October 26, 2021

VIA RES

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

Dear Ms. Long,

Re: Hydro One Networks Inc. (HONI)
Transmission and Distribution Rates (2023-2027) Application
Board File No.: EB-2021-0110

We are counsel to the Distributed Resource Coalition (**DRC**) in the above-noted proceeding. Please find attached the interrogatories of DRC, filed pursuant to Procedural Order No. 1.

Sincerely,

Lisa (Elisabeth) DeMarco

c. Eryn MacKinnon, HONI
Charles Keizer and Arlen Sternberg, Torys LLP
Wilf Steimle, Electric Vehicle Association
Cara Clairman, Plug'n Drive

Encl.

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ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B, as amended (the **Act**);

AND IN THE MATTER OF an Application by Hydro One Networks Inc. ("**HONI**") for an order or orders made pursuant to section 78 of the Act, approving or fixing just and reasonable rates for the transmission and distribution of electricity.

EB-2021-0110

INTERROGATORIES

OF

DISTRIBUTED RESOURCE COALITION (DRC)

October 26, 2021

Question: A–DRC–1

Reference:
- Exhibit A, Tab 3, Schedule 1, pp. 21-22

Preamble: HONI's business plan notes that one of the key drivers of its investment plan is the need to integrate distributed energy resource ("**DERs**").

a) Please provide any and all analysis, reports, studies, presentations, data or other documentation with respect to past and forecast (2020-2027) DER uptake in HONI's service territory.

b) Please indicate whether HONI considers Electric Vehicles ("**EVs**") to be DERs and discuss the related implications for HONI's distribution system and system capacity.

c) Please provide any and all analysis, reports, studies, presentations, data or other documentation with respect integrating DERs as a driver HONI's investment plan.

Question: A–DRC–2

Reference:
- Exhibit A, Tab 3, Schedule 1, Attachment 1, p. 46

Preamble: HONI indicates that it is seeking to transition its commercial fleet to low or zero emission technology, including increasing the rate of EVs from an estimated 5 percent of the renewal forecast in 2020 to 45 percent by 2030.

a) The federal government provides financial incentives for qualified zero emission vehicles purchased or enhanced capital cost allowance deductions.

(i) Please advise whether HONI's planned fleet renewal investments qualify for the federal financial incentives and/or enhanced capital cost allowance deductions.

Please advise whether the capital expenditure figures reported reflect federal financial incentives and/or enhanced capital cost allowance deductions.

b) Please complete the following chart indicating the breakdown of vehicle type in HONI's current vehicle fleet:

Vehicle Type	Fully Electric	Hybrid	Non-EV/Hybrid	Total
Heavy Duty Vehicles				
Medium Duty Vehicles				
Light Duty Vehicles				

c) What proportion of HONI's planned fleet renewal investment will involve fully electric and/or hybrid vehicles? Please complete the following chart indicating HONI's anticipated breakdown of vehicle type in HONI's planned fleet renewal investment (2022 to 2027):

Vehicle Type	Fully Electric	Hybrid	Non-EV/Hybrid	2022-2027 Total
Heavy Duty Vehicles				

Medium Duty Vehicles				
Light Duty Vehicles				

d) Please indicate the estimated quantum of efficiency savings (including fuel cost savings) that HONI anticipates it will achieve by utilizing hybrid vehicles and EVs rather than traditional internal combustion engine vehicles.

Question: A–DRC–3

Reference:
- Exhibit A, Tab 6, Schedule 6, Attachment 1

Preamble: HONI notes that through its Ivy Charging Network, a partnership with Ontario Power Generation, it is expected to have 73 fast-charger stations across Ontario by the end of 2021.

a) Please provide estimates for the expected number of fast-charging stations across Ontario for each year between 2022 and 2027.

b) Please provide any and all reports, working papers, analysis or other materials that have been prepared (in draft or in final form) in connection with the Ivy Charging Network.

