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SUBMITTED VIA ELECTRONIC MAIL TO REGISTRAR@OEB.CA

Ms. Christine Long
Registrar
Ontario Energy Board 2300 Yonge Street
27th Floor
Toronto, Ontario
M4P 1E4

Re: Board File: EB-2018-0287/0288 – Utility Remuneration and Responding to DERs

Dear Ms. Long:

Advanced Energy Management Alliance (“AEMA”) welcomes the opportunity to provide you with comments relating to the **Board File: EB-2018-0287/0288 – Utility Remuneration and Responding to DERs**. AEMA is a North American trade association whose members include distributed energy resources (“DER”), demand response (“DR”), and advanced energy management service and technology providers, as well as some of Ontario’s largest consumer resources, who support advanced energy management solutions due to the electricity cost savings those solutions provide to their businesses. These comments represent the views of AEMA as an organization, not any individual company, except as noted below.

AEMA continues to support the direction of the consultation and appreciates the work completed by Ontario Energy Board (“OEB”) staff and other stakeholders. *Please find enclosed comments focused on near term priorities the OEB should take to enable DERs.*

AEMA appreciates the opportunity to provide this feedback and AEMA members welcome the opportunity to participate in future working groups that may be established. Thank you for the consideration.

Best regards,

A handwritten signature in black ink, appearing to read "Katherine Hamilton".

Katherine Hamilton
Executive Director
Advanced Energy Management Alliance

Utility Remuneration/Responding to DERs (2018-0287/88) Comments from Advanced Energy Management Alliance (AEMA)

Background.

In the first quarter of 2019, the Ontario Energy Board initiated two related consultations focused on Distributed Energy Resources (DERs). Utility Remuneration set out to identify how to remunerate utilities in ways that make them indifferent to traditional or innovative solutions, better support their pursuit of least cost solutions, strengthen their focus on long-term value and that required them to reflect the impact of sector evolution in their system planning and operations.¹ The Responding to DERs consultation was initiated to develop a more comprehensive regulatory framework that facilitates investment and operations of DERs on the basis of value to consumers and supports effective DER integration so the benefits of sector evolution can be realized.² Over the last two years, consultants have prepared reports on the topics, sector participants have provided presentations and comments on the issues/challenges that need to be addressed, the principles and objectives, as well as advice on how to proceed with establishing a regulatory framework. Consultant reports have also been presented that shine light on the near-term forecast of DERs in the province, due to the ongoing pandemic, and the long-term projected growth as recovery continues.

Scope.

A great deal of information has been presented, written and discussed and the OEB is now pushing the ‘restart’ button. “What is the best way ...in the near term to get things started?”³ What are the near-term priority work streams? These questions are asked during a time of “transformation” that is underway at the OEB to modernize, among other key business plan objectives.

Advanced Energy Management Alliance (“AEMA”), is a North American trade association whose members include distributed energy resources, demand response (“DR”), and advanced energy management service and technology providers, as well as some of Ontario’s largest consumer resources, who support advanced energy management solutions due to the electricity cost savings those solutions provide to their businesses. AEMA members have been active in OEB regulatory matters relating to DERs (among other important topics for our customers), as well as engagements at the IESO. AEMA is pleased to share valuable insights from its members arising from their experiences in Ontario and in other jurisdictions. The comments herein represent the consensus views of the organization as a whole, not those of any individual member.

Recommendations from AEMA.

AEMA strongly supports the OEB moving forward with the establishment of a policy and regulatory framework for the response to DERs and doing so with urgency due to the current activity relating to DERs and external factors which will impact the growth of DERs.

¹ <https://www.oeb.ca/industry/policy-initiatives-and-consultations/utility-remuneration>

² <https://www.oeb.ca/industry/policy-initiatives-and-consultations/responding-distributed-energy-resources-der>

³ February 3rd, 2021 – Transcript – Ceiran Bishop, pg. 142, lines 20-23.

In December 2020 two developments occurred that necessitate the prioritization of this consultation by the OEB. The federal government announced that carbon pricing will escalate over the next several years resulting in \$170 per tonne of CO₂ by 2030. The IESO also released its Annual Planning Outlook which concluded that Ontario may experience significant capacity and supply gaps as early as 2025 and increasing every year thereafter. It should also be added that certain areas of the province such as the region west of London are already experiencing electricity reliability issues and the IESO has identified a 650 MW need. Given the above factors, the need to expedite DER integration and modernize the utility remuneration model is at all-time high.

Following the outline of the timing of recommendations in the January 18th ICF *Ontario Distributed Energy Resources Impact Study*, AEMA has grouped their advice for the near-term priorities. As outlined below, work has already been started or is being completed on key recommendations such as “Common DER data requirements” and “Frameworks for integration of DER into Distribution Planning”. Understanding DER projections and distribution value should be a near-term priority that ties into the work already underway at the OEB, while establishing how to incorporate DERs in the distribution system through Non-Wire Solutions. This can be done by setting up frameworks to create standard evaluation processes and enable changes in remuneration structures. AEMA recommends that the OEB develop a simplified process to respond and enable DERs within a regulatory framework that evolves over time. The OEB should look to other jurisdictions for the best practices as those markets have evolved and matured.

