Elson Advocacy

January 14, 2021

BY EMAIL AND RESS

Ms. Christine Long
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700, P.O. Box 2319
Toronto, Ontario M4P 1E4

Dear Ms. Long:

Re: EB-2020-0007 – Burlington Hydro – 2021-2025 Distribution Rates

Please see the enclosed interrogatories of Environmental Defence in the above proceeding.

Yours truly,

Amanda Montgomery

cc: Parties in the above proceeding

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Interrogatories of Environmental Defence

EB-2020-0007 – Burlington Hydro – 2021-2025 Distribution Rates

Transmission Losses

1. Reference: Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Preamble: Hydro Ottawa's Conservation and Demand Management Annual Reports for 2006 and 2007 describe a project relating to Distribution Loss Reduction as follows:

> Description:
>
> The Distribution Loss Reduction Program is a broad network based initiative to drive greater efficiencies within the distribution grid. This program will identify opportunities for system enhancements. Next steps will be to complete the engineering analysis and feasibility studies. Items to be addressed may include the following:
>
> > Power Factor Correction - A power factor assessment will be completed which will identify locations for the installation of power factor correction capacitor banks.
> >
> > Voltage Conversion - Voltage upgrades can save up to 90% of the losses associated with a feeder as higher voltages and lower current results in lower losses. This study will ascertain the locations and value of voltage conversions.
> >
> > Power System Load Balancing - This program is designed to ascertain where load shifting can occur to improve system efficiency. It is estimated that approximately 5% - 10% of system losses could be saved.
> >
> > Voltage Profile Management - Changing voltage profiles at the distribution station level can result in a peak reduction at the controllable distribution stations.
> >
> > Line Loss Reductions - Replacement of conductors can reduce line losses. An evaluation of where such opportunities exist may be undertaken.
>
> Target users
>
> The results of this program will positively impact all of Hydro Ottawa's customers.
>
> Benefits
>
> Reducing electricity distribution system delivery losses will have a number of positive impacts including reducing system demand, relieving network capacity to accommodate growth and reducing the requirement for new generating capacity in the Province. Costs

associated with distribution system delivery losses are recovered through electricity distribution charges. Reductions in these costs will therefore benefit all customers

The plan can be found here: EB-2019-0261, Technical Conference Undertakings, Undertaking TC-JT 3.15, Attachment A.

The most recent update can be found here: EB-2019-0261, Interrogatory Response, IRR ED-1, Attachment A.

Questions:

a) Please review the work completed by Hydro Ottawa with respect to losses and create a chart detailing which items Burlington Hydro has and has not also completed. Please separately include each of the following areas:
    a. Power Factor Correction
    b. Voltage Conversion
    c. Power System Load Balancing
    d. Voltage Profile Management
    e. Line Loss Reductions
b) If there were three areas that Burlington Hydro could explore to find the most cost-effective opportunities to reduce losses, what would those be?

2. Reference: Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Questions:

a) How does Burlington Hydro's rate of distribution system energy losses compare to other leading LDCs inside and outside of Ontario?
b) How does Burlington Hydro compare to other LDCs in terms of its efforts to reduce distribution system energy losses? In what ways is or isn't Burlington Hydro a leader in this regard?

3. Reference: Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Questions:

a) What are the most important steps that Burlington Hydro has taken in the past 20 years to reduce distribution system energy losses?
b) Where does Burlington Hydro believe the greatest opportunities are to make additional reductions in distribution losses in the next 20 years?
c) Does Burlington Hydro quantify and consider the potential value of distribution loss reductions for different options when procuring equipment (e.g. transformers) and deciding on the details of demand-driven capital projects (e.g. the type and sizing of

conductors)? If yes, please explain how and provide documentation detailing the methodology used.

d) If Burlington Hydro is considering the value to its customers of distribution loss reductions for planning purposes, how does it calculate the dollar value ($) of said loss reductions (kWh)? Is the value calculated based only on the HOEP or on all-in cost of electricity (e.g. including the GA)?

e) Please list and describe the operational measures that Burlington Hydro takes to cost-effectively reduce distribution losses.

f) Please provide a table listing the technically available measures to cost-effectively reduce distribution losses and describe for each the respective responsibilities of Burlington Hydro, the IESO, and Hydro One.