Question: A–DRC–4

Reference:
- Exhibit A, Tab 7, Schedule 1, Attachment 2, p. 3

Preamble: HONI's five-year investment plan includes installing innovative energy battery and storage solutions to provide improved resiliency for customers by 60%.

a) Please indicate what Exhibit B investments will provide for the installation of the above-mentioned DERs solutions.

b) Please indicate whether HONI considers EVs to be part of the above-mentioned DERs solutions.

c) Please provide any and all analysis HONI undertook to arrive at the 60% improved resiliency figure. Please provide HONI's definition of "resiliency" as it related to installing energy battery and storage solutions.

Question: **A–DRC–5**

Reference:
- Exhibit A, Tab 4, Schedule 1

Preamble: HONI is proposing that OM&A costs in years two through five of its rate term be adjusted by a Revenue Cap Index ("**RCI**"), on an annual basis, as follows:

$$\mathbf{RCI = I - X + C}$$

where,

- "I" is the inflation factor;
- "X" is the productivity factor;
- "C" is HONI's custom capital factor reduced by a supplemental stretch factor on capital of 0.15%

a) Please outline HONI's assumptions in the "X" productivity factor in the above RCI equation regarding capacity, load changes, and leveraging due to EVs and other DERs in each of years two through five.

b) Please outline HONI's assumptions in the "C" term in the above RCI equation regarding capacity, load changes, and leveraging of EVs and other DERs in each of years two through five.

c) How were each of DERs, EVs, and EV charging infrastructure treated for the purpose of setting the "I" factor at which HONI arrived? Please provide all related working papers.

Question: **A–DRC–6**

Reference:
- Exhibit A, Tab 3, Schedule 1, Attachment 1

Preamble: HONI indicates that its load and customer forecast methodology uses well-established industry practices and methods, such as econometric and end-use models, Conservation and Demand Management ("**CDM**") inputs from the Independent Electricity System Operator ("**IESO**"), and customer forecast surveys.

a) Please discuss whether HONI's load forecast considers the impact and integration of EVs and EV charging infrastructure and provide any and all related analysis, working papers, and/or reports.

b) Please provide, in the chart format below, an assessment of the impacts on loads and demands — including the load forecast — of HONI's estimate of EVs and distributed generation in each year and any supporting references.

	2023	2024	2025	2026	2027
EVs (number, kW or kWh)					
EV charging infrastructure (number, kW or kWh)					
Distributed Generation (number, type, kW or kWh)					
etc.					

c) The Government of Canada has set a mandatory target for all new light-duty cars and passenger trucks to be zero-emission by 2035. In the *Made-in-Ontario Environment Plan* (the "**Environment Plan**") the Ministry of Environment, Conservation and Parks estimates that 16% of targeted greenhouse gas emissions reductions will come from low-carbon vehicles (i.e., primarily EV adoption). Please indicate:

(i) whether HONI's assumptions regarding EVs and greenhouse gas emissions reductions resulting from EVs in its service territory are consistent with these federal and provincial policies;

(ii) if not, what are HONI's assumptions;

(iii) whether HONI has altered its perceived impact of EV adoption on load forecasts in light of the federal target or Environment Plan or

any other federal or provincial plan or program, including proposed green stimulus programs following the COVID-19 pandemic;

(iv) whether HONI will update its overall demand assumptions and EV related assumptions in light of

a. the federal target;

b. the Environment Plan;

c. any other federal or provincial plan or program, including proposed green stimulus programs following the COVID-19 pandemic;

(v) what are the estimated total and annual capital expenditures and operating expenditures regarding EV charging infrastructure that HONI has included in the Application during the 2023-2027 period; and

(vi) what capital expenditure and operating expenditure funding (federal, provincial, or otherwise) is available to HONI specific to EVs and DERs.

