

INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-1

EVIDENCE REFERENCE:

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

QUESTION(S):

- 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.

RESPONSE(S):

- a) Hydro Ottawa notes that the City of Ottawa's (City) website (accessed August 07, 2025) includes both the Energy Evolution action plan¹ and the Climate Change Master Plan.² Both of these sources indicate the City's target of 100% reduction of emissions from City operations by

¹City of Ottawa, "Energy Evolution"

<https://ottawa.ca/en/living-ottawa/environment-conservation-and-climate/reducing-greenhouse-gas-emissions/strategies-and-action-plans/energy-evolution#section-fa5b88e5-10e8-4ed9-8031-67c6c73d7df3>.

²City of Ottawa, "Climate Change Master Plan"

<https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/climate-change-master-plan#section-08062b40-74a0-4521-b619-93451ff489fe>.

2040, and 100% reduction of emissions from the community by 2050.

b) Please refer to Section 12.7 of Schedule 1-1-4 - Administration for an overview of how Hydro Ottawa addressed the referenced settlement agreement commitment as an OEB-approved directive.

In addition, below is a list of other notable activities and outcomes related to Energy Evolution that were enabled by Hydro Ottawa over the 2021-2025 term:

- Light Rail Transit (LRT): Hydro Ottawa has been a critical planning, coordination and delivery partner for the City's flagship LRT public transit and transit electrification project. Hydro Ottawa's core responsibilities included the relocation and protection of conflicting infrastructure, the expansion of the electrical system to accommodate future LRT stations, and the provision of commercial connections. For additional information on the infrastructure investments made by the utility during 2021-2025 in support of LRT, please see Section 5.1.1. Historical Expenditures (for System Access) in Schedule 2-5-5 - Capital Expenditure Plan.
- Zero Emission Bus (ZEB) program: together with the LRT project, the ZEB program represents a signature initiative under the City's Climate Change Master Plan to reduce GHGs from public transit. The program involves the conversion of the City's diesel-fuelled municipal bus fleet to non-emitting electric buses.

During the 2021-2025 rate term, Hydro Ottawa's action in support of ZEB was the provision of electrical infrastructure to support the load of an electric bus terminal at the municipal transit agency's main garage for bus maintenance and storage. For more information on these investments, please see Sections 4.1.1. and 5.1.1. of Schedule 2-5-5 - Capital Expenditure Plan. Respectively, these sections provide an overview of variances in all of Hydro Ottawa's capital expenditures and in System Access expenditures for the 2021-2025 period.

- Building retrofits: Retrofitting buildings through the installation of more energy efficient equipment and technology is a major area of focus under the City's Climate Change Master Plan. On this file, Hydro Ottawa has likewise served as a coordination and implementation partner. The utility assisted the City in the design and development of signature municipal programs such as the Better Homes Loan Program, which offered financing options to homeowners to assist with energy improvements; the Better Buildings Program, which encouraged benchmarking among commercial buildings, and provided further support for energy efficiency; and the High Performance Development Standard, which contains a set of requirements aimed at elevating the performance of new building projects to achieve sustainable and resilient design. Interaction with City staff related to Energy Evolution, including the initiatives noted above, is further outlined in Schedule 1-4-1 - Customer Engagement Ongoing, Section 2.3.3.1.

In addition, in 2024 Hydro Ottawa launched the Ottawa Retrofit Accelerator (ORA) program, which provides an ecosystem of support services to assist commercial customers with all phases of deep retrofits and energy efficiency upgrades aimed at facility-level decarbonization. These steps taken to further position Hydro Ottawa as a trusted advisor and energy partner to customers within the utility's proposal to establish ORA was assessed and affirmed by Natural Resources Canada, with \$10 million in federal funding awarded to Hydro Ottawa for three-year delivery of the program. Of note, the City is an official ORA program partner. Additional information on ORA is available in Schedule 1-4-1 - Customer Engagement Ongoing, Section 2.4.4

- Energy efficiency and emission reduction projects for Ottawa Community Housing (OCH): As a subsidiary of the City of Ottawa, and the city's largest social housing provider, OCH is an important partner in pursuing the City's community GHG reduction target. Hydro Ottawa has supported OCH through its Key Accounts team, as well as with decarbonization support (through the Ottawa Retrofit Accelerator Initiative) and energy efficiency support (through the utility's Conservation and Demand Management team).