Priority Work Streams.

1. Current - Connections Working Group

As noted during the most recent virtual consultation (February 3rd, 2021), valuable work has been accomplished and is still ongoing at the OEB’s Connection Working Group. The Connections Working Group has made progress on its key objective to improve the consistency and clarity of the DER connection process and lower costs for customers, proponents and the industry. Through the development of consistent requirements and forms it will be possible for third party providers to better model the costs connected with each project and ultimately provide system benefits and savings to the customer/ratepayer. Work continues to be done on the technical and process requirements for the various risk profiles of proposed DERs and the appropriate timelines to enable connections. Amendments to the Distribution System Code will be required and AEMA will continue to support the work of the Connections Working Group.

2. Current - Regional Planning Review

On December 10th, 2020, the OEB announced that it will engage with stakeholders on the Regional Review Process, based on the finalized Regional Planning Process Report issued by the IESO in January 2021, and discussed with OEB in July 2020. Included in the recommendations for OEB consideration is better coordination of regional planning with related processes. The list (under the assumption it is not exhaustive) includes bulk transmission planning, EOL replacement, distribution planning, connection assessments, OEB regulatory proceedings, markets and procurement mechanisms (e.g. non-wires alternatives), and energy efficiency program planning. The established Advisory Group will also explore other areas in the planning process where efficiencies can be realized.

AEMA, supported by a consultant on the Advisory Group, recommends that topics such as accurate and responsible viability of non-wire solutions to address power system needs, and the adoption of procurement mechanisms for non-wires solutions to offer services to regional power systems be part of the Regional Planning Process Review. DERs and non-wires solutions can help alleviate the significant capacity and supply gaps on the horizon.

3. New – Responding to DER Framework

Ontario needs to develop a regulatory framework that responds to and enables DERs to ensure their full participation in both the retail and wholesale markets. Bringing the concept of Non-Wires Alternatives/Non-Wires Solutions (NWA/NWS) to the Ontario distribution sector will enable cost effective and reliable resources to assist local distribution companies to meet their emerging system needs.

Ontario can look to other jurisdictions who have implemented a Non-wires alternative regulatory framework or are in the process of doing so. NY PSC has a vast record of an evolving non-wire alternative framework that has been implemented by Con-Edison to meet emerging needs at sub-stations. Con-Ed filed a petition to defer the need for \$1.2 billion in traditional infrastructure investments. The Commission authorized the utility to incur up to \$200 million in expenditures to implement a portfolio of customer side and non-traditional utility side solutions to defer major infrastructure upgrades. The Connecticut State PUC launched an investigation into Distribution System Planning of the Electric Distribution Companies – Non-Wires Alternatives in 2020 where participants presented lessons learned and advice on how to implement non-wires alternative.⁴

To enable a DER Regulatory Framework that supports Sector Evolution that enables DERs in the Ontario, to support modernization and optimization, while leveraging the regulatory frameworks to promote economic development, AEMA recommends the OEB undertake the steps outlined below. The key sector principles of cost-effectiveness, efficiency, safety and reliability should remain at the forefront of the OEB’s activities.

- **Define Non-Wires Services**

Although a definition of DERs has been established in this engagement, the ability of DERs to provide value to distribution and transmission systems needs to be defined.

NWA/NWS are solutions that remove or defer the need to construct or upgrade components of a distribution and/or transmission system (wires investment). Projects with a combination of DERs, demand side management solutions and infrastructure can be used to meet the same need as a poles and wires solution. NWA/NWS can provide ratepayer and stakeholder benefit while delivering grid services and environmental benefits.⁵

- **NWA/NWS Screening and Evaluation**

The screening and evaluation process of NWA/NWS is key to the success of a resource and/or service. In its simplest form, within the planning process for local distribution companies, project lists can be identified. A screening process can then be used to determine if non-wire service is

⁴ [http://www.dpuc.state.ct.us/dockcurr.nsf/\(Web+Main+View/All+Dockets\)?OpenView&StartKey=17-12-03RE07](http://www.dpuc.state.ct.us/dockcurr.nsf/(Web+Main+View/All+Dockets)?OpenView&StartKey=17-12-03RE07)

⁵ <http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/2a19d96f77d7e0e4852585ba00598f93?OpenDocument>

cost-effective. CanSIA presented an Advanced Energy Economy (AEE) process for Distribution System Planning Process that outlines information needed to “provide more visibility into and control of the distribution system, maximize the benefits DERs bring to the system, and maintain system reliability and reasonable cost of service to ratepayers.”⁶

