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July 22, 2025

EB-2024-0115 Hydro Ottawa 2026-2030 Custom Rate Application
Pollution Probe Interrogatories to Applicant

Dear Mr. Murray:

In accordance with OEB direction, please find attached Pollution Probe's interrogatories to the Applicant. The following appendix have been filed in parallel.

PollutionProbe_IR_AppendixA_CanmetReport_20250722

Respectfully submitted on behalf of Pollution Probe.

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Cc: All Parties (via email)
Richard Carlson, Pollution Probe (via email)

EB-2024-0115

ONTARIO ENERGY BOARD

Hydro Ottawa

2026-2030 Cost of Service

POLLUTION PROBE INTERROGATORIES

July 22, 2025

Submitted by: **Michael Brophy**

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Toronto, Ontario M4G 3H4

1-PP-1

Reference: EB-2019-0126 dec_order_Hydro Ottawa_20201119, Schedule A, Settlement Proposal page 22 of 67.

a) Please confirm that the City of Ottawa Energy Evolution plan remains in place with Net Zero by 2050 targets. If not correct, please provide the updated plan and explain the changes.

b) Please provide the activities and outcomes delivered by Hydro Ottawa coordination over the 2021-2025 term related to cost efficiencies, reduced emissions, and enhanced energy outcomes within the City of Ottawa. For each activity and outcome, please include specific quantitative results where possible.

c) Please provide a summary of the activities and outcomes to be delivered by Hydro Ottawa coordination over the 2026-2030 term related to cost efficiencies, reduced emissions, and enhanced energy outcomes within the City of Ottawa. For each activity and outcome, please include specific quantitative results where possible.

1-PP-2

Ref. 1: Ontario's Energy for Generations plan (Energy for Generations | ontario.ca). This major policy document was recently released by the Province of Ontario following Hydro Ottawa's filing of its application.

a) What policy issues in the Energy for Generations plan are incremental to what Hydro Ottawa considered in development of its application?

b) Please explain how Hydro Ottawa intends to integrate the new policy directions over the rate term.

c) One of the four key principles in Ontario's Energy for Generation plan is to decarbonize electricity and reduce the grid intensity. Please provide any policies and/or actions that Hydro Ottawa has to reduce grid emissions locally, including reduction of generation using fossil fuels.

d) What additional performance metrics may be required to assess Hydro Ottawa's progress against any of the new items (including DERs) in the Provincial Energy for Generations plan?

1-PP-3

Reference: June 11, 2025 Directive to the OEB (OC-802-2025.pdf) and Directive to IESO (https://www.ieso.ca/-/media/Files/IESO/Document-Library/corporate/ministerial-directives/Directive-from-the-Minister-of-Energy-and-Mines-20250612-IEP.pdf)

The above-noted Directives were issued to the OEB and IESO following Hydro Ottawa's filing its application. Items in the directives occur over the next year and/or within the timeframe of the Hydro Ottawa's application, Strategy and DSP.

a) What policy or operational issues outlined in the Directives are incremental to what Hydro Ottawa considered in development of application and what is required over the plan term?

b) Please explain how Hydro Ottawa intends to participate in and implement related actions in the relevant initiatives outline in the Directives.

c) Please provide a copy to the local DER and eDSM (previously called CDM) forecast Hydro Ottawa provided for its service territory into the most recent Regional Planning for this planning region. Please provide DER types at the most granular type available and not the gross and net kW impact related to each.

d) Please explain how Hydro Ottawa ensured that (current and future) local DERs are included in the Regional Planning process that Hydro Ottawa participates in and how those resources are netted out of the demand forecasts to ensure that wires solutions are not over-estimated.

