

Ms. Christine Long
Board Registrar
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

February 16, 2021

**Re: Sector Evolution Consultations: Utility Remuneration (EB-2018-0287) and Responding to Distributed Energy Resources (EB-2018-0288)
Pollution Probe DER Post-Session Comments**

Dear Ms. Long:

In accordance with the OEB letter dated January 18, 2021 for the above-noted proceeding, please find attached Pollution Probe's written comments related to the DER reports and proposed next steps.

Pollution Probe has been an active participant in the above noted proceedings and has provided submissions, materials and a presentation to support the Board in its efforts to ensure access to Distributed Energy Resources (DERs) and their benefits in Ontario. Pollution Probe has coordinated with industry stakeholders including municipalities to promote the need for stronger alignment between community energy planning, regional electricity planning, infrastructure planning/approvals and other related regulatory issues.

General Comments

DERs are a broad set of resources available to Ontario and DER options will continue to evolve and mature over time. Pollution Probe has commended the OEB on its approach to use an over-arching policy approach to ensure that DER is looked at holistically, while using sub-components to assess and resolve specific groups of issues (e.g. DER Connections). Avoiding a siloed approach is critical to long-term success and ensure the best options for Ontario consumers and communities.

DER related issue come up in many OEB proceedings and the frequency is increasing over time in line with the value that DER solutions bring to the evolving energy sector. It is important to use a broad definition of DER to ensure that it adequately captures the full suite of related issues, benefits and opportunities. More limited scoping can be used in specific sub-initiatives, such as was successful done for DER Connections. The DER Connections Working Group

recognized that there is a broader definition for DER, but that the scope of DER Connections only dealt with issues impacting the point of connecting to the electricity system. This was better dealt with through careful scoping of the DER Connections initiative, rather than trying to redefine the DER definition in a constrained manner, which could have been confusing and deleterious on a broader scale.

It appears that the pace of activity for the DER Sector Evolution Consultation (i.e. the above-noted proceedings) has slowed since February 2020, with the exception of progress through the DER Connections process (EB-2019-0207). A significant amount of work had been conducted by the OEB and stakeholders prior to the Stakeholder Session in February 2020. OEB Staff consolidated input, actions and outcomes in an excellent presentation made on February 20, 2020. Since then, momentum has faded and it is recommended to reaccelerate in 2021 and beyond to enable the DER solutions needed to enable a Modern, Reliable and Sustainable Energy Sector for Ontario.

The pace of change related to DER is accelerating and best practice has evolved since the OEB initiated the DER Sector Evolution Consultation. For example, an industry best practice manual related to DERs was released in August 2020 to help jurisdictions consider DERs in a consistent and more effective manner. It is recommended that the OEB leverage this approach and adopt the definition of DER as outlined in the [NESP National Standard Practice Manual \(nationalenergyscreeningproject.org\)](http://nationalenergyscreeningproject.org). This will keep Ontario aligned with other jurisdictions working on the same set of challenges and opportunities.

LEI - COVID-19 impact on distributed energy resources

This report examined how COVID-19 has impacted the major drivers of DER adoption, including a desire for cost savings, the ability to reap environmental benefits, achieving better supply reliability and greater independence, and taking advantage of government incentives. The report has been finalized and there is no option to make adjustments at this point. Therefore, the comments below are intended to provide observations on key elements from the report and how they should be considered in relation to the OEB's DER Sector Evolution Consultation.

- The LEI report leverages an IESO definition for DER which is narrower than the DER focus required by the OEB. The OEB's role is distinctly different from that of IESO and definitions need to match the scope of the OEB's role. Use of definitions is important as outlined elsewhere in this submission and it is important that a DER definition not be leveraged that restricts the ability of the OEB to consider all the relevant DER options that are appropriate and applicable for communities across Ontario. Additionally, IESO has acknowledged

elements beyond the DER definition used by LEI, including the use of Conservation and Demand Management (CDM) as a DER tool.

- The scope of the LEI report provides short-term insight related to the impacts of COVID-19. However, it is important not to let short-term impacts overshadow the long-term goals for DER in Ontario.
- The LEI heat map of DER activity illustrates that DERs are being used very broadly, likely due to the net benefits that they bring to consumers, communities and the overall energy system. Although the LEI data is from 2019, it shows a strong base which has grown since then in North America.
- LEI highlights various benefits (identified through surveys) that DERs contribute, including cost savings, reliability, energy security/independence, environmental benefits and alignment with government policy/incentives. These benefits align well with the drivers documented in Ontario, include those outlined in energy and emission plans for municipalities across Ontario.
- The findings of the LEI report provide a good snapshot of short-term impacts related to COVID-19, but provide limited insight on longer term DER in Ontario.
- The LEI report suggests a cautious approach by the OEB on its consultation process due to the slowing of DER activities over the period of COVID-19. Pollution Probe suggests that the exact opposite is actually needed. Slowing down or delaying consultation activities only delays the availability of DER benefits to Ontario. The LEI report does not adequately consider the amount of time and effort still required by the OEB and stakeholders to advance the tangible and meaningful DER solutions needed in Ontario. Many barriers and challenges still remain. Even with a comprehensive and efficient workplan, the finish line is still years away. The need for DERs in Ontario is imminent and growing. The OEB should accelerate the process, rather than delay it.