4. Reference: Exhibit 8, p. 20-21; Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Questions:

a) Please complete the below table.

Value of Burlington Hydro's Distribution System Energy Losses – Historic						
	2015	2016	2017	2018	2019	Total
Electricity Purchases (MWh)						
Electricity Sales (MWh)						
Losses (MWh)						
Losses %						
All-In Cost of Electricity in BHI ($/MWh) – Annual Average						
Cost of Losses ($)						

b) Does Burlington Hydro anticipate the value of losses on its system to be materially higher or lower over the next five years? Please explain.

c) Please complete the following table:

GHG's from Burlington's Forecast Distribution System Energy Losses						
	2021	2022	2023	2024	2025	Total
Forecast Losses (MWh)[1]						

[1] If no better numbers are available, the losses from 2019 or the average over 2015 to 2019 could be used for the purpose of this row of this response.

Carbon Intensity of Electricity[2] (CO2e/MWh)						
GHGs (CO2e)						

d) Is Burlington Hydro willing to review its operational measures, investment planning, and other practices to consider whether it could be taking additional measures to cost-effectively reduce the energy losses occurring in its distribution system?

5. Reference: Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Preamble: In EB-2019-0261, Hydro Ottawa agreed to, and the Board approved, the following:

Between 2021 and 2025, Hydro Ottawa shall endeavour to maintain its five-year average total system losses below the target of 3.02% set by the OEB in EB-2005-0381 through cost-effective measures.

Question:

a) Is Burlington Hydro willing to agree to the same terms? If not, what commitments can Burlington Hydro make to the Board in this regard? In particular, please indicate what target Burlington Hydro is willing to meet.

6. Reference: Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Preamble: In EB-2019-0261, Hydro Ottawa agreed to, and the Board approved, the following:

In addition, over the course of 2020-2021, Hydro Ottawa shall prepare a plan to reduce distribution losses as much as possible through cost-effective measures. The utility shall file the plan with the OEB when complete. In 2022-2025, Hydro Ottawa shall implement as many of the cost-effective measures set out in its plan as possible (e.g. any changes to planning and procurement processes to better mitigate losses, investments that can be made within current budgets, operational measures, etc.). All other cost-effective measures will be incorporated into the utility's next rebasing application and DSP.

Question:

a) Is Burlington Hydro willing to agree to the same terms? If not, what commitments can Burlington Hydro make to the Board in this regard? In particular, please indicate what target Burlington Hydro is willing to meet.

[2] Please base this figure on the IESO's January 2020 Annual Planning Outlook - http://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Annual-Planning-Outlook-Jan2020.pdf?la=en; see also the data tables at http://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Annual-Planning-Outlook-Data-Tables-Jan2020.xlsx?la=en.

7. Reference: Exhibit 8, Attachment 2, Tab Appendix 2-R Loss Factors

Preamble: In EB-2019-0261, Hydro Ottawa agreed to, and the Board approved, the following:

Finally, as described in Hydro Ottawa's response to undertaking JT 3.10, a pilot of a Grid Edge Volt/VAr Control ("VVC") solution will be complete by the end of 2020. If this pilot is successful, Hydro Ottawa shall increase the deployment of these (or equivalent) units by conducting an analysis in 2021 to identify potential suitable locations and by deploying these units in a subset of locations which are deemed to be suitable and cost-effective, with an estimated investment of up to $1.0M over the five-year test period. The cost of these investments will be accommodated within the overall approved capital budget.

Question:

a) Is Burlington Hydro willing to agree to implement similar technology through an equivalent commitment? If not, what commitments can Burlington Hydro make to the Board in this regard?

Fixed Versus Variable Charges

8. Reference: Exhibit 7, Attachment 19, Cost Allocation Model, Sheet O2 Monthly Fixed Charge|Floor|Ceiling

Questions:

a) Please confirm that no proposed fixed charges exceed the maximum fixed charge set by the Board.
b) Most utilities set fixed charges above the maximum levels prescribed by the Board. Why has Burlington Hydro not done the same?
c) Please provide a table of Burlington Hydro's fixed monthly charges for its commercial and industrial customers for each year back to 2005.
d) Please describe the basis for Burlington Hydro's fixed monthly charges.