1-PP-4

Ref. 1: Ontario Ministry of Energy and Electrification's Cost Effective Energy Pathways Study for Ontario (Cost Effective Energy Pathways Study for Ontario)

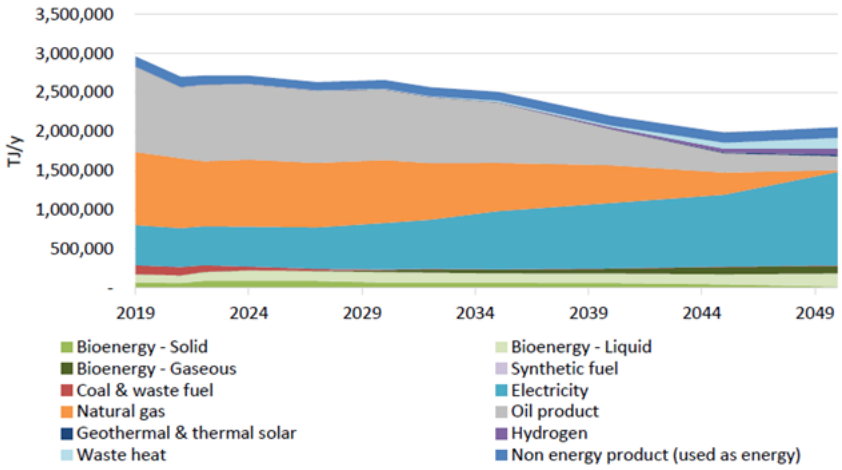


Figure ES-1. Final energy consumption (TJ/y) by fuel type from 2019 to 2050 for the NZ50 IP

a) Please confirm that the Provincial Energy Pathway noted above has a common Net Zero by 2050 objective to the City of Ottawa Energy Evolution Plan. If Hydro Ottawa notes significant differences, please provide details.

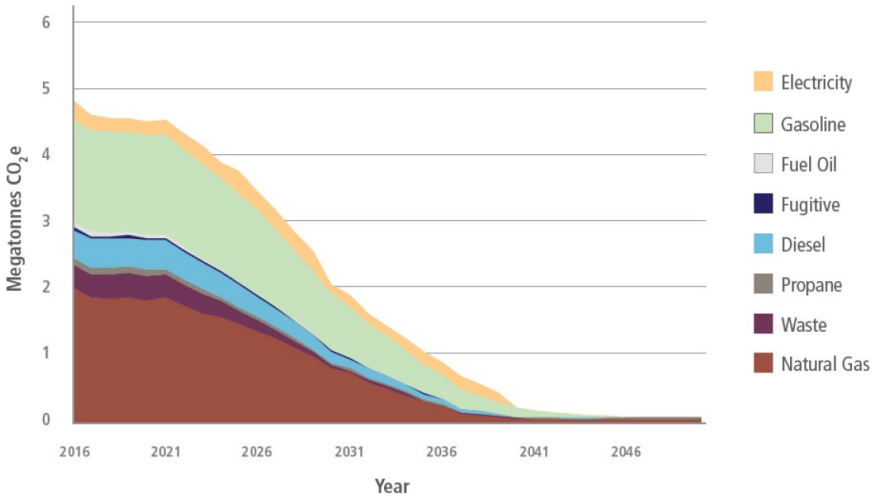
b) Does Hydro Ottawa believe that the Provincial energy Pathway outlined above is reflective of the Energy Transition and planned trajectory for Hydro Ottawa service territory? If not, why not.

c) What policy or operational issues outlined in the Provincial Pathways Study are incremental to what Hydro Ottawa is able to accommodate based on the application and plan filed?

d) Does Hydro Ottawa's application and plan enable the pathway to net zero by 2050 as outlined in the Provincial Pathways Study noted above? If not, please explain what the variances are and what changes would need to occur to ensure that Hydro Ottawa is able to deliver over the rate plan term in a manner that aligns with net zero by 2050.

1-PP-5

Please confirm that the following diagram represents the City of Ottawa's Energy Evolution emission reduction curve. If this is not current, please provide the more current version. [reference: Energy Evolution Plan, Page 25 - OTTAWA'S COMMUNITY ENERGY TRANSITION STRATEGY – FINAL REPORT]



1-PP-6

a) Please provide a copy of Hydro Ottawa's emission reduction commitments and net zero plan.

b) Please outline Hydro Ottawa's emissions reduction targets for the rate period, if any.

1-PP-7

Reference: Figure 7 - Historical and Forecasted DER Capacity [1/3/2, page 24]

a) Please explain what the numbers just below the total MW per year represent (e.g. 4 in 2019 and what the total per year represents as a percentage of peak demand.

b) Please explain what the non-renewable DERs represent and what Hydro Ottawa is doing to promote BESS and renewable over non-renewable, in alignment with Ottawa's net zero objectives.

c) Are EV reductions from managed charging included in the figures noted above. If not, why not.

