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January 25, 2019

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

Dear Ms. Walli,

**EB-2018-0287 Report of the Advisory Committee on Innovation (“ACI”) to the OEB**

This letter responds to your request for comment dated November 22, 2018 on the recommendations contained in the Report of the Advisory Committee on Innovation to the OEB (the “Report”), expanding on comments provided at the January 16<sup>th</sup> stakeholder session. It specifically addresses the following questions:

1. What actions should be the highest priority for the OEB?
2. What interdependencies should be considered for planning and sequencing the OEB’s next steps regarding further policy development and consultations?
3. Are there any gaps or complementary areas of inquiry that need to be considered?

**1. What actions should be the highest priority for the OEB?**

As evidenced by the discussions at the January 16<sup>th</sup> stakeholder session, the first priority should be clearly identifying the specific policy outcomes that the OEB aims to achieve with these consultations.

ACI recommendation 1B (to establish clear rules on DER integration) asks the strategic question about the respective roles of distributed energy resources (DERs) and the utility-owned and operated grid. Specifically, the consultation should address the questions of who is accountable for identifying and responding to the distribution system’s needs and for determining what non-utility costs, if any, should be socialized amongst all customers. The answers will frame the balance of the DER-related recommendations and should be the highest priority for consideration stemming from the Report.

ACI recommendations 1A, 1C and 3B on cost responsibility and technical and commercial integration of DERs should follow closely in priority. These may appear to be easier to tackle before answering the big strategic questions, but the solutions here must be consistent and principled to be effective. We note that the economic and technical implications of DER integration are inextricably linked. The ACI's recommendation 3A that utilities publish system information should be considered at the same time because this entails resources and, therefore, cost.

The ACI's recommendations 1D and 2A to 2D are inter-dependent because they focus on utility investment and compensation. These topics must be considered in the context of the cost and operational impacts on utilities of recommendations pertaining to DER integration.

Consultations on simplifying regulation (ACI recommendation 4) can be done in parallel with the strategic and structural changes discussed in the other recommendations. Recommendations 4A and 1D appear interdependent.

## **2. What interdependencies should be considered for planning and sequencing the OEB's next steps regarding further policy development and consultations?**

We note there are a significant number of interdependent and overlapping initiatives of the IESO and the OEB. This includes the IESO's Innovation Roadmap, LTEP initiatives to integrate DERs and Energy Storage Advisory Group and the OEB's own Cyber Security Advisory Committee and LTEP initiatives, particularly those pertaining to reliability and enhancing OEB capacity.

Here are three specific examples of overlap and intersection between the ACI's recommendations and the IESO's Innovation Roadmap.

- The ACI recommends standardizing technical DER connection requirements on the distribution grid. The Innovation Roadmap is meant to enable innovation for actions within the IESO's purview, which includes market rules. Market rules include rules that impact the IESO-controlled grid (i.e. bulk electricity system) and standards and criteria relating to electricity supply generated from distribution-connected sources. The IESO also has an Energy Storage Advisory Group.
- The ACI recommends relaxing restrictions on utility activities, potentially allowing them to do more than distribution, and encouraging utility investment in monitoring and control that could eventually manage DERs dynamically similar to the bulk system. The Innovation Roadmap calls out a specific focus area "core to IESO mandate" as informing "new distribution system operations and business models to support bulk market efficiency and reliability".

- As already stated, the ACI recommends that distributors increase their monitoring and control capability for DERs. The Innovation Roadmap wants to focus on increasing transparency and visibility of resources operating on the distribution system and building its own new data collection and analysis function.

There is significant risk that these initiatives occur in parallel without cross-consultation or coordination, resulting in an internally inconsistent regulatory framework that creates ambiguity and regulatory inefficiencies resulting in confusion, burden and cost for stakeholders. Hydro One's technical inter-connection requirements have been in place since 2009 and will need to reflect changes as required.