Question: **B–DRC–7**

Reference:
- Exhibit B, Tab 1, Schedule 1, Section 1.6

Preamble: HONI engaged Innovative Research Group Inc. ("**IRG**") to assist in meeting HONI's customer engagement commitments and develop a comprehensive customer engagement study. The work was carried out in two phases. The first phase engaged customers at the beginning of the investment planning process. During the second phase, customers were again engaged after draft investment plans were prepared

a) Please provide a copy of all written instructions provided by HONI to IRG in relation to IRG's customer engagement mandate for the Application and the reports provided in Exhibit B, Tab 1, Schedule 1, Section 1.6, Attachments 2-7.

b) Please provide a copy of all written instructions provided by HONI to IRG in relation to customer engagement with respect to consumer choice in integrating new technologies like DERs, EVs, solar power, and battery storage.

c) Please describe all measures undertaken by HONI and IRG to invite and ensure the participation of EV stakeholders and other DER customers (including EV drivers, owners of DERs, EV associations, and DER industry associations) in customer engagement activities.

d) Please provide any and all notes from IRG's customer engagement relating to EVs/DERs that are supplementary to the reports provided in Exhibit B, Tab 1, Schedule 1, Section 1.6, Attachments 2-7.

Question: B–DRC–8

Reference:
- Exhibit B, Tab 1, Schedule 1, Section 1.8

Preamble: HONI's Business Plan indicates that the Application includes an "assessment of circumstances, challenges and other issues affecting planned investments" including building grid resilience against climate change. HONI's System Plan includes an analysis of the impacts of climate change on its network. HONI indicates that part of its adaptation response to climate change includes investments and expenditures related to deploying DERs to provide backup power. Part of HONI's mitigation response to climate change includes the transition of its commercial fleet to low or zero emission technology. HONI further indicates that the connection of customer DERs "may also contribute to reduction of [HONI's] Scope 2 emissions."

a) Please identify any and all instances in which electrification, electric mobility, EVs, and electrified transportation charging were included or considered as mitigating or aggravating factors in HONI's assessment of the risks associated with climate change.

b) Please provide in tabular format HONI's anticipated annual Scope 1, 2, and 3 emissions over the Application period (2023-2027) and please indicate the anticipated reductions in Scope 1, 2, and 3 emissions attributable to HONI's mitigation and adaption responses related to DERs.

c) Please provide any and all analysis undertaken by HONI in quantifying its Scope 1, 2, and 3 emissions. Please also provide any and all modelling or other analysis HONI has undertaken to estimate reductions in its Scope 1, 2 or 3 emissions.

Question: B–DRC–9

Reference: Exhibit B, Tab 2, Schedule 1, Section 2.11, T-SA-06

Preamble: HONI proposes capital expenditures for protection and control modifications for DERs to preserve its loading and protection capability in order to accommodate the connection of DERs on HONI's distribution and other local distribution company distribution systems.

HONI indicates that "gross costs have been forecast based on current DER customer requests, and anticipated future requests resulting from the IESO Industrial Conservation Initiative (ICI) program."

a) Please provide the number of DER customer requests for 2020 (actuals) and 2021-2027 (forecast) to support HONI's proposed capital expenditures.

Question: B–DRC–10

Reference: Exhibit B, Tab 3, Schedule 1, Section3.11, D-SR-12

Preamble: HONI proposes several planned productivity initiatives, including investments to replace its legacy AMI 1.0 system with a new AMI 2.0 system. HONI notes that the legacy system causes lost opportunities for benefits and efficiencies and the replacement will provide "improved network reliability and coverage, additional features, and AMI platform enhancements (e.g., enhanced meter memory and increased network capacity) to address foreseeable future needs (e.g., increased adoption of [DERs} such as distributed generation, battery storage, and [EVs])."

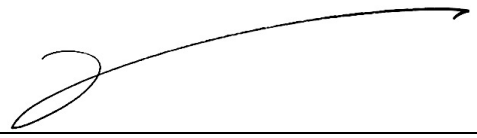
a) Please outline and provide examples of additional complexities that HONI expects will be introduced into the AMI and metering domains as DERs and EVs grow.

b) Please outline how AMI analytics and integration management will assist HONI to manage the additional complexities associated with DERs and EVs. In addition, please explain why the use of AMI data is important in the context of DERs and EVs.

c) Please provide any and all estimates of short-, medium-, and longer-term customer savings that will result from the AMI.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS

26th day of October, 2021



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