Integrated Resource Planning

9. Reference: Distribution System Plan

Questions:

a) Please describe the processes at Burlington Hydro to implement Integrated Resource Planning, with a particular focus on the consideration of non-wires solutions to system needs. Please file any internal documentation outlining said processes.

b) How does Burlington Hydro ensure that non-wires options are identified and considered early enough in the planning process to ensure that they can be implemented in lieu of supply-side solutions where cost-effective?

c) How does Burlington Hydro calculate the net costs/benefits of non-wires solutions when comparing them to supply-side options? Please include all kinds of distributed energy resources in your answer, including energy efficiency, demand response, storage, and distributed generation. Please include a description of how avoided energy costs (e.g. the value of future energy savings from energy efficiency) are considered when comparing wires and non-wires solutions.

e) Does Burlington Hydro always study potential non-wires solutions to system needs in its capital planning processes? If not, please explain the screening criteria that Burlington Hydro uses to determine whether an assessment of non-wires solutions is warranted.

f) Does Burlington Hydro agree that it is appropriate in certain circumstances for an LDC to procure or contract for distributed energy resources where doing so would be a more cost-effective alternative in comparison to a traditional supply-wide investment?

g) Does Burlington Hydro agree that it is appropriate for it to earn a return if it is able to avoid a capital investment in wires or transformers through distributed energy resources such as energy efficiency, demand response, or storage?

h) Does Burlington Hydro agree that it is important to give LDCs an incentive to adopt non-wires solutions to system needs where those solutions are more cost-effective?

i) Does Burlington Hydro agree that the difference between the financial returns from wires and non-wires solutions creates a disincentive to implement non-wires solutions?

j) Has Burlington Hydro sought approval to earn a return for avoiding a capital investment in wires or transformers through distributed energy resources such as energy efficiency, demand response, or storage?

k) How does Burlington Hydro believe a financial return should be calculated for avoiding a capital investment in traditional supply-side infrastructure through distributed energy resources such as energy efficiency, demand response, or storage?

10. Reference: Exhibit 8, Attachment 2, Tab A.2-AA_Capital Projects

Questions:

a) Of the capital spending identified in the application, please identify which items are candidates for considering whether the need could be addressed most cost-effectively with distribution energy resources or non-wires solutions? For each, please describe the need addressed by the project and the cost of the supply-side solution.

b) Does Burlington Hydro anticipate that the drop in electricity demand from COVID-19 will defer the need for some of the capital investments outlined in its application? If yes, would this potentially create a window to consider or reconsider non-wires solutions? If not, why not?

c) If Burlington Hydro determines before the end of 2025 that a certain capital investment could be addressed more cost-effectively through a non-wires solution, what regulatory steps would be required to implement that non-wires solution instead? Please consider a scenario where the non-wires solution is less expensive up-front and a scenario where the non-wires solution is more expensive up-front but is more cost-effective overall (e.g. due to future avoided energy costs).

d) Is Burlington Hydro proposing to spend on any distributed energy resources (including energy efficiency, storage, etc.) to avoid more costly supply-side investments? If yes, please provide details and cite references to the evidence. If not, why not?

11. Reference: Exhibit 8, Attachment 2, Tab A.2-AA_Capital Projects

Preamble: These questions relate to the planned investments described in Attachment 2, Tab A.2-AA_Capital Projects.

Questions:

a) For each investment, please quantify and describe the need to be addressed.

b) For each investment, please discuss (i) the possibility that COVID-19 might reduce or defer the need; and (ii) whether this may provide additional time to consider or implement non-wires solutions.

c) For each investment, describe the efforts taken so far to consider distributed energy resources as a potentially more cost-effective alternative. Please expressly address (i) energy efficiency; and (ii) a combination of options, such as energy efficiency coupled with storage. Please file any analysis or related documentation that Burlington Hydro has prepared in this regard.

d) For each investment to be made by HONI in relation to Burlington, please describe whether and how HONI and Burlington Hydro have or will be working together to consider non-wires alternatives.