The IESO and OEB strategic initiatives (i.e. Innovation Roadmap and key LTEP activities) should be coordinated and prioritized in time, and the balance of work that addresses the tactical implications of such work should follow. The following priority sequence is suggested.

- Coordinated effort to address the Report's recommendations (sequenced as suggested above), the IESO's Innovation Roadmap and LTEP work streams on integrated bulk and regional planning processes, and new considerations of the upstream impacts to transmission;
- Work on the OEB's "Strengthen Utility Accountability to Customers" LTEP work stream and IESO and OEB working groups and advisory committees (e.g. cyber security, energy storage) should fall from the results of strategic framework established;
- Regulatory simplification work can occur in parallel with the above.

As part of the process, the OEB should explore and consider the industry's existing knowledge of DER integration to mitigate the risk of creating unnecessary regulatory solutions.

### **3. Are there any gaps or complementary areas of inquiry that need to be considered?**

Notably, the Report does not explore the upstream relationship and impacts to the transmission system and the IESO, both operationally and economically. Coordination of all these elements is critical to ensuring reliable, cost effective supply of electricity to all Ontarians. Successful DER integration can only be achieved with a clear vision of the entire system. Also, the possible regulation of DER providers could be explored.

Hydro One appreciates the opportunity for input and looks forward to the opportunity for further consultation on the ACI's recommendations.

Sincerely,

ORIGINAL SIGNED BY S. LISA LEE  
ON BEHALF OF FRANK D'ANDREA

Frank D'Andrea

**Appendix**  
**Advisory Committee on Innovation – Recommendations**

**1. Provide a Transparent and Level Playing Field**

- a. Improve the transparency and consistency of the distribution system connection process and clarify cost responsibilities to reduce uncertainty for DER proponents, utilities and consumers.
- b. Establish clear rules for DER integration into distribution systems, addressing technical matters including information, visibility, management and control to, among other things, protect the reliable and safe operation of the distribution system, and optimize the planning and management of resources and assets.
- c. Establish guidelines for commercial arrangements governing performance of non-traditional resources so utilities and others can rely upon them as alternatives to traditional system investment.
- d. Reexamine regulatory restrictions on utility business activities and review the separation of regulated and competitive services in light of new technologies and service expectations.

**2. Remove Disincentives to Innovative Solutions**

- a. Remunerate utilities to make them indifferent to conventional or alternative solutions, including when other parties own and provide the alternative solution. Considerations will include, among other things, meaningful incentives and moving away from traditional rate base regulation.
- b. Establish an empirical evaluation methodology for cost-benefit comparison so all proposals are evaluated on a fair and consistent basis. Elements such as the value of optionality (i.e., the benefit of having options down the road), flexibility, location, time, resiliency, optimizing existing assets, and externalities as appropriate should be considered.
- c. Establish a way to ensure DERs can be compensated for their services commensurate with their value while paying their appropriate share of system costs. The approach should recognize new revenue streams which may be aggregated and allow shared cost recovery.

- d. Consider timely funding mechanisms to encourage utility innovation that provides near term customer benefits.

### **3. Encourage Market-Based Solutions and Customer Choice**

- a. Require utilities to publish information about the characteristics and capabilities of their systems to enhance transparency of distribution system needs and capabilities within the market.
- b. Encourage cost-effective investment by utilities in monitoring and control capabilities to the extent that these enabling investments will help them efficiently manage a more dynamic distribution system.

### **4. Embrace Simplified Regulation**

- a. Provide a means by which both utilities and unregulated entities are encouraged to discuss specific regulatory obstacles with the OEB, in order to allow near-term deployment of innovations while longer-term regulatory reforms are implemented.
- b. Review the information the OEB collects to ensure it is used to evaluate performance in the sector –specifically whether utilities, other service providers and regulation itself are benefitting customers.
- c. Explore the use of self-executing processes that use transparent, pre-approved criteria to allow streamlined regulatory review.
- d. Further examine OEB decision timelines to determine whether they can be shortened without compromising the effectiveness of stakeholder participation.