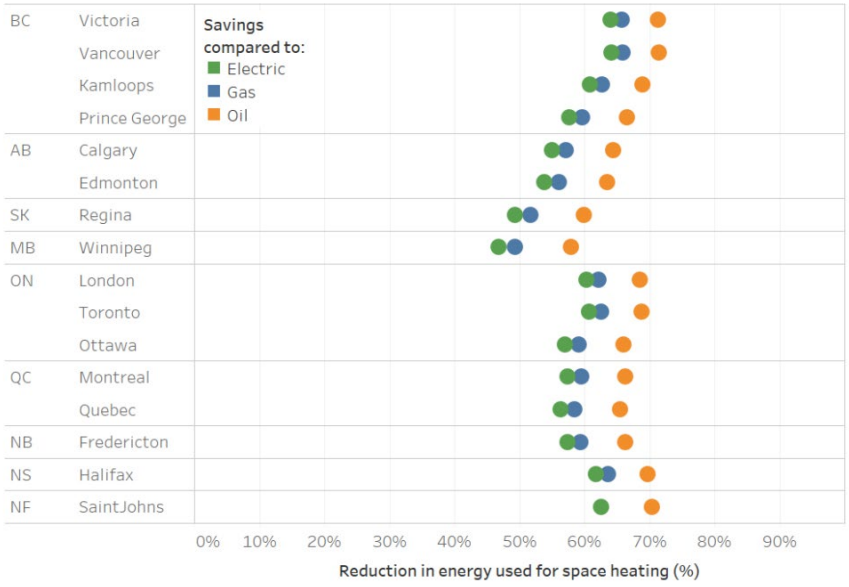
d) What are the net peak load reductions per year due to the DERs noted in Figure 7.

e) Please explain what activities Hydro Ottawa is undertaking to increase DERs and also to leverage the net demand benefits that can come from DER programs and coordination.

1-PP-8

Reference: PollutionProbe_IR_AppendixA_CanmetReport_20250722

Figure 1: Energy Savings (percentage) for a ccASHP compared to natural gas, oil and baseboard electric.



The CanmetENERGY cold-climate air source heat pump (ccASHP) Report shows an electric ccASHP is 50% to 70% more efficient than natural gas, oil or resistance (i.e. baseboard) electric.

Please confirm this aligns with Hydro Ottawa's understanding. If Hydro Ottawa has a different understanding, please provide a copy of the details.

1-PP-9

Table 10 - 2026-2030 Custom Performance Scorecard [1/3/2, page 5] and “For Growth & Electrification , which focuses on expanding grid capacity, new measures include tracking incremental system capacity and DER capacity”. [1/3/1, page 36]

a) If DERs, NWS and enhancing DSO capabilities is a focus underpinning Hydro Ottawa’s plan, please explain why the following scorecard measure targets are only “monitor” instead of tangible values to drive increasing value and penetration.
   - Customer Participation in Non-Wires Solutions
   - Distributed Energy Resource Capacity

b) Please explain why net demand reductions is not also a metric to measure for DERs given managing DERs can reduce peak demand.

c) Please provide the baseline actual for the two metrics noted above and if the OEB were to require a tangible quantitative annual target for the two measures noted above, please provide what Hydro Ottawa would propose.

d) Advancing as a DSO will require Hydro Ottawa to move away from utility owned solutions (e.g. battery storage) and use a more open approach to enable the market to fill those needs. Please describe the changes Hydro Ottawa is making to shift this approach.

1-PP-10

Reference: Hydro Ottawa and other distributors have known for several years that the Ministry, OEB and the IESO together, intend to advance a Distribution Systems Operator (DSO) model; on May 20, 2025 the OEB issued a discussion paper on the move to the DSO model. The application and plan has several statements of intention, but it is unclear what changes and results Hydro Ottawa intends to deliver over the plan.

a) Please provide examples of specific, new and/or innovative DER / NWS programs Hydro Ottawa intends to implement (Pilots, Regulation Change Requests, etc.).

b) What incremental approvals (if any) does Hydro Ottawa require to implements the specific DSO activities identified in its 2026-2030 plan.

c) Does Hydro Ottawa have a specific plan to learn from the existing and ongoing success of other LDC’s to reduce costs and increase results from DSO-related activities (e.g. Toronto Hydro and other utilities are already delivering some of these initiatives).