Burlington's **Climate Change Action Plan**

12. Reference: Exhibit 1, Page 27; Exhibit 1, Appendix B, pp. 8, 26

Questions:

a) Please file a copy of Burlington's Climate Change Action Plan and its declaration regarding a climate emergency.

b) Please confirm Burlington's GHG reduction targets.

c) Please provide Burlington's planned reductions in GHGs from electricity to meet its overall GHG targets.

d) What are Burlington Hydro's roles and responsibilities in relation to Burlington's Climate Change Action Plan and related climate change policies?

e) Please provide the information used in the Climate Change Action Plan modelling of the "business as usual" scenario for electricity use, electricity carbon intensity, and GHG's arising from electricity use.

Burlington's Electricity Demand and GHGs Per Climate Planning Documents					
	2020	2021	…	2049	2050
Annual Electricity Demand (kWh)					
Carbon Intensity of Electricity (CO2e/kWh)					
GHGs from Electricity Use (CO2e)					

f) According to the IESO's January 2020 Annual Planning Outlook[3], the carbon intensity of electricity is forecast to increase significantly between now and 2040 under the reference case. Please calculate the impact of this increase on the GHG emissions arising from Burlington's electricity usage in the following table:

Burlington's Carbon Emissions from Electricity – Impact of Increased Carbon Intensity					
	2020	2021	…	2040	Total
Annual Electricity Demand – Burlington (kWh)					
Scenario 1 – Carbon Intensity Remains at 2019 Levels					
Carbon Intensity of Electricity (CO2e/kWh) -					
GHGs from Electricity Use (CO2e)					
Scenario 2 – Carbon Intensity Increases per IESO Annual Planning Outlook Reference Case					
Carbon Intensity of Electricity (CO2e/kWh) -					
GHGs from Electricity Use (CO2e)					
Percent Difference in GHG Levels Between Scenario 1 and 2					

[3] http://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Annual-Planning-Outlook-Jan2020.pdf?la=en; see also the data tables at http://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Annual-Planning-Outlook-Data-Tables-Jan2020.xlsx?la=en.

g) Please confirm that the forecast increase in carbon intensity of electricity is due to forecast increases in gas-fired electricity generation.

h) Has Burlington Hydro provided the City of Burlington with an updated forecast of GHG emissions arising from electricity use in the City as a result the forecast increases in gas-fired electricity generation? If yes, when was that provided?

For each of the above, please make assumptions as necessary and state all assumptions. If the calculations are a challenge, please answer the question on a best-efforts basis and with any caveats as necessary. If certain parts of the answer cannot be estimated, please explain why and complete as much of the answer as possible. If an answer cannot be provided for the complete period, please provide an answer for as far into the future as feasible. If Burlington's electricity demand cannot be forecast beyond 2025, please assume that demand remains at 2025 levels.

Energy Efficiency

13. Reference: Exhibit 1, pp. 79-81.

Questions:

a) What are the total avoided energy costs that have been achieved though Burlington Hydro's CDM programs to-date?

b) What are the total net benefits (calculated per the TRC) that have been achieved through Burlington Hydro's CDM programs to-date?

c) What was the TRC benefit-cost ratio for Burlington Hydro's CDM programs for the latest year of data available for (i) residential customers; and (ii) commercial / industrial customers? Please indicate the year of data provided.

d) Is Burlington Hydro prevented by the OEB rules or other rules to implement a non-wires alternative to a capital project that involves an energy efficiency program? If yes, please identify the rules and provide excerpts.

e) Is Burlington Hydro prevented by the OEB rules or other rules from filing an application with the OEB seeking approval of an energy efficiency program akin to the applications filed by gas utilities for their DSM programs? If yes, please identify the rules and provide excerpts.

f) Could the City of Burlington ask Burlington Hydro through a unanimous shareholder resolution (or otherwise) to apply to the OEB for approval of an energy efficiency program to be funded via distribution rates (e.g. as part of its efforts to meet its GHG reduction targets)? If not, please explain why not.

g) Aside from any regulatory questions, does Burlington Hydro believe it could develop an energy efficiency program that would save more for consumers (via avoided future energy costs) than it cost (via administration and the incremental costs of the efficiency measures)? Please explain.

h) If Burlington Hydro were to propose an energy efficiency program, what areas would it focus on?

i) If Burlington Hydro were to finance the cost of an energy efficiency program to ensure the benefits (avoided energy costs) match the costs over time, what, approximately, is the lowest interest it could obtain to do so?

14. Reference: Distribution System Plan, Section 5.4.1.1, p. 132

Preamble: "BHI is not currently engaged in any demand response, energy storage programs or other capacity relief programs."