- 1 • Engagement on municipal plans and policies: alongside the provision of expertise and
2 input on municipal retrofit programs, Hydro Ottawa offered the City support on a range of
3 other municipal plans and policies. These included the City's 2021-2046 Official Plan,
4 adopted by City Council in November 2021. During the consultation and development
5 process for the Official Plan, the utility collaborated with City staff in examining the
6 implications of their proposals for impact to the local distribution network. Other
7 examples of constructive coordination included the utility's engagement in 2024 and
8 2025, respectively, on proposed municipal bylaws governing the use of battery electric
9 storage systems (BESS), and the provision of EV parking spaces in new residential
10 developments. Ways in which the utility engages with the City are also detailed in
11 Section 2.3.1.1 of Schedule 1-4-1 - Customer Engagement Ongoing.
12
13 • Key Accounts symposium: during the 2021-2025 rate period, Hydro Ottawa hosted two
14 major symposia with Key Account customers, including the City. The events were aimed
15 at engaging with, obtaining feedback from, and providing insight and education to
16 customers on a range of issues, challenges and opportunities, including electrification,
17 energy efficiency, DERs, EV charging and net-zero. Within the main plenary as well as
18 breakout sessions, there was extensive dialogue on the Climate Change Master Plan
19 and Energy Evolution. During the 2022 symposium, Hydro Ottawa invited City of Ottawa
20 staff to present at a breakout session focused specifically on Energy Evolution. For
21 additional information, please see Section 2.3 of Schedule 1-4-1 - Customer
22 Engagement Ongoing.
23
24 • DER deployment and integration: Please refer to interrogatory response 1-PP-7 part (e)
25 for a summary of the actions the utility is taking to expand DER deployment and
26 integration, and leverage the demand benefits associated with DERs. Increased use of
27 DERs supports Energy Evolution's goal of growing the use of renewable energy
28 resources in Ottawa.
29
30 • Net-zero operations: For an overview of the utility's activities related to Hydro Ottawa
31 Holding Inc.'s net-zero operations commitment, refer to the response to interrogatory

1-PP-6. These activities have also supported the City's emissions reduction and clean energy goals.

c) Hydro Ottawa has provided information regarding its coordination with the City of Ottawa on a range of issues and interests, including Energy Evolution, in the pre-filed evidence. Please refer to Section 2.3 of Schedule 1-4-1 - Customer Engagement Ongoing, and Section 6 of Schedule 2-5-2 - Coordinated Planning with Third Parties.

In addition, as part of Hydro Ottawa's business planning process, detailed in Schedule 1-2-3 - Business Plan, Energy Evolution and the Climate Change Master Plan were key strategic inputs informing the context for the development of its 2026-2030 investment plans. The list below provides an overview of key examples of alignment between the utility's plans and the City's emission reduction and renewable energy objectives.

- Electrification and decarbonization: as noted throughout this Application, electrification is a major driver of investment for the upcoming five-year rate term and is one of four strategic grid investment priorities (see Schedule 2-5-1 - Distribution System Plan Overview as well as Attachment 1-4-1(B) - Customer Experience Strategy for more information). Numerous planning considerations have informed Hydro Ottawa's approach to electrification-related investments in 2026-2030. Among the most significant of these are the unprecedented number of large load requests which the utility is fielding from customers and prospective customers whose sustainability interests and objectives are inducing them to seek upgraded service, expand their load profile and electrify their operations. In addition, Hydro Ottawa commissioned a study examining the implications of decarbonization and electrification in the transportation and building sectors on future load and the distribution system (please see Attachment 2-5-4(F) - Decarbonization Study). The reference scenario from this study has informed regional planning forecasts and the scoping of corresponding infrastructure investments for the next five years, such as the capacity of specific substations and the conversion of voltage levels for deteriorating station assets. Finally, the Hydro Road station project is another compelling

example of electrification activity. Designed to support the power supply requirements of the City's ZEB program, the station is scheduled for energization in 2027.

- Energy transition programs: during the 2026-2030 rate period, Hydro Ottawa is set to expand on existing programs (such as raising awareness of and increasing uptake of the IESO's electricity Demand Side Management programs, the Ottawa Retrofit Accelerator program), and introduce new programs (such as the Ottawa DER Accelerator project, non-wires customer solutions programs, etc.) which will facilitate customer action to implement energy efficiency measures, decarbonization measures, and the greater use of customer-owned DERs to address system needs in a targeted area of constraint. For more information, please see Section 2.4 of Schedule 1-4-1 - Customer Engagement Ongoing (for examples of programs Hydro Ottawa has run in the past) and Section 9.2.2.1 of Schedule 2-5-4 - Asset Management Process and Section 3.6.3.1 of Schedule 2-5-8 - System Service Investments (for additional information on Hydro Ottawa's proposed non-wires customer solutions programs).

For a fulsome overview of the work Hydro Ottawa is undertaking to promote and enable increased deployment and integration of DERs, please see interrogatory response 1-PP-7 part (e).

- Battery energy storage systems (BESS): over the course of the next five-year term, Hydro Ottawa is proposing to deploy approximately 25 MW worth of BESS to help cost-effectively address capacity constraints and improve reliability in targeted areas. Please see Section 2 of Schedule 2-5-8 - System Service Investments for details.
- Removal of Net Metering Service Charge: as a focus on supporting local renewable energy, by way of this Application Hydro Ottawa is proposing to eliminate the service charge that had previously been applied to net metering resources. The utility stopped levying this charge in 2021, in order to support local distributed generation. Please see Schedule 8-4-2 - Generation Charges for further information.

