Marconi:

Re: EB-2021-0307 – Reliability and Power Quality Review – SEC Comments

We are counsel to the School Energy Coalition ("SEC"). These are SEC's comments on the questions raised in the OEB's letter dated November 30, 2021, establishing the Reliability and Power Quality Review ("RPQR").

General

SEC commends the OEB for undertaking this RPQR. Customers are most concerned about costs and reliability, as is evident from almost every customer engagement survey undertaken by electricity distributors and transmitters. Further, much of the work of individual OEB adjudicative panels in rate applications is balancing the inherent tension between rates and reliability. This is not surprising. It is one of the primary responsibilities of the OEB, as set out in section 1(1) of the *Ontario Energy Board Act*, which mandates that the OEB, in carrying out its responsibility, must be guided by the objective "[t]o inform consumers and protect their interests with respect to prices and the adequacy, reliability and quality of electricity service."

Over the years, the OEB has incorporated new tools and methods to measure and assess cost performance, but not as much attention has been given to doing the same with respect to reliability. Understanding both is important to assessing the key question – are customers getting good value for their money?

SEC notes that the focus of the RPQR, as set out in the OEB's letter, is on immediate changes to deal with the existing situation. This is understandable, and needed. However, SEC wants to stress that the more difficult and important questions relate to the future role of the grid in a rapidly evolving electricity sector. Three expected changes will almost certainly affect distributors and transmitters in fundamental ways:

- Electrification of transportation and space/water heating will increase the needs of customers for high reliability of power.

- Increased reliance on electronics in both business and non-business applications will exacerbate the already critical issue with power quality in some parts of the province, and for some categories of customers.

- The rapid market penetration of DERs, particularly on-site storage, will reduce or, in some cases, change the concerns of customers with respect to reliability and power quality, particularly at times of peak demand.

All of this suggests that reliability and power quality will be more important, but at the same time the paradigm that the grid (distributors, typically) have the sole responsibility for delivering on those aspects of power, may have to be modified. The cost of providing high reliability and excellent power quality to everyone may become too expensive, especially when there are non-wires alternatives that have a lower cost, and can provide exceptional reliability and power quality to those who really need it at a cost they are willing to pay.

SEC believes that, whether in this consultation or in another (existing or future) proceeding, it will be important for the OEB to grapple with the impacts of these changes on the role of the grid in providing reliability and power quality.

The remainder of these submissions deal with the more immediate scope delineated in the OEB's letter.

Questions Posed by the Board

SEC has reviewed the questions contained in Appendix A. We note that it is very hard to answer a number of the questions at this time, without further information and/or access to background research to help understand some of the issues and potential options.

Many of the questions reference OEB Staff's assessment of reliability data that have not been presented to stakeholders or otherwise made public. Our overarching submission is that OEB Staff should either convene a stakeholder conference, or issue a discussion paper, which: a) provides the data itself and information on the OEB Staff assessment of that data, b) outlines the issues that are raised, and c) analyses of some of the various options. Moreover, the OEB may want to convene a working group, as the Board's letter suggests, since a number of the questions raise complex issues that may be best explored through discussion amongst various stakeholders.

On that basis, SEC can only provide very preliminary views on many of the listed questions. As noted, the issues are complex, and our opinions on the problems and potential solutions may change with more information. We have organized our comments below based on the categories of questions in Appendix A of the OEB's letter.

Utility Accountability

OEB Staff's questions under this heading appear to indicate that it has concerns related to consistency of reporting of the underlying reliability data (major event days, and outage cause code reporting), and issues with respect to reporting delivery points and loss of supply outages. Without understanding the extent of underlying problems and issues regarding these outage reporting issues and inconsistencies, it is very hard for SEC to provide input on how best to address it. What we can advise is that it is very important to have consistent reporting of data to assess the causes of reliability problems across the sector, and the OEB should do what it can to provide guidance and related training to utility staff.