Question:

a) Please explain why Burlington Hydro is not currently engaged in any demand response, energy storage or other capacity relief programs.

15. Reference: Exhibit 4, pp 214-216

Preamble: On September 30, 2020, MENDM directed the IESO to implement a 2021-2024 Conservation and Demand Management Framework launching January 1, 2021. The new framework will be centrally-delivered by the IESO under the Save on Energy brand and will include incentive programs targeted to those who need them most, including opportunities for commercial, industrial, institutional, on-reserve First Nations, and income-eligible electricity consumers. The implications of this new framework have not been contemplated in this Application. The details of programs to be offered under the new framework, and their estimated energy and demand savings are not available to BHI. Several IESO reports suggest the anticipated savings may be significant, and will result in reductions to BHI's load and revenues. As of this filing, the OEB has not provided guidance on how to incorporate the impact of this new framework in BHI's forecast loads.

Questions:

a) Please provide any updated information that is now currently available in relation to this topic.

b) Please assess and describe the degree to which any demand reductions would impact infrastructure investments planned or under consideration by Burlington Hydro. Please provide a response on a project-by-project basis.

Heat Pumps

16. Reference: Distribution System Plan

Preamble: An expert report filed in EB-2016-0004 by Dr. Stanley Reitsma, P. Eng., outlined significant benefits to the electricity system in reducing peak demand.[4] See page 5 to 13. For example, Dr. Reitsma concludes:

> "Though geothermal relies on electricity as an input (to power the pump), geothermal system actually reduces electricity demand in the summer, and increases it in the winter, relative to traditional methods of heating and cooling (heating with fossil fuels and cooling with traditional AC systems). For Ontario, a summer peaking jurisdiction, a greater reliance on geothermal would reduce peaking power needs and also reduce surplus baseload generation. Coincidentally, the load profile of a geo system is similar to the production profiles of Ontario wind energy facilities."[5]

> "For the cooling of buildings, Geo HP's use about half the electricity to operate compared to air source heat pumps and AC systems, and, geo's electrical demand doesn't spike as it gets hot outside, since the ground loop temperature remains relatively unchanged. They can reduce the "heat wave" electricity system demand spikes by up to 75%."[6]

Questions:

a) Does Burlington Hydro agree with the comments in the above-referenced report regarding the benefits that geothermal systems can provide to the electricity system, including a reduction of peak demand? Please explain.

b) Does Burlington Hydro agree that the expansion of geothermal systems would reduce peak demand on Burlington Hydro's system, on which distribution system capacity is based?

c) Does Burlington Hydro agree that geothermal systems have the capacity to provide important benefits to the electricity distribution system, especially in comparison to traditional baseboard heating?

d) Does Burlington Hydro agree that the benefits of geothermal systems are not reflected in the distribution costs paid by residential consumers because those charges do not vary based on coincident peak demand?

e) Does Burlington Hydro agree that increases in heat pumps would assist the City of Burlington in achieving its GHG reduction targets?

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[4] Dr. Stanley Reitsma, P. Eng., *Ontario's Low Carbon Future: Geothermal Heat Pumps*, March 21, 2016 (http://www.rds.oeb.ca/HPECMWebDrawer/Record/521626/File/document).
[5] *Ibid*, p. 5.
[6] *Ibid*, p. 6.

f) Would Burlington Hydro agree to study the possibility of offering customers with geothermal systems a reduction in their distribution charges that would approximately reflect the benefits those customers provide to the distribution system? Assume the overall rate structure would continue to make Burlington Hydro whole for its revenue requirement.

g) Could the City of Burlington ask Burlington Hydro through a unanimous shareholder resolution (or otherwise) to apply to the OEB for approval of a rate structure that provides a discount to customers with geothermal systems to reflect the benefits those customers provide to the distribution system? If not, please explain why not. Assume the rate structure would continue to make Burlington Hydro whole for its revenue requirement.

h) Please provide Burlington Hydro's best information on the number and proportion of its customers with (i) electrical; (ii) natural gas; (iii) propane; (iv) oil; (v) wood; and (vi) other kind of space heating.

