



Canadian Manufacturers and Exporters (CME) Submission EB-2018-0287 & EB-2018-0288

Utilities Remuneration and Distributed Energy Resources (DER) Integration

The OEB held an information session on February 3, 2021, to discuss two reports that had been commissioned in support of the OEB consultation on Utilities Remuneration and Distributed Energy Resources (DER) Integration. CME believes the cost of doing business in Ontario must be reduced and the CME has identified how energy policy can contribute through the following principles:

- Energy costs must be affordable, reliable, transparent and sustainable so that industry can become more competitive.
- Energy policies must be informed by evidence-based research as well as data, analysis and comparative case studies.
- Energy policies must be market-based and driven by the need to attract new investment, jobs and new growth.
- Unnecessary red tape and regulations should be eliminated.
- Policy recommendations should be adopted only if the full extent of their economic and competitiveness impacts are clearly understood and taken into account.

Context

The OEB initiated this consultation in September 2019 with stakeholder meetings to inform the scope of the consultation. This was followed by a review in February 2020 where OEB Staff synthesized the stakeholder inputs into guiding principles, objectives, and the expected scope for the consultation. Feedback from that last session and the subsequent COVID-19 pandemic led the OEB to commission two reports to provide more insight into DER adoption in the province. The OEB convened a stakeholder meeting on February 3 to discuss the findings of these reports, asking for feedback on these and on the priorities for the consultation as it proceeds:

- 1. COVID-19 Impact on Distributed Energy Resources by LEI
- 2. DER Impact Study by ICF to project future DER penetration

Findings

In response to the February 2020 meeting, the CME offered several recommendations focused on the OEB Act mandate to sustain regulated service levels on a lowering cost basis, protecting the regulated rate base, exploring the role of Industrial Conservation Initiative (ICI) in motivating DER adoption, and using evidence-based cost-benefits analyses to assess the value to rate payers. Unfortunately, the reports mentioned above do not address the recommendations previously provided, the most relevant gap being the lack of an assessment of system value that DERs provide to rate payers. Instead, the reports contain illustrative data projections whose relevance to Ontario's situation is unclear and that infer implications that do not adequately inform the root causes of DER adoption patterns in Ontario, which both reports do clarify is the ICI. As such, the outcomes do not help decision making. LEI recommended that decisions should not be made at this time with the data available.





The priority for this OEB consultation going forward should be focussed on clarifying the value DERs provide to the system and hence the basis for imposing costs (or not) on rate payers. Many issues depend on this question, including the appropriate role of rate designs in incenting DERs. As such, we provide the following four recommendations:

- 1. Consider carefully the relevance of these reports on decision making in Ontario.
- 2. Prioritize studying the total system value to rate-payers of DER in Ontario.
- 3. Align with the MENDM's principles for amending Green Energy Act (GEA) related regulations.
- 4. Consider DER integration system implications deferred from DER Connections Working Group.

Recommendation #1: Consider carefully the relevance of these reports on decision making in Ontario.

Both the LEI and ICF reports underscore how DER adoption in Ontario is a function of the financial incentives that the ICI and the Net Metering programs provide DER installations. LEI suggests that post-COVID adoption will be similarly motivated to pre-COVID adoption, even with the observed decline in ICI value to DER adopters. Both reports have based their DER adoption analyses on patterns in other jurisdictions and identified cost savings as the primary motivator. While reasonable given their noted lack of data, Ontario's unique pricing structure, incentive programs, geography, and market regulation are arguably quite dissimilar. Nothing contrasts these dissimilarities as starkly as the ICI program. The analysis of both reports did point to the ICI and Net Metering programs as the drivers for forecasting adoption. This is not surprising as the value that can be derived from the ICI program, for example, is unmatched, as shown in Figure 1.¹



Figure 1: Cost of ICI DER in Ontario Exceeds Capacity Value (\$USD/MW-Year by Region)

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¹ Lazard LCOS Analysis v5.0, IESO December 2020 Capacity Auction, OEB MSP ICI Report, IESO Power Data, LEI Report, Strapolec analysis. Value for Canada reflects Ontario and is illustrated is after 29% reduction recently enacted by Ontario government.





LEI identified that the recent government move of the renewables cost onto the tax base reduced the value derived from the ICI by 29%. Notwithstanding, the ICI still provides almost eight-fold higher revenue than recently valued by the IESOs Demand Response capacity auction. It is notable that the two other jurisdictions where DER adoption is high in the U.S. (New York and California), also offer high incentives for DER adoption, but still far less than in Ontario.

Due to the high return that the ICI offers DER proponents, adoption in Ontario is currently more limited by how fast DER can be put in.

A proper analysis of DER adoption and impacts would consider its relation to rate design. A useful analytical benchmark would be to assume the ICI and net metering programs were removed, and under that scenario, identify the system benefit of DER adoption, potentially using that guidance to recommend more appropriate rate designs that consider the full system cost impact on all rate payers. Under those adoption scenarios, more appropriate recommendations on the steps that should be taken at the cost of ratepayers may be determined.

Recommendation #2: Prioritize studying the total system value to rate-payers of DER in Ontario.