- 1 • Facilitating isolations/re-energizations for electrical work: as outlined in Section 2 of
2 Schedule 6-3-5 - Other Income & Deductions, Hydro Ottawa is proposing to offer
3 residential electrical isolations/re-energizations for electrical work at no service charge to
4 the customer. The intention is to facilitate work such as service upgrades if necessary for
5 things like EV charger or heat pumps installations, or for DER connections.
6
- 7 • Climate adaptation and resilience: it bears emphasis that the City's Climate Change
8 Master Plan does not focus exclusively on GHG emissions mitigation – adapting to the
9 effects of climate change and strengthening resilience against future impacts are
10 likewise priorities. Hydro Ottawa confirms that its capital investment program for
11 2026-2030 includes multiple proposals for bolstering the resilience of its distribution grid
12 against extreme weather events. For example, the utility has established a new
13 Distribution System Resilience Program within its System Service portfolio focused on
14 enhancing resilience through such measures as strategic undergrounding, storm
15 hardening, feeder reconfiguration and line relocation. Additional information is available
16 in Schedule 2-5-7 - System Renewal Investments and Schedule 2-5-8 - System Service
17 Investments. Of note, the formulation of these proposals was informed by rigorous
18 climate adaptation studies and assessments, which were included in the pre-filed
19 evidence: Attachment 2-5-4(B) - Addendum Report to Distribution System Climate
20 Vulnerability Risk Assessment and Climate Change Adaptation Plan and Attachment
21 2-5-4(E) - Resilience Investment Business Case Report.

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1-PP-2

EVIDENCE REFERENCE:

Ontario's Energy for Generations plan ([Energy for Generations | ontario.ca](https://www.ontario.ca/en/government/energy/energy-for-generations-plan)). This major policy document was recently released by the Province of Ontario following Hydro Ottawa's filing of its application.

QUESTION(S):

- 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?

RESPONSE(S):

- a) Hydro Ottawa's initial review of the *Energy for Generations* plan, which was released on June 12, 2025, shows that the plan affirms and reinforces declarations made by the Government of Ontario in previous policy documents such as *Powering Ontario's Growth* issued in 2023 and *Ontario's Affordable Energy Future* issued in 2024. It likewise reiterates policy priorities and expectations outlined by way of previous Letters of Direction and Ministerial Directives delivered to the OEB and IESO, respectively, in those years.

Of note, the issuance of *Energy for Generations* was accompanied by Ministerial Directives to both the OEB¹ and IESO². As these agencies take specific actions to implement the government's policy objectives, consistent with the Ministerial Directives, Hydro Ottawa will assess which policy issues—if any— are incremental to its current plans. These directives are also the subject of the utility's response to interrogatory 1-PP-3.

b) Hydro Ottawa remains committed to engaging meaningfully as required in any forthcoming OEB and IESO consultations, working groups or directives related to the *Energy for Generations* plan. The utility's integration strategies and any necessary adjustments to its plans and operations will be considered in response to specific OEB and IESO implementation guidance.

c) Hydro Ottawa wishes to clarify that, according to the *Energy for Generations* plan, the four principles which are the central focus of the plan are as follows: affordability; security; reliability; and clean energy.³

With respect to actions that Hydro Ottawa is taking to support the deployment of clean energy and help reduce greenhouse gas emissions from the electricity system, there is extensive information included in this Application and responses to other interrogatories. For example, Schedule 2-5-1 - Distribution System Plan Overview underscores how electrification and enabling the energy transition are two of the utility's strategic investment priorities for 2026-2030. Furthermore, for details on how Hydro Ottawa is supporting energy efficiency, see Section 2.4 of Schedule 1-4-1 - Customer Engagement Ongoing. For details on how Hydro Ottawa is supporting the City of Ottawa's major climate change and renewable energy initiatives, please see the response to interrogatory 1-PP-1. For details on the utility's wide-ranging efforts to increase the use of DERs, see the response to interrogatory 1-PP-7 part (e).

¹ Ontario Energy Board, "Minister's Directive" <https://www.oeb.ca/documents/OC-802-2025.pdf>.

² IESO, "Minister of Energy and Mines' Integrated Energy Plan Implementation Directive for the IESO" <https://www.ieso.ca/-/media/Files/IESO/Document-Library/corporate/ministerial-directives/Directive-from-the-Minister-of-Energy-and-Mines-20250612-IEP.pdf>.

³ Ministry of Energy and Mines, "Energy for Generations" <https://www.ontario.ca/files/2025-07/mem-energy-for-generations-en-2025-07-18.pdf>, page 6.