17. Reference: Distribution System Plan

Questions:

a) Please describe potential roles that Burlington Hydro could play in relation to the implementation of electric heat pumps as an alternative to natural gas heating.

b) How many new homes and businesses are forecast to be built in Burlington Hydro's coverage area in the next 10 years? If available, please provide an annual breakdown.

c) How many new customers does Burlington Hydro expect to hook up in the next 10 years? If available, please provide an annual breakdown.

d) What assistance could Burlington Hydro provide to developers to promote the installation of electric heat pumps instead of natural gas furnaces in new construction?

e) Would Burlington Hydro benefit from regulatory changes in order to play a greater role in promoting the expansion of electric heat pumps in lieu of natural gas? If yes, what are those potential changes?

f) Please comment on the report by Ralph Torrie estimating that electricity demand could decline if all heating was converted to electric heat pumps and energy retrofits were increased: https://www.corporateknights.com/channels/built-environment/recovering-stronger-building-low-carbon-future-green-renovation-wave-15875463/.

18. Reference: Distribution System Plan

Questions:

a) How many and what percent of Burlington Hydro's customers heat their homes with electricity through resistance heating? Please provide a best efforts estimate.

b) How many and what percent of Burlington Hydro's customers heat their homes with electricity through air-source and ground-source heat pumps? Please provide a best efforts estimate.

c) How many and what percent of Burlington Hydro's customers have electric water heaters. Please provide a best efforts estimate.

d) Please provide a table quantifying the winter peak demand (KW), summer peak demand (KW), and annual energy consumption (KWh) attributable to (i) home heating; and (ii) water heating for Burlington Hydro customers. Please also express this as a percent of the total demand and consumption. Please provide a best efforts estimate.

e) What role could heat pumps play in reducing energy use?

Electric Vehicles

19. Reference: Distribution System Plan

a) How many electric vehicle charging stations are installed by Burlington Hydro customers now and how many are forecast for each year from 2021 to 2025? Please provide a high-end and low-end estimate.

b) Is Burlington Hydro confident that it is making all the investments needed to facilitate increases in electric vehicles and electric vehicle charging stations even if its high-end forecasts come to fruition? Please explain.

c) Have any Burlington Hydro customers been unable to install an electric vehicle charging station (e.g. a level 3 station) due to constraints on Burlington Hydro's distribution system? If yes, how many customers each year?

d) Have any Burlington Hydro customers been *delayed* in installing an electric vehicle charging station (e.g. a level 3 station) due to constraints on Burlington Hydro's distribution system? If yes, how many customers each year?

e) Is it Burlington Hydro's goal that all customers will be able to install and use electric vehicle charging stations if they wish to do so? If not, please detail Burlington Hydro's targets in this regard.

f) Is it Burlington Hydro's goal that all customers will be able to install and use electric vehicle charging stations *without delay of more than one month* if they wish to do so? If not, please detail Burlington Hydro's targets in this regard.

g) Please list and describe the investments that Burlington Hydro intends to make over 2021-2025 to ensure readiness for electric vehicles.

h) Please list and describe the ways in which Burlington Hydro is *currently* able to use the battery in electric vehicles as a distributed energy resource to provide a service that benefits the distribution system.

i) Please list and describe the ways in which it is possible to use the battery in electric vehicles as a distributed energy resource to provide a service that benefits the distribution system, *focusing only on those which Burlington Hydro is not yet capable of undertaking*.

j) Is Burlington Hydro able to capitalize on the storage capacity of electric vehicles to reduce distribution system costs by: (i) communicating directly with charging stations to reduce load during peak periods; (ii) communicating directly with charging stations to allow power to be drawn from batteries during peak periods; (iii) drawing energy from car batteries connected to charging stations during peak periods; and (iv) communicating directly with charging stations to ensure energy is drawn from the LDC's system at the optimal times? If not, please explain what additional steps Burlington Hydro is willing to commit to take to explore and implement these things.

k) Is Burlington Hydro willing to offer customers special rates to encourage the expansion of electric vehicles? If not, why not?

l) Is Burlington Hydro willing to further explore steps it can take to speed up the implementation of charging stations in hard-to-service locations, such as for on-street parking in the City of Burlington?

m) Could the City of Burlington ask Burlington Hydro through a unanimous shareholder resolution (or otherwise) to apply to the OEB for approval of programs intended to encourage the expansion of electric vehicles? If not, please explain why not.