2-PP-11

Reference: Exhibit 2– Distribution System Plan and DER definition from National Standard Practice Manual - NSPM (nationalenergyscreeningproject.org)

Distributed Energy Resources (DERs) are resources located on the distribution system that are generally sited close to or at customers' facilities. DERs include EE, DR, DG, DS, EVs, and increased electrification of buildings. DERs can either be on the host customer side of the utility interconnection point (i.e., behind the meter) or on the utility side (i.e., in front of the meter). DERs are mostly associated with the electricity system and can provide all or some of host and/or support the utility system by reducing demand and/or providing supply to meet energy, capacity, or ancillary services (time and locational) needs of the electric grid.

a) Please provide the definition of DER that Hydro Ottawa is using and explain how it differs (if at all) from the best practice NSMP definition noted above.

b) Please explain what DER resources from the list above are included in the Hydro Ottawa modeling and what the gross and net impact for each were. Please also provide the gross and net impact related to each type of DER included in Hydro Ottawa's modelling.

c) What local DER forecast does Hydro Ottawa rely on for DERs that are not identified and controlled by the IESO? Please provide a copy of the forecast.

d) Please provide the full list of local DERs not controlled by IESO, included in Hydro Ottawa demand model.

e) Please explain how DERs forecasted in Hydro Ottawa's gross and net demand forecast are used as a baseline input into the Regional Planning process.

2-PP-12

Ref. 1: Exhibit 2 – Distribution System Plan and Ontario Save on Energy eDSM Portfolio (Ontario Launches New Energy Efficiency Programs to Save You Money | Ontario Newsroom)

a) Please provide details related to Hydro Ottawa's level of commitment to promote the Provincial eDSM programs and undertake local eDSM programs. For the local program, please provide a copy of the agreement with IESO to facilitate local eDSM actions.

b) Has Hydro Ottawa assessed the maximum portion of energy and demand savings possible over the rate term (and beyond if available) that could be achieved by eDSM (formerly called CDM)? If no, please explain why not. If yes, please provide a copy of the analysis, reports, presentation and other related materials.

c) Compared to the maximum potential for eDSM over the rate term, what portion of this is reflected in the Hydro Ottawa plan as filed?

d) Please explain how Hydro Ottawa plans to maximize eDSM results in its service territory from the IESO's Save on Energy program portfolio and local eDSM initiatives.

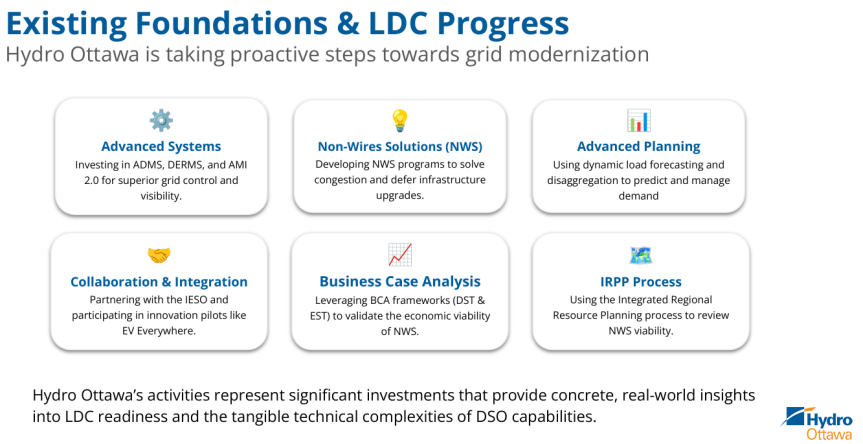
2-PP-13

Reference: "Hydro Ottawa informed the OEB of minor modifications to the project's construction schedule. Whereas the original schedule had contemplated an in-service date of November 2021, this date was subsequently revised to Q2 2022. In addition, the name of the station has been changed from South Nepean Municipal Transformer Station (MTS) to Cambrian MTS." [1/1/4, page 9] and, "The PSN Project will not preclude the future promotion and use of renewable resources in the South Nepean area. On the contrary, as affirmed in the Applicants' interrogatory responses, the Project will support greater deployment of renewable resources, as the South Nepean MTS transformers have been specifically designed to accommodate injection of renewable energy into the local area's transmission system." [EB-2019-0077 Reply Submission by Hydro One and Hydro Ottawa for the South Nepean]

Given that the Cambrian MTS (formerly called South Nepean) was completed in 2022, please provide details on the incremental renewable resources and other DERs that have been connected due to this additional capacity.

