



Jonathan McGillivray
Associate
Bay Adelaide Centre
333 Bay Street, Suite 625
Toronto, ON M5H 2R2
TEL +1.647.208.2677
FAX +1.888.734.9459
jonathan@demarcoallan.com

October 18, 2019

VIA RESS AND COURIER

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
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 filed further to the Board's letter dated September 26, 2019.

Sincerely,

A handwritten signature in black ink that reads "Jonathan McGillivray". The signature is fluid and cursive, with the first name being the most prominent.

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

ONTARIO ENERGY BOARD

EB-2018-0287

EB-2018-0288

ELECTRIC VEHICLE SOCIETY (EVS)

WRITTEN COMMENTS

October 18, 2019

INTRODUCTION

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 12 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 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 from September 17 through September 19, 2019 and has invited stakeholders to provide input on foundational questions, including:
 - i. What objectives should the utility remuneration and responding to DERs initiatives aim to achieve?
 - ii. What specific problems or issues should each initiative address?
 - iii. What principles should guide the development and selection of policy options?
3. EVS submits that the objectives, specific problems and issues, and guiding principles of the Consultations should reflect the considerations that EVs are growing, EVs can behave like DERs, and EVs may have significant system and consumer benefits. EVS made a presentation and provided extensive oral comments at the stakeholder meeting in mid-September and appreciates the opportunity to file these comments, which are divided into the following three sections:
 - (a) EV trends and opportunities in Ontario;
 - (b) the role of EVs as DERs; and
 - (c) EVS's recommendations.

A. EV TRENDS AND OPPORTUNITIES IN ONTARIO

4. The number of EVs on the road in Canada has increased at an accelerating pace over the last several years. As of late 2018, the share of new passenger car sales that were EVs had

risen to 8.3% nationwide.¹ As of the end of the first quarter of 2019, EVs had a market share of nearly 2% with continued growth across most provinces.² There are over 100,000 EVs in Canada and more than one-third of those are in Ontario.³ All predictions point to exponential growth in EVs over the next few years as a result of extended range, greater variety of makes and models, and improving battery capacity. Furthermore, there are nearly 2,000 public charging stations across the province in addition to potential and existing charging points available at most consumer residences.⁴

5. Growth in EVs represents an important opportunity to reduce Ontario's overall greenhouse gas emissions since transportation accounts for the largest share of Ontario's greenhouse gas emissions (35%), while Ontario's electricity grid is nearly emissions-free.

B. THE ROLE OF EVs AS DERs

6. The IESO defines DERs as "electricity-producing resources or controllable loads that are connected to a local distribution system or connected to a host facility within the local distribution system."⁵ The IESO further states that DERs can include solar panels, combined heat and power plants, electricity storage, small natural gas-fueled generators, electric vehicles and controllable loads, such as HVAC systems and electric water heaters.
7. There are several well-reported system and consumer benefits of DERs. EVS submits that these benefits may apply to all DERs, including energy storage facilitated by EVs (commonly known as "vehicle to grid" (V2G) or "vehicle to X" (V2X)). These include: (i) economic benefits (optimized generator operation, deferred generation capacity investments, reduced ancillary service cost, reduced congestion cost, deferred transmission capacity (reduced sustained outages, reduced momentary outages, reduced sags and swells); and (iii) environmental benefits (reduced greenhouse gas emissions). Electrification of mass transit, particularly through the proliferation of battery electric buses (BEBs) may also have significant DER benefits.

¹ Fleetcarma, "Electric Vehicle Sales Update Q3 2018, Canada", available online at:

<https://www.fleetcarma.com/electric-vehicles-sales-update-q3-2018-canada/>.

² Electric Mobility Canada, "Electric Vehicles Sales in Canada – Q1 2019", available online at: <https://www.emc-mec.ca/wp-content/uploads/Sales-Report-Q1-2019.pdf>.

³ *Ibid.*

⁴ Data extracted from ChargeHub.

⁵ IESO, "Distributed Energy Resources", available online at: <http://www.ieso.ca/en/Learn/Ontario-Power-System/A-Smarter-Grid/Distributed-Energy-Resources>.

8. EVS submits that EVs can provide system-wide benefits and increased capacity in a cost-effective manner and greenhouse gas emissions reductions that benefit all consumers (whether or not they are EV owners). DER and EV-related DER growth and integration are 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.
9. EVS further submits that the Consultations should consider the fact that both utility and non-utility investment in DERs, including EV-related DERs, may produce enhanced system reliability, lower customer costs through load shifting, deferred/paced system investments, and improved flexibility.

C. RECOMMENDATIONS

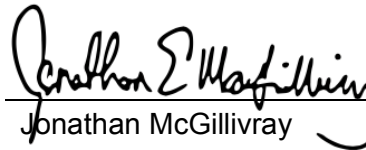
10. EVS respectfully makes the following recommendations:
 - (a) Reduce regulatory barriers to DERs, including EV-related DERs, by developing clear guidelines/rules and streamlining regulatory review;
 - (b) The benefits of EVs should be considered fully in the context of DER integration;
 - (c) Utilities should not be prohibited from implementing EV DER infrastructure where efficient and effective for customers;
 - (d) Re-assess and clarify regulatory restrictions on utility business activities and separation of regulated vs. competitive services;
 - (e) Encourage deferred utility capital investment by advancing the role of DERs as viable alternatives to traditional investment;
 - (f) Development mechanisms to compensate DERs, including EV-related DERs, for the services they provide to the electricity system; and
 - (g) Facilitate market-based solutions that respect consumer choices by increasing transparency.

ALL OF WHICH IS RESPECTFULLY
SUBMITTED THIS

18th day of October, 2019



Lisa (Elisabeth) DeMarco
DeMarco Allan LLP
Counsel for EVS



Jonathan McGillivray
DeMarco Allan LLP
Counsel for EVS