- 1 d) Consistent with the responses above, it would be premature and speculative to attempt to
2 identify what additional performance metrics may be required or suitable to assess the utility's
3 progress against any future OEB and/or IESO requirements or guidance resulting from the
4 implementation of the *Energy for Generations* Plan.

INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-3

EVIDENCE 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.

QUESTION(S):

- 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.

RESPONSE(S):

- a) Concerning the Ministry's directives to the OEB and IESO, Hydro Ottawa respectfully submits that it is premature to identify which policy or operational issues would be considered incremental to Hydro Ottawa's Rate Application. These Directives propose actions that distributors may need to undertake at a future date. The interpretation and subsequent implementation of these Ministerial Directives are primarily the responsibility of the OEB and the IESO, as the direct recipients. As a regulated entity, Hydro Ottawa will diligently follow all direction provided by the OEB and IESO as necessary regarding the implementation of these Directives.
- b) Hydro Ottawa's specific actions and implementation plans will be developed in alignment with forthcoming guidance, ensuring compliance and effective contribution to the province's energy objectives. The utility remains committed to collaborating with the OEB, IESO, and other stakeholders to advance these important initiatives once a clear path for LDC participation is implemented and established.
- c) Hydro Ottawa does not provide local DER and Electricity Demand Side Management (eDSM) forecasts as part of the regional planning process. This is led by IESO in applying appropriate eDSM and DER assumptions to the gross demand forecasts furnished by LDCs to derive the net demand forecast.
- d) Forecast assumptions for DERs (and eDSM) are guided by the IESO's Regional Planning process. The IESO's assumptions align with the eDSM assumptions found in their 2024 Annual Planning Outlook, including the 2021–2024 CDM Framework. The resulting net demand forecast then dictates the needs of the regional grid. Hydro Ottawa actively participates in the Integrated Regional Resource Plan (IRRP) working group and contributes to the ongoing IESO-led Local Achievable Potential Study. This study will inform the evaluation and assessment of Non-Wires Solutions (NWS) at both regional and local system levels.

- 1 More details on IESO's Regional Electricity Planning in Greater Ottawa can be found in
- 2 Schedule 2-5-2 - Coordinated Planning with Third Parties, Section 4 and the [IESO Website](#).

INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-4

EVIDENCE REFERENCE:

Ontario Ministry of Energy and Electrification's Cost Effective Energy Pathways
Study for Ontario ([Cost Effective Energy Pathways Study for Ontario](#))

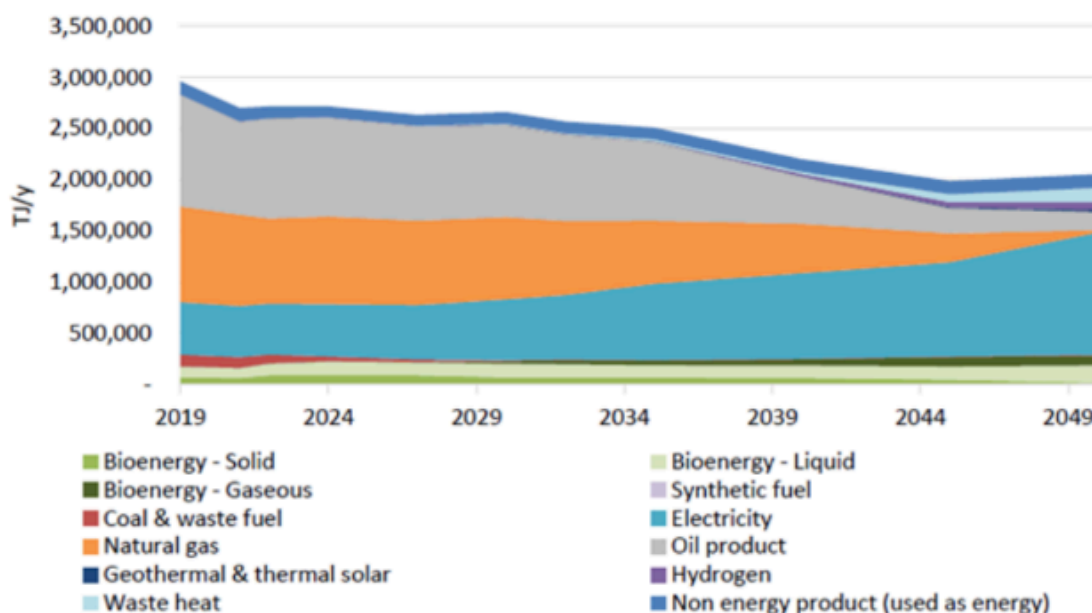


Figure ES-1. Final energy consumption (TJ/y) by fuel type from 2019 to 2050 for the NZ50 IP

QUESTION(S):

- 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.
- 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.