2-PP-14

Reference: Hydro Ottawa - DSO Capabilities Presentation [filed by Ottawa Hydro June 26, 2025 via EB-2025-0060], slide 4.



a) Please provide a table indicating what activities and results have been achieved against each of the six categories outlined by Hydro Ottawa above. For each reference in this table, please provide an evidence reference if it was included in this Cost of Service application.

b) Please provide a separate table indicating what incremental activities and results Hydro Ottawa proposes to achieve during the 2026-2030 rate term against each of the six categories outlined by Hydro Ottawa above. For each reference in this table, please provide an evidence reference if available.

c) Please provide the business cases developed by Hydro Ottawa for NWS (per above) and indicate which of these business cases have already been implemented. For any of the business cases already included in this application, please provide the reference for those ones rather than duplicating them.

d) Has Hydro Ottawa developed a business case, plan or other similar document to identify opportunities, utility considerations or implementation timelines related to DSO capability development and delivery. If no, why not. If yes, please provide a copy of the documents and any accompanying presentations.

e) What barriers, if any, exist for Hydro Ottawa to develop and implement results related to each of the six categories noted above by Hydro Ottawa, during the 2026-2030 term?

2-PP-15

Reference: For the 2026-2030 period, a major focus will be deployment and implementation of the enhanced operational technology, tools and platforms included in Hydro Ottawa's Grid Modernization roadmap. These innovations will equip control room operators to more effectively direct outage emergency response, and will minimize downtime through automation of feeder fault location. In addition, they will be essential to enabling System Operations to manage the shifting consumption and demand patterns associated with increased electrification and penetration of DERs, and to maximizing the benefits of electrified devices and distributed forms of energy. [2/5/8, page 101 and 1/2/3, page 48]

a) Please provide a copy of the current Hydro Ottawa's Grid Modernization Roadmap.

b) Please describe what incremental DERs are being added to Hydro Ottawa modelling to align with the rapid expansion and use of local DER solutions driven by the energy transition.

c) Please provide details on DSO activities already being delivered by Hydro Ottawa and what the results have been to managing local peak demand.

d) Please indicate what certainty there is for Hydro Ottawa to deliver more DSO services over the 2026-2030 term, particularly is a slower conservative approach is taken by the OEB as proposed by Hydro Ottawa.

e) Please explain what metrics and tracking Hydro Ottawa has in place or proposed to add during the new rate term to measure tangible results from DSO services and related investments.

2-PP-16

a) Please explain why the Distribution System Plan over the previous terms has not been able provide a stable foundation to meet these needs in a more balanced manner across rate terms (i.e. rather than creating such a peak in spending during the 2026-2030 term), resulting in a large change to investments during the new term.

b) If Hydro Ottawa's previous distribution system planning has not been able put in place the infrastructure needed to meet the future needs in Hydro Ottawa's service territory, please explain what analysis has been done with the new Distribution System Plan to assess the risks that the new plan will not be sufficient to meet future needs, including supporting net zero by 2050 requirements in the City of Ottawa.

2-PP-17

Given Hydro Ottawa's intent to focus on DERs and NWSs, has Hydro Ottawa completed any analysis that would enable local DER/NWS solutions to avoid traditional wire solutions as part of the Regional Planning process? If not, why not. If yes, please provide a copy of the documents.

2-PP-18

a) Please provide a copy of the current version of the Ottawa DER Potential Study. Please explain what this mean for the future of DERs in Ottawa.

b) Please provide the scope of the Ottawa DER Potential Study and indicate the timeframe it is meant to cover.

c) IESO has indicated that DER Potential Study analysis from the current studies are being used to inform the Regional Planning process and decisions. Please explain the impact this is having on planning that will impact the Hydro Ottawa service territory.