When evaluating an NWA/NWS a Benefit Cost Analysis needs to be performed. This should be done comprehensively and include all benefit streams that reflect policy goals, economic factors and market conditions – both electricity and carbon markets. This model should be accessible to stakeholders and easily understood. An example below is from Con Edison’s 2026 Avoided Cost Model.⁷

Avoided Cost Model

	Net Present Value of Avoided Cost Streams
Potential Savings / Avoidance (Costs are already Escalated)	
Avoided Capacity (NYC) - Bulk System Benefits	\$63.62
Avoided Energy (NYC)	\$100.22
Net Avoided CO2	\$34.18
Avoided Distribution Costs	\$47.60
Avoided Line Loss	\$11.77
Total (\$M)	\$257.39

However, in the near term to enable a productive NWA/NWS strategy, local distribution companies should use a “go to market” strategy to see if they can get a price below what the regulated backstop solution would be. If an NWA/NWS can provide the same benefits and comes in at a better price (via an RFP or auction similar to the IESO York Region Demonstration Project), then the NWA/NWS is the better option. A cost-benefit analysis should be a key work stream in the Responding to DERs engagement, but it should not be a barrier to the enablement of NWA/NWS today.

It is critical that third parties be engaged by local distribution companies to help them understand what DERs currently exist in their jurisdictions and what can be built to support NWS. Requests for Information are a tool that can be used to evaluate the current and future marketplace in a local distribution company’s territory.

- **Compensation Frameworks**

The right regulatory environment needs to be created for utilities to invest in non-wires alternatives and services including third party participation. The financial incentives to choose NWA/NWS over traditional “poles and wires” needs to be agnostic to capex/opex issues. As noted in ‘Lessons Learned’ from the regulatory framework Con-Edison participates in, “...utility

⁶ <https://www.oeb.ca/industry/policy-initiatives-and-consultations/utility-remuneration> CANSIA Discussion Paper, April 9, 2020

⁷ <http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/a487c4934214e732852585cb003acb62?OpenDocument>

incentives should align with positive customer outcomes.”⁸ NY PSC authorized Con Edison to earn a rate of return on their investment despite not using their own capital.

Utility ownership is not required to have reliable NWA/NWS providing services to local distribution companies. Contractual agreements between utilities and third parties can define the performance requirements of NWA/NWS solutions, including meaningful non-performance penalties.

- **Integration with other Markets**

In order to obtain the most cost-effective resources for NWS, dual participation needs to be allowed. For example, a resource should be able to participate in both a local distribution companies NWA/NWS project as well as the wholesale market. The ability to revenue stack will reduce the cost of participation in the service, which will lead to both distribution level savings for consumers and wholesale market savings.

Dual participation is a now commonly accepted principle in retail and wholesale markets. FERC Order 2222 re-affirms this principle that “allows DER that participate in one or more retail programs to participate in its wholesale markets” (160) as well as “a single DER can...be compensated in each for providing distinctly different services” (164).⁹

The IESO is planning to launch an “Enabling Resources” consultation which identifies market enablement opportunities for resources including DERs and the formation of participation models for dispatchable and non-dispatchable DERs, including aggregations. The development of a regulatory framework for incorporating DERs into local distribution companies’ day-to-day practice through NWA/NWS, should occur in step with the IESO’s current ongoing engagements (Enabling Resources; Regional Planning Review, etc.). This will ensure the formation of a cohesive, coordinated DER integration plan for both the retail and wholesale side of the electricity system.

4. New – Review of the Affiliate Relationship Code

As noted in the OEB’s 2020-2021 Business Plan, a review of the Affiliate Relationship Code will assess whether the regulatory requirements for affiliate relationships “maintain an appropriate balance between protecting the interest of consumers, efficiency in regulation and the role of utilities in an evolving energy sector.”¹⁰ This review can take place in tandem with the other work streams that are both ongoing/current (Connections WG and Regional Planning Review) or are recommended (Responding to DER framework – defining NWS, screening and evaluation, compensation framework and integration with markets).

Conclusion.

The enablement of NWA/NWS through evaluation processes plus proper regulatory incentive and performance frameworks will allow the OEB to ‘keep up’ with the evolution of the electricity sector, as it responds to both internal and external factors. This process can be created to meet the near-term need of distribution system upgrades, while extracting the current value from DERs in Ontario. This will be an evolving framework, as outlined by ICF and their recommended

⁸ See ConEdison model.

⁹ https://www.ferc.gov/sites/default/files/2020-09/E-1_0.pdf

¹⁰ <https://www.oeb.ca/sites/default/files/OEB-2020-2021-business-plan.pdf>

timelines. By reviewing the processes of other jurisdictions to enable DERs to provide NWA/NWS value to local distribution companies and therefore the ratepayers, the OEB can create a regulatory framework to respond to DERs that is modern, optimized and evolving while allowing services to be provided to local distribution companies that are fair, efficient, cost-effective and reliable.