- 1 c) What policy or operational issues outlined in the Provincial Pathways Study are incremental to
2 what Hydro Ottawa is able to accommodate based on the application and plan filed?
3 d) Does Hydro Ottawa's application and plan enable the pathway to net zero by 2050 as outlined
4 in the Provincial Pathways Study noted above? If not, please explain what the variances are
5 and what changes would need to occur to ensure that Hydro Ottawa is able to deliver over the
6 rate plan term in a manner that aligns with net zero by 2050.

7
8
9 **RESPONSE(S):**

10
11 a) Hydro Ottawa agrees that the "Cost Effective Energy Pathways Study for Ontario" and the
12 Energy Evolution Plan both have a focused discussion on achieving net-zero by 2050; however,
13 Hydro Ottawa has not completed an analysis to determine if significant differences exist
14 between the studies. Hydro Ottawa's Decarbonization Study (filed at Section 5 of Attachment
15 2-5-4(F)) was informed in part by the City of Ottawa's Energy Evolution plan. The Provincial
16 Pathways Study was released in August 2024 and was not used to inform Hydro Ottawa's
17 Decarbonization Study as the Decarbonization study was being finalized at this point.

18
19 b) See the response to a) above.

20
21 c) As stated in the response to a) above, the provincial pathways study was not used to inform
22 Hydro Ottawa's Decarbonization Study. As such, Hydro Ottawa is not able to comment on
23 whether or to what extent the policy or operational issues outlined in the Provincial Pathways
24 Study are incremental to what Hydro Ottawa is able to accommodate based on the application
25 and plan filed.

26
27 Consistent with its responses to part a) of interrogatory 1-PP-2 and part a) of interrogatory
28 1-PP-3, Hydro Ottawa will assess what policy issues—if any—are incremental to its current
29 plans as the process unfolds for the OEB and IESO's implementation of their respective
30 Ministerial Directives from June 2025. The utility will comply with all applicable requirements
31 emerging from these implementation processes.

1 d) Although this specific study was not contemplated in Hydro Ottawa's application and plan, as
2 outlined in response a), Hydro Ottawa is planning to support full electrification as its service
3 territory moves in that direction. As further explained in the response to part a) of interrogatory
4 1-CO-4, Hydro Ottawa undertook a decarbonization study (see Attachment 2-5-4(F) -
5 Decarbonization Study) to understand the impacts of decarbonization on its distribution system
6 through a variety of scenarios, including full electrification by 2050. While Hydro Ottawa
7 determined that the Reference Scenario was the most likely scenario at this time, this rate
8 application only covers the 2026-2030 period, and load forecasting is continuously reassessed.
9 The proposed investments in this application will support continued electrical demand growth
10 beyond 2030.

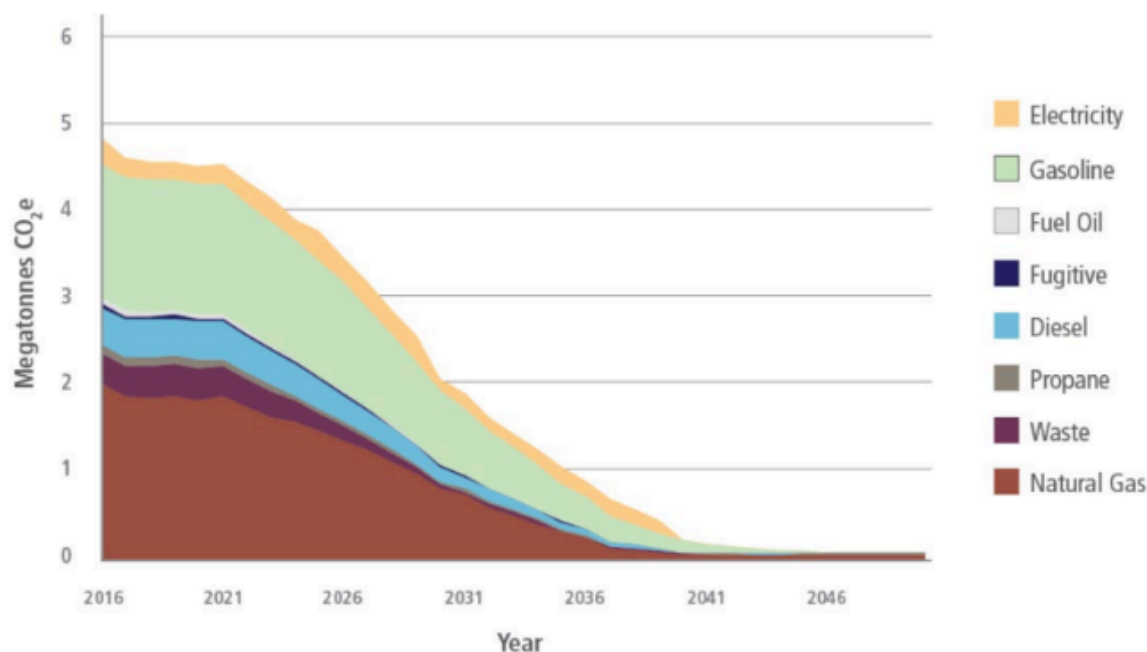
INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-5