With respect to the issues raised by OEB Staff about data gaps in reporting between transmitters, host distributors, and embedded distributors, SEC agrees that this may be very material in assessing actual

performance and customer impacts, considering the percentage of total outages that are caused by upstream loss of supply. Currently, an outage on a host distributor's system that impacts embedded distributors is treated as no different from any other customer outage where, in reality, that outage may impact thousands of downstream customers. This raises a number of questions, including: a) should more focus be put on host distributor reliability responsibilities to embedded distributors, and b) if so, who should bear those costs?

Monitor Utility Performance

OEB Staff notes that current use of service area level reliability metrics (i.e. SAIDI and SAIFI) does not support benchmarking across the sector because of the different characteristics between utilities (i.e. size and location).

SEC does not entirely agree with this statement. There are benefits to benchmarking these high-level metrics, because regardless of utility size, location, geography, or other utility characteristics, these metrics do reflect the actual reliability performance that on average a customer of a given distributor faces. Comparative rates, for example, do not tell the entire story of reasonable utility costs, but they are still an important measure for customers, as they reflect what customers pay as compared to similar customers across the province. System-wide reliability statistics are similar.

SEC does agree that SAIFI and SAIDI alone do not provide sufficient precision in measuring utility reliability performance for the purpose of supporting rate applications. To do that, the OEB should revisit the work it did in the context of its previous Initiative to Develop Distribution System Reliability Standards (EB-2010-0249). As part of that consultation, the OEB commissioned a report by Pacific Economics Group ("PEG"), which looked at various options for setting reliability standards.[1] In the context of its report, PEG provided its opinion on the issues it faced with creating different types of reliability benchmarks.

A number of the concerns that PEG raised may no longer exist, or require further consideration, if the OEB wishes to pursue more rigorous reliability benchmarking. For example, PEG notes that there were data gaps in the previous decade (2002-2012), and that data was not normalized to exclude the impact of severe storms.[2] This was also cited as a reason that econometric benchmarking would be problematic at that time.[3]

As a result of that consultation, the OEB made amendments to the RRR filings to gather better reliability information, and then undertook a further consultation on reliability, which implemented the concept of Major Event Days.[4] This should remedy many of the data issues that PEG raised in its report.

There have also been some developments in econometric reliability benchmarking in Ontario since 2013. In Toronto Hydro's most recent Custom IR application, the utility filed an econometric reliability benchmarking study.[5] PEG, on behalf of OEB Staff, commented that this work had "done a service to Ontario's regulatory community by making progress in the area of reliability benchmarking" and that it was a "good starting point".[6] PEG went on to propose some improvements.[7]

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[1] EB-2012-0249, Pacific Economics Group, *Service Reliability Standards in Ontario: Analysis of Options*
[2] EB-2012-0249, Pacific Economics Group, *Service Reliability Standards in Ontario: Analysis of Options*, p.2
[3] EB-2012-0249, Pacific Economics Group, *Service Reliability Standards in Ontario: Analysis of Options*, p.3
[4] EB-2015-0182 ,Amendments to the Reporting and Record Keeping Requirements Regarding System Reliability
[5] EB-2018-0165, Exhibit B, Schedule 2, p.40
[6] EB-2018-0165, Exhibit M1, p.26
[7] EB-2018-0165, Exhibit M1, p.27

SEC believes the OEB should investigate the use of econometric reliability benchmarking as a way to monitor utility reliability performance. The benefit of this type of benchmarking is that it allows for the normalization of reliability to reflect the unique characteristics of each utility (i.e. geography, weather, density, and other exogenous factors). Just as this is done in cost benchmarking, so too can it be done for reliability.

Customer Specific Reliability

OEB Staff asked if the OEB should develop customer-focused reliability measures that provide transparency on the level of service individual customers receive, presumably as opposed to broader utility wide average reliability information such as SAIDI and SAIFI.

SEC believes the answer should be yes, but that determining what those customer specific measures is the more difficult part.