The total system value to rate payers has been raised throughout this consultation by several stakeholders. It has been emphasized that a net Cost and Benefit Analysis (CBA) should be performed from the perspective of rate payers. The ICF study only looked at DER penetration from a DER adopter perspective and did not inform whether DERs provide a system benefit. In contrast, there is substantial evidence that DERs are causing an increase to rate-payer bills:

- The OEB's own Market Surveillance Panel (MSP) released a report in 2018 that showed the ICI program was resulting in annual cost shifting of more than \$1.2B to class B consumers, and recommended adjustments be made.²
- Net metering is another government program which, like the ICI, has benefits offered to net metering participants that are not offset by cost savings to the system and drive ratepayer costs up. Investigations into the value of net metering programs in other jurisdictions show how they can shift costs to economically disadvantaged rate payers.³
- Additionally, the IESO's Non-Emitting Resources Sub-Committee (NERSC) found that residential solar and storage are not economically viable options for Ontario.⁴
- System issues are now being recognized and requiring a number of consultations across the IESO and OEB to address them. The costs of these consultations are being borne by rate payers.

Ratepayers should not be subsidizing the adoption of DERs nor the system cost incurred to upgrade the system to accommodate them. The OEB mandate to protect ratepayers should be applied to ensure this fundamental issue of net benefits to ratepayers is addressed in this consultation. For this reason, as outlined in our previous recommendations, CBAs should be used to backstop

² OEB MSP, "The Industrial Conservation Initiative", 2018.

³ MIT Energy Initiative, "The distributional impacts of rooftop solar PV adoption", 2019.

⁴ IESO NERSC, "Participation in Ontario's Future Electricity Markets", 2019.





recommended actions with evidence-based decision-making criteria that demonstrate a lowering of consumer bills for the same or better services.

Recommendation #3: Align with the MENDM's principles for amending Green Energy Act (GEA) related regulations.

The GEA was repealed in 2018. However, several regulations related to the GEA were left unchanged at that time. The MENDM has recently initiated consultations to examine modifications to these regulations to align with policies underpinning the repeal of the GEA. Recent consultations include:

- a) Proposed Revocation of O. Reg. 326/09: Mandatory Information Re: Connections of Renewable Generation Facilities, Electricity Act, 1998
- b) Proposed Revocation of O. Reg. 274/18: Siting Restrictions for Renewable Energy Generation Facilities
- c) Changes to Ontario's Net Metering Regulation to Support Community-Based Energy Systems

The result of these consultations reflect the presence of implications on policies related to DER. The DER Integration consultation should proceed in alignment with related MENDM policies and highlight where these policies impact on DER adoption assumptions, barriers, and any further modifications to regulations that may be warranted.

Recommendation #4: Consider DER integration system implications deferred from DER Connections Working Group.

The DER Connections Review working group has been working in parallel with this consultation to simplify, clarify, and improve the interconnection process. The working group has made progress on several issues, some of which were reflected in the ICF report. However, questions around broader DER system costs were deemed to be out of scope of the working group on the basis that they would be addressed in the Responding to DER consultation. This consultation should consider the following system implications:

a) An IESO System Impact Assessment (SIA) should be more prevalent in the DER Connections process

Currently, a System Impact Assessment (SIA) is only required to be completed by DER connections requests for installations above 10 MW. This 10MW limit is an artifact of the GEA. Considering the relevance of SIAs to DER connections is directly related to the aforementioned need for a total cost impact assessment. IESO SIA involvement in the connections process should be considered by this consultation for three reasons:

- The working group is looking to move away from a size-based framework towards a riskbased framework. This will require a change in the regulations stipulating when an SIA is triggered.
- Small DERs may have an impact on the system in aggregate, similar to larger installations.
- The IESO interoperability consultation has identified many factors that could impact on system reliability due to the connection of DERs

IESO's assessment of system cost implications, ratepayers are at risk of cost increases.

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b) The Distributor System Code (DSC) and all related regulations should be reviewed to properly align with the government's changes to the GEA (see recommendation #3 above) The lack of clear definitions of DER has been identified as a priority for this consultation. This need for clarity exists within the DSC and is the source of much confusion, including interpretation of the requirements stemming from GEA related regulations, such as the obligation to connect or even provide information. For example, the ICF refers to an obligation to connect DER. However, that obligation dates back to when loads had predictable and assumed behaviors that were modelled by local distribution companies in their planning. The DSC states that distributors can refuse connections if they have adverse system impacts. Suffice it to say, that the DSC warrants review.

Summary of Recommendations:

CME recommends that the approach for responding to DER and proceeding with this consultation should include:

- 1. Consider carefully the relevance of these reports on decision making in Ontario. A proper analysis of DER adoption and impacts would consider its relation to rate design, which include the ICI and Net Metering Programs. Only when considering the full range of scenarios, which includes the removal of these rate programs, can appropriate recommendations be drawn.
- 2. **Prioritize studying the total system value to rate-payers of DER in Ontario.** Clarity is required for priorities on low-cost objectives, protecting the rate base, and addressing the urgency to implement DERs.
- 3. Align with the MENDM's principles for amending Green Energy Act (GEA) related regulations. The DER Integration consultation should align with the numerous other MENDM consultations that may impact DER.
- 4. Consider DER integration system implications deferred from DER Connections Working Group. A number of issues have been flagged for discussion in the DER Integration consultation and should be considered appropriately.

About Canadian Manufacturers & Exporters (CME)

Since 1871, CME has been fighting for the future of Canada's manufacturing and exporting communities and helping them grow. The association directly represents more than 2,500 leading companies nationwide. More than 85 per cent of CME's members are small and medium-sized enterprises. As Canada's leading business network, CME, through various initiatives including the establishment of the Canadian Manufacturing Coalition, touches more than 100,000 companies from coast to coast, engaged in manufacturing, global business and service-related industries. CME's membership network accounts for an estimated 82 per cent of total manufacturing production and 90 per cent of Canada's exports.