EVIDENCE REFERENCE:

QUESTION(S):

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](#)]



RESPONSE(S):

The graph shown appears to be the same one shown on Page 25 of the City of Ottawa's 2020 *Ottawa's Community Energy Transition Strategy* report, and is labelled in the report as "Figure 10:

- 1 Projected emissions by fuel source for 100% reduction scenario, 2016-2050". For additional context
- 2 related to the City of Ottawa's Energy Evolution plan, please see part a) of Hydro Ottawa's
- 3 response to interrogatory 1-PP-1.

INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-6

EVIDENCE REFERENCE:

QUESTION(S):

- 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.

RESPONSE(S):

- a) Hydro Ottawa wishes to clarify that the commitment to achieve net-zero operations has been adopted at the holding company level. As explained in Schedule 1-3-2 - Proposed Annual Reporting - 2026-2030, "Hydro Ottawa's parent company, Hydro Ottawa Holding Inc., has committed to achieving net-zero operations by 2030. While this is a holding company-level goal, as the largest subsidiary within the corporate enterprise, Hydro Ottawa is well-positioned to help contribute meaningfully to its achievement." Consequently, the specific plan for achieving the net-zero objective is a holding company one, not a utility-specific one.

With respect to the critical role that the utility is playing in helping the holding company meet this objective, there are several pieces of evidence in this Application with information on the support being provided:

- Section 5.2.1. (Net-Zero Progress) of Attachment 4-1-3(E) - Health, Safety and Environmental Compliance and Sustainability and Business Continuity Management, which summarizes steps Hydro Ottawa has taken to identify and reduce corporate emissions, and continuously improve its environmental performance (with a particular focus on facilities and stations, fleet, and technology infrastructure);

- Section 5.4 (General Plant Expenditures) of Schedule 2-5-5 - Capital Expenditure Plan, which outlines the utility's capital expenditures under the General Plant category during the 2021-2025 rate term, including the acquisition of additional electric vehicles (EVs) for the corporate fleet and the installation of EV charging stations at all operations and work centres;
- Sections 10 (Buildings - Facilities) and 11 (Fleet Replacement) of Schedule 2-5-9 - General Plant investments, which provide detail on the specific facilities and fleet-related capital expenditures proposed as part of the 2026-2030 rate plan and their alignment with sustainability and carbon-reduction objectives; and
- Section 3.3 (Safety, Environment & Business Continuity) of Attachment 4-1-3(C) - Workforce Growth, which presents the rationale underlying the proposed increase in staff positions for the upcoming five-year period to provide much-needed capacity for advancing sustainability and carbon reduction initiatives.

For information on emission reductions by the utility, please see the response to part (b) below.

- b) The utility's Custom Performance Scorecard for the 2026-2030 rate period (see Schedule 1-3-2 - Proposed Annual Reporting - 2026-2030) includes Scope 1 Greenhouse Gas Emissions and Scope 2 Greenhouse Gas Emissions as performance measures. For the former, the corresponding target is "Reduce"; for the latter, "Monitor."

As noted in Schedule 1-3-2, it is generally Hydro Ottawa's intent for the targets accompanying Custom Performance Scorecard measures to be assessed as five-year targets, stretching over the duration of the five-year rate term. The utility confirms that this approach applies to the aforementioned greenhouse gas measures.

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1-PP-7

EVIDENCE REFERENCE:

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

QUESTION(S):

- 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.

RESPONSE(S):

- a) In Figure 7 in Schedule 1-3-2 - Proposed Annual Reporting - 2026-2030, the numbers located immediately below the total MW per year represent battery energy storage system (BESS) capacity. For example, in 2019, BESS capacity was 4 MW, renewable capacity was 102 MW and non-renewable capacity was 21 MW, altogether totalling 127 MW.

Total distributed energy resource (DER) capacity, expressed as a percentage of historical peak demand per year, is presented in Table A below.

