resilient LLP

February 17, 2021

VIA RESS

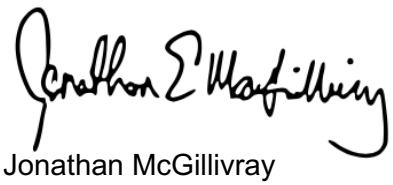
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4
Attention: Registrar

Dear Ms. Long:

Re: Utility Remuneration and Responding to Distributed Energy Resources Consultation – Written Comments on Expert Reports
Board File Nos.: EB-2018-0287 and EB-2018-0288

We are counsel to the Electric Vehicle Society (**EVS**) in the above-noted proceeding. Please find enclosed EVS's written comments further to the Board's letter of January 18, 2021.

Sincerely,



Jonathan McGillivray

c. All Participants in EB-2018-0287 and EB-2018-0288
All Licensed Electricity Distributors, Natural Gas Distributors and Electricity Transmitters
All Other Interested Stakeholders

Encl.

Jonathan McGillivray • Bay Adelaide Centre • 333 Bay Street, Suite 625 Toronto, ON M5H 2R2 • +1.647.208.2677 • jonathan@resilientllp.com

ONTARIO ENERGY BOARD

EB-2018-0287
EB-2018-0288

ELECTRIC VEHICLE SOCIETY (EVS)

WRITTEN COMMENTS

February 17, 2021

1. The Electric Vehicle Society (**EVS**) is a non-profit organization representing over 1,000 end-use, largely residential, individual electric vehicle (**EV**) electricity customers. EVS has 13 local chapters of electricity rate-paying customers in Ontario. Its mission is to accelerate the adoption of EVs and shift car culture towards a more sustainable future.
2. The Ontario Energy Board's (the **Board**'s) integrated EB-2018-0287 / EB-2018-0288 consultation processes (the **Consultations**) on utility remuneration and responding to distributed energy resources (**DERs**) are of particular relevance to EVS and its members. EVS members stand to be directly and materially affected by developments in the Board's and the broader sector's response to DERs. The Board held a stakeholder meeting on February 3, 2021 to discuss the expert reports prepared by ICF and London Economics International LLC and invited stakeholders to comment on the findings and recommendations of the reports and experts. Stakeholders were also invited to discuss the implications of the studies on the appropriate focus areas and sequencing of next steps in these Consultations.
3. EVS submits that these Consultations should reflect the considerations that: (i) EVs are growing; (ii) EVs can behave like DERs (commonly known as "V2G" or V2X"); and (iii) EVs may have significant system and consumer benefits. EVS attended the stakeholder meeting on February 3, 2021 and appreciates the opportunity to provide these comments on the reports and their implications for next steps.
4. This submission (A) provides EVS' brief comments on the ICF report and (B) sets out EVS' recommendations for focus areas and next steps in the Consultations.

A. Comments on ICF Report

5. The Board engaged ICF to conduct a DER impact study to forecast the adoption of distributed generation and storage in Ontario over the next 10 years and identify the potential signposts for the timing of regulatory policy responses. EVS submits that the scope of the ICF report was unduly narrow, given the remit. The report only addressed distribution-connected, grid-injecting solar PV and energy storage, and therefore failed to consider the broad range of other DER technologies, including wind, biomass, biogas, EVs, combined heat and power plants, natural gas-fuelled generators, controllable loads (e.g., HVAC systems, electric water heaters), and others.
6. Consequently, EVS believes that the ICF report may have significantly underestimated projections of DER deployment in Ontario over the next 10 years. DERs other than solar PV

and energy storage, including and especially EVs, may drive significant DER deployment across the province over the study period.

7. During the stakeholder meeting, ICF representatives were asked whether consideration of a broader set of DER technologies would have changed the recommendations set out in the ICF report and responded as follows [emphasis added]:

> MR. BERLIN: […] I tend to think a lot of things we are suggesting -- you know, if you look at a lot of the recommendations around convening conversations with certain key stakeholders, or setting kind of standard data reporting requirements or things of that nature, or exploring how utility planning might evolve or utility monitoring and controls might evolve, a lot of those things I think are probably true across the full kind of spectrum of DER.
>
> Now, would some of them happen a little bit faster or later, or would some of them happen within a slightly different flavour? Possibly. I mean I think about demand response which is, you know, already, which is been a tried and true essentially DER for a while now. ***I also think about all the changes we are seeing today even nowadays in the EV space with major car companies announcing changes in plans that frankly came too late for this study. But it would have been interesting to think about what the timing of that would have all meant.***
>
> […]
>
> MR. VAIDYA: This is Surhud. I think there are a few elements that would continue to hold in the recommendations. For example, if I were to use electrification and proliferation of electric vehicles, if electric vehicle adoption amongst customers would go up at very rapid rates, that would mean impacts for the distributors on the grid on their distribution system. ***So there would need to be approaches to try to understand, for example, the penetration of electric vehicles, additional capacity would have to be put into place to incorporate those electric vehicles. [S]o I think some of the recommendations that we have made here would still hold, just using that as an illustrative example.***

MS. SIDDIQUI: Just add to Surhud's point, this is Homaira from ICF, that one of the recommendations we put forward was working with LDCs to determine how the potential DER trajectory would look like within the respective territories to help determine the DER use cases.