ICF Report - Ontario DER Impact Study

The ICF Study forecasts the adoption of distributed generation and storage in Ontario over the next 10 years and identifies potential signposts for the timing of regulatory policy responses. The study considers two of the most common DER technologies that can inject power into the distribution system, solar photovoltaics (PV) and battery energy storage. The report has been finalized and there is no option to make adjustments at this point. Therefore, the comments below are intended to provide observations on key elements from the report and how they should be considered in relation to the OEB's DER Sector Evolution Consultation.

- ICF correctly indicates that the pace of change in the electric utility sector is accelerating because of technological innovation, evolving customer expectations, and a changing policy landscape.

- The scope of the report is only on solar PV and battery energy storage, which are two leading DER technologies. As outlined elsewhere in this submission, it is important to take a top-down, holistic approach with DER in order not to limit options to a subset of DER market solutions. It will be important that the OEB DER Sector Evolution Consultation does not become focused only on solar PV and battery energy storage. If those are leading opportunities to consider first, they should be clearly laid out in a multi-year workplan (Pollution Probe suggests in the recommendations at the end of this submission).
- As clarified by ICF in their presentation February 3, 2021, the scenarios provided by ICF in their study are only meant to be illustrative, rather than definitive. It is most likely that the 'high' scenarios modeled by ICF will be exceeded by 2030 and the scenarios provided in the study should not be used as guidance. Given that these two technologies are leading DER options to support growing electrification and emissions reduction, it should be expected that penetration rates are much higher by 2030 than illustrated in the study. Existing policy already pursues net zero emissions by 2050, and Ontario municipalities are currently assessing options for net zero emissions by 2030.
- Additionally, ICF built their model based on the 2017 IESO LTEP projections that are somewhat dated now. It will be important to consider future oriented projections based on best available information and be cautious about relying solely on older modelling information.
- Avoided energy costs were identified by ICF related to solar PV, but should have also been applied to energy storage. This is even more true when applied to Ontario's energy system which is forecast to be supply constrained in the future. Energy storage reduces incremental peak generations which is the most costly and dirtiest supply option for Ontario.
- Pollution Probe generally agrees with the implications laid out in the study and these would provide a useful input to an OEB multi-year DER workplan. Further assessment and adjustment will be needed as the workplan is developed.
- ICF appears to view DER issues primarily from a system or LDC perspective. It is important to view DERs from a market perspective, including consumer and municipal needs. If the pace needed by the market exceeds the pace that some LDCs can adapt, the market always wins. For example, if an LDC does not prudently plan for increasing EV penetration and their system is unable to handle the load, the market is likely to look at non-LDC options (e.g. through batteries), despite the system and LDC. Using a market view is equally or even more important than a system and LDC view alone.

Recommendations and Next Steps

- The OEB should lock in the gains that have been made over the past two years to avoid slipping backwards. This includes locking in the elements laid out in the OEB Staff presentation from February 20, 2020, including the Guiding Principles, OEB role, etc. The materials presented by OEB Staff were overwhelmingly supported and provide a firm foundation to move forward.
- It is recommended that the OEB set a workplan with specific outcomes and timelines out over the next five years. Details in the more immediate future (2021 and 2022) should be more detailed and have more granular timelines, while longer term items in the plan could be less detailed since they may need to be adjusted. This type of approach provides certainty on the commitment to DER and has a firm transparent timeline for the outcomes needed to move it forward.
- Avoid getting stuck in the weeds for the overarching DER Consultation. There are lots of considerations that will need to be looked at in details (e.g. rate impacts, affiliate relationship code, etc.), but if the overall direction and framework makes sense, then those details can be worked through. Parallel activities can be leveraged to work through specific sets of issues.
- It is recommended that the OEB set up a structure for more regular updates and discussion. To the extent that issues in the OEB workplan can be segmented into small subsets of issues, targeted initiatives can be set up to make progress on those specific issues and then they can be fed back into the broader consultation (similar to the DER Connections approach).
- It would be helpful for the OEB to commission a common set of technology assumptions to enable the OEB to compare long-term benefits and costs for DER options against traditional options. Pipes and wires solutions approved now will be in places far past 2050, and may not be the best option in many cases. It is important to use a consistent, defensible and transparent set of assumptions.
- Use the OEB DER Sector Evolution Consultation as an overarching view of the moving parts and to ensure orderly macro coordination and ensure that it does not constrain the natural growth of DER option evolution that occurs in other related proceedings (e.g. gas IRP Framework).
- Ensure alignment with community energy and emissions planning. Across Ontario, municipalities have developed and are implementing energy and emissions plans. These plans are agnostic on whether the required investments come from LDCs or private/public investors, so rules will need to be developed which promote the best outcomes for consumers and remove legacy barriers.
- Use industry best practice to guide the OEB approach, including the National Standard Practice Manual for DERs, August 2020 ([NESP National Standard Practice Manual](#))

nationalenergyscreeningproject.org. Pollution Probe recommends adopting the National Standard Practice Manual definition for DER.

- Some areas of the Province will be ready and willing to move at a faster pace than others. The OEB will need to consider this in relation to its workplan. Areas for early adoption of enhanced DERs could be done on a pilot basis and the learnings could be feed back into the broader consultation.
- Longer term, the OEB and Government of Ontario will need to tackle the legacy issues (e.g. energy silos) and DER will need to be effectively integrated into the next Long Term Energy Plan and Environment Plan at the Provincial level.

Thank you for the opportunity to provide feedback and please do not hesitate to reach out should you have any questions.



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