Table A – DER Capacity as a Percentage of Historical Annual Peak Demand

Total DER Capacity as Percentage of Peak Demand				
2019	2020	2021	2022	2023
9%	11%	11%	11%	11%

b) The "non-renewable" DERs represented in Figure 7 in Schedule 1-3-2 - Proposed Annual Reporting - 2026-2030 represent generators that typically operate on fossil fuels such as diesel or natural gas. See part (e) below for additional information on what Hydro Ottawa is doing to promote BESS and renewables.

c) Electric vehicle (EV) reductions from managed charging are not included in Figure 7. Customers with managed charging infrastructure that allow for the intelligent control and optimization of EV charging are not required to notify Hydro Ottawa of their managed charging infrastructure and how they are using it, therefore Hydro Ottawa does not have the relevant data to track EV reductions from managed charging. Categories in the figure are as follows: BESS (energy storage), renewable (solar, hydraulic, bio-gas), and non-renewable (natural gas, petroleum, diesel) sources.

d) The DERs depicted in Figure 7 do not contribute to Hydro Ottawa's net peak load reduction calculations because of their intermittent nature. Intermittent sources of energy, such as solar or wind, cannot be used in peak demand forecast planning in the same way as firm capacity due to their inherent variability and dependence on weather conditions. For these DERs to factor into net peak load reduction, Hydro Ottawa would need to employ specific programs or market mechanisms to procure flexible load services from the respective DER owners or from third-party aggregators.

e) Hydro Ottawa Holding Inc.'s 2021-2025 Strategic Direction contains eight Strategic Objectives, discussed in Schedule 1-2-3 - Business Plan, Section 2.2 as well as Attachment 1-4-1(B) - Customer Experience Strategy, Section 3.1. One of those eight objectives is "Leverage and

1 promote distributed energy resources.” These objectives cascade across the enterprise and
2 therefore serve to guide the business and operations of the regulated distribution utility.

3
4 The major activities which Hydro Ottawa is undertaking to increase DERs and leverage the
5 benefits they provide, including net demand benefits, can be grouped into the principal
6 categories below. For more detail on each type of activity, please see the corresponding
7 Application evidence which is cited.

8
9 **1. Educating and engaging customers on DERs:** beyond providing material resources
10 and support, Hydro Ottawa actively engages and educates its customers on DER
11 through a comprehensive multi-channel approach. This includes in-depth blogs on its
12 website, inclusion of articles in various newsletters (residential, community and
13 commercial audiences), promotions through social media platforms, thought leadership
14 editorials in industry and commercial publications, and its thinkenergy podcast, which
15 features expert discussions on topics like DERs, renewables, and BESS. By leveraging
16 these diverse channels, Hydro Ottawa aims to help customers overcome DER adoption
17 barriers. (Schedule 1-4-1 - Customer Engagement Ongoing).

18
19 **2. Facilitating DER Connections:** the utility supports customer-owned DER connections
20 by upgrading infrastructure, improving grid access, enabling reverse power flow
21 capability, increasing voltage levels, streamlining connection processes and ensuring
22 compliance with applicable regulations. (Section 5 [Generation Connections] of
23 Schedule 2-5-6 - System Access Investments; Section 2 [Stations and Buildings
24 Infrastructure Renewal] of Schedule 2-5-7 - System Renewal Investments).

25
26 **3. Integrating DERs into system planning and asset management:** DERs are
27 integrated into the processes employed by Hydro Ottawa for long-term planning and
28 assessing what solutions will work best to meet the needs of customers. (Sections 4
29 [Regional Planning] and 6 [Other Utility and Stakeholder Coordination] of Schedule 2-5-2

- Coordinated Planning with Third Parties; Section 9.3 of Schedule 2-5-4 - Asset Management Process).

4. Supporting existing DER adoption programs: Hydro Ottawa connects customers to available provincial incentive programs for DER technologies (e.g. Save on Energy Retrofit Program and Home Renovation Savings Program), assisting with customer support and marketing efforts. Similarly, in recent years the utility has cultivated experience serving as a delivery organization for federal funding aimed at supporting energy efficiency, decarbonization and DER initiatives. Through the Ottawa Retrofit Accelerator program, the utility is assisting building owners with deep retrofits and efficiency upgrades. Previously, the utility partnered with Natural Resources Canada through the agency's Zero Emission Vehicle Infrastructure Program to enable the installation of more than 1,000 EV charging ports across the City of Ottawa. Hydro Ottawa is also raising awareness and helping increase uptake of existing Provincial IESO Electricity Demand Side Management (eDSM) programs which include incentives for DER adoption. (Section 2.4 [Conservation and Demand Management] of Schedule 1-4-1 - Customer Engagement Ongoing).

5. Launching new programs to increase DER adoption and utilize DERs as flexible resources: the utility's Non-Wires Customer Solutions Program and Ottawa DER Accelerator project will encourage further adoption and make use of customer-owned DERs to address system needs in a targeted area of constraint. (Section 9 [System Capacity Assessment] of Schedule 2-5-4 - Asset Management Process; Section 3 [Distribution Enhancements] of Schedule 2-5-8 - System Service Investments; Interrogatory responses 2-Staff-67; 2-Staff-69).

6. Deploying non-wires solutions as alternatives to traditional infrastructure investments: Hydro Ottawa plans to deploy approximately 24.5 MW of utility-owned BESS at four substations by 2030 to increase capacity and improve grid reliability (Section 9 [System Capacity Assessment] of Schedule 2-5-4 - Asset Management

Process; Section 2 [Capacity Upgrade] of Schedule 2-5-8 - System Service Investments).