I think if you look along the lines of EV and EV adoption rates, what would be an important consideration in the near term for LDCs.

MR. BERLIN: Yeah, and I will note a trickier one because unlike solar storage, which once they are installed they tend to stay put, EV projections are inherently difficult because although someone might by at some place they may move, they may charge at a workplace, there's a bunch of complications on the EV side that kind of go above and beyond what needs to be considered for solar and storage as well.

MR. SUCCAR: Just to add that one of my colleagues mentioned this, sort of linking back to the objectives of the study, the technician early on -- the choice of scope here was deliberate and not to limit the set of technologies, the science of technologies, but to really focus on the question of what are the sign posts for regulatory action and what informs sort of timing for those considerations.

And from that point of view, distributed resources on lower voltage rated circuits, potentially on secondary circuits, had the potential to create issues around secondary voltage drives, along -- bypassing in the context of market design and market participation that inform issues around the roles and responsibilities of various actors within the regulatory construct that informs actions that OEB might take in the future.

So, yes, if we included a broader set of technologies and had a different set of penetration rate, ultimately the choice of technologies and the penetration rates we focused on, we were focussed on what are those technologies that really inform that regulatory question. So I think we'd

> get to different curves, but it wouldn't give you an answer which answers the questions that we were attempting to get at.[1]

8. EVS believes that these comments, provided by ICF representatives during the stakeholder meeting, provide an important addendum to the ICF report and emphasize the influence of EVs on the subject matter of the report. Furthermore, these comments indicate that important considerations of EVs as DERs were excluded from the ICF report as a result of its limited scope. EVS strongly urges the Board to ensure that the next steps of these Consultations are not unduly constrained on the basis of the limited scope of the ICF report.

B. Recommendations for Focus Areas Next Steps

9. EVS reiterates its recommendations for the next phase(s) of the Consultations:

   (a) Reduce regulatory barriers to DERs, including EV-related DERs, by developing clear guidelines/rules and streamlining regulatory review;
   (b) The benefits of EVs should be considered fully in the context of DER integration;
   (c) Utilities should be encouraged to implement EV DER infrastructure where efficient and effective for consumers;
   (d) Re-assess and clarify regulatory restrictions on utility business activities and separation of regulated versus competitive services;
   (e) Encourage deferred utility capital investment by advancing the role of DERs as viable alternatives to traditional investment;
   (f) Develop mechanisms to compensate DERs, including EV-related DERs, for the services they provide to the electricity system;
   (g) Facilitate market-based solutions that respect consumer choices by increasing transparency and competition;
   (h) Create a dedicated working group focused on EVs as DERs.

10. The number of EVs and EV chargers in Canada has increased at an accelerating pace over the last several years. EVs and EV-related DERs, including EV chargers and other equipment, are a key example of a DER that has a range of key system and consumer benefits, including economic benefits (optimized generator operation, deferred generation capacity investments, reduced ancillary service cost, reduced congestion cost, deferred transmission capacity investments (reduced sustained outages, reduced momentary outages, reduced sags and

[1] Transcript, Stakeholder Meeting (February 3, 2021) 85:1–87:20.

swells)) and environmental benefits (reduced greenhouse gas emissions). EVS submits that it is essential that these benefits are reflected in the regulatory framework that emerges from the Consultations.

11. DER and EV-related DER growth and integration are moreover resulting in fundamental changes to the distribution grid that will impact several aspects of the electricity system, including electricity supply and demand, customer preferences, capital expenditures, operations and maintenance, load, and productivity. EVS submits that the Consultations should reflect the importance of minimizing risks associated with stranded assets while facilitating adoption of new DER technologies and approaches through reduced regulatory barriers, increased competition, better rate structures, clear and efficient rules and requirements, and streamlined regulatory review.
12. EVS strongly endorses explicit consideration of EVs, and smart charging more specifically, as a key DER technology for these Consultations and for broader near-term examination by the Board. EVS has had the opportunity to review — and agrees with — Environmental Defence's (**ED**'s) request that the Consultations should include a working group or similar process for focused attention on EVs.[2]
13. EVS generally agrees with the initial list of topics to be addressed proposed by ED. EVS specifically recommends that a dedicated working group be formed in order to develop specific guidance around EV infrastructure readiness, the significant benefits and importance of EV supply equipment (EVSE) and removal of regulatory barriers to charging service, rate design (including very low overnight rates for EV charging), and promotion of EV best practices in capital investment, system planning, load and demand forecasting, and productivity among utilities. The working group could also undertake activities to engage local distribution companies where higher levels of EV penetration are expected, commission research and jurisdictional review on facilitating EV charging, consider the implications of EVs for distribution planning, cost allocation, and rate design, and develop proposals and/or frameworks for regulatory reforms to facilitate the benefits of EVs and EV charging.
14. EVS furthermore continues to recommend that additional work be undertaken to ensure that the Consultations are conducted on the basis of a common, consensus- and research-based definition of DERs that is clear, practical, and inclusive of EVs.

[2] Environmental Defence's Comments (February 17, 2021), pp. 6-7.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS

17th day of February, 2021

Lisa (Elisabeth) DeMarco
Resilient LLP
Counsel for EVS

Jonathan McGillivray
Resilient LLP
Counsel for EVS