A problem with SAIDI and SAIFI measures is they often mask significant disparities of reliability within a utility's service territory. Customer specific reliability measures, such as Customers Experiencing Multiple Interruptions (CEMI) and Customers Experiencing Long Duration Interruptions (CELDI), allow for a better look at the range of reliability outcomes across a distributor's system. The OEB, in its 2015 Report of the Board *Electricity Distribution System Reliability: Major Events, Reporting on Major Events and Customer Specific Measures,* discussed potentially introducing CEMI/CELDI measures.[8] At the end of the process it noted that "customer specific system reliability measures will be dealt through a separate process", but that did not occur.[9]

SEC believes that the OEB should undertake work in this area, and provide stakeholders with further information on possible metrics to reflect customer specific reliability (in addition to CEMI and CELDI), including the benefits and drawbacks of each one. A starting point for this work may be to update the jurisdictional review on customer-specific reliability metrics the OEB commissioned as part of the EB-2010-0249 consultation.[10]

OEB Staff also asks whether, along with customer-focus reliability standards, if the OEB should consider consequences to a distributor when reliability performance expectations are not met, such as customer compensation when reliability falls below acceptable levels?

SEC believes that the OEB should consider such a system. At a high level, it would promote value for money for customers. Yet, SEC recognizes that developing such a mechanism will require significant work, especially since at this time there are not even customer specific metrics, let alone targets and standards. Moreover, in any design, it will be important to ensure that there are no perverse incentives for utilities to use such a system as an excuse to demand in applications dramatically higher capital budgets.

We also note that, central to any analysis of consequences for missing reliability standards will be the rapidly evolving changes in the grid itself, including DERs. Determining what level of reliability is the utility's responsibility, and what additional reliability should be left to the customer to acquire in the competitive markets, will be a key issue.

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[8] EB-2015-0182, *Report of the Board: Electricity Distribution System Reliability: Major Events, Reporting on Major Events, and Customer Specific Measures*, p.22

[9] EB-2015-0182 , Amendments to the Reporting and Record Keeping Requirements Regarding System Reliability, p.2

[10] EB-2010-0239, Pacific Economic Group, *Customer Specific Reliability Metrics: A Jurisdictional Survey*

Moreover, our experience has been that utilities are incredibly reticent to set performance targets, let alone financial penalties.[11]

Utility Planning

OEB Staff asks how reliability data can be enhanced to support effective utility planning and rate setting.

SEC submits that reliability benchmarking data will have a very significant and positive impact in the ability of the OEB to assess the reasonableness of capital plans. Robust and consistent reliability data, especially by cause code, and new customer specific metrics, should allow utilities to better focus their resources on customers and areas where work is required. For example, some utilities, in recognition of the disparity in reliability amongst customers within their service territory, have undertaken a "worst performing feeder" type programs to address the issue. SEC has also noticed that utilities who not just track outages by defective equipment cause code, but also by individual asset type, usually have better data for capital planning.

We do note that including reliability benchmarking in system planning is part of a broader set of issues on utility system planning, consistent with the general issue we raised earlier about the evolving role of the distributor. This is an important priority for the OEB, and the reliability component will be most completely addressed in the context of that wider review of system planning.

Conclusion

SEC appreciates the opportunity to be able to provide input at this stage of this consultation, and would be interested in participating further as the process continues, whether with working groups, stakeholder conferences, submissions on individual issues, or other steps.

Yours very truly,
Shepherd Rubenstein P.C.

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Mark Rubenstein

cc: Ted Doherty, SEC (by email)

[11] We do note one limited exception. In Hydro Ottawa's current Custom IR framework (2021-2026), the OEB approved Settlement Proposal included a mechanism where if Hydro Ottawa did not meet certain targets (including three that relate to system reliability) it would be required to credit back to ratepayers through a deferral account a limited amount of money. (See *Decision and Order* (EB-2019-0261), November 19, 2020, Schedule A, p.36-37)