In addition, the utility is participating in a pilot project (EV Everywhere) which pairs predictive analytics with local demand response programming for EVs and battery storage. (Section 9 [System Capacity Assessment] of Schedule 2-5-4 - Asset Management Process).

7. Modernizing grid infrastructure and investing in energy analytics tools to enable and unlock additional system benefits from DERs: the utility is making investments in grid modernization technologies (Advanced Distribution Management System, DER Management Systems, Advanced Metering Infrastructure 2.0) to enable two-way electricity flow from DERs, connect more renewable generation and enhance grid efficiency. (Schedule 2-5-1 Distribution System Plan Overview; Section 6 [Metering] of Schedule 2-5-6 - System Access Investments; Sections 5 [Grid Technologies], 6 (Field Area Network) and 7 (Control and Optimization) of Schedule 2-5-8 - System Service Investments; Section 6 [Grid Technology] of General Plant Investments).

Investments in data analytics tools will provide insights into DER adoption and disaggregated energy use, and identify non-wires solutions opportunities for load shifting or demand reduction for data-driven planning. (Section 3 [Customer Engagement Platforms] of Schedule 2-5-9 - General Plant Investments).

8. Meeting the human capital needs associated with DER utilization: discrete workforce resources and skillsets are required in order to effectively integrate DERs and maximize their benefits, especially with their deployment and utilization set to increase in the future. Hydro Ottawa is taking steps to ensure that the utility has the requisite human capital to deploy, manage, integrate and optimize DERs, from both a system and customer benefits perspective. (Sections 3.1 [Testing, Inspection, and Maintenance] and 3.7 [System Operations & 24/7 Maintenance] of Schedule 4-1-2 - Operations,

1 Maintenance and Administration Program Costs; Section 3 [Identifying Workforce
2 Needs] of Attachment 4-1-3(B) - Workforce Planning Strategy; Section 3 [Workforce Plan
3 by Program] of Attachment 4-1-3(C) - Workforce Growth).

4
5 In addition, there are specific rate-making tools which contribute to Hydro Ottawa's broader
6 support for DER deployment and integration. For information on these, please see Schedule
7 1-3-1 - Rate Setting Framework, Schedule 7-1-3 - Standby Service Charge and Schedule 8-4-2
8 - Generation Charges.

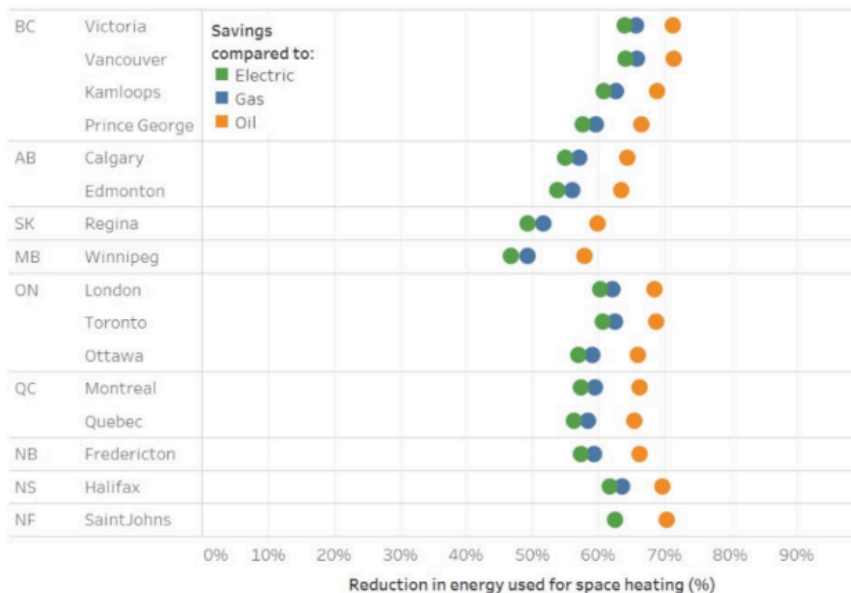
INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-8

EVIDENCE 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.

QUESTION(S):

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

RESPONSE(S):

The Canmet report referenced above was not utilized in Hydro Ottawa's forecast assumptions submitted through the Rate Application. Hydro Ottawa is therefore unable to make any assertions about the referenced report. Hydro Ottawa's electrification methodologies, which inform the decarbonization scenarios' assumptions, are detailed in Section 2 of Attachment 2-5-4(F) - Decarbonization Study. The assumptions and electric heating efficiencies used in the study are explained below.

- Space heating and water heating were electrified based on expected technology share (heat pumps, electric resistance, gas) from existing publicly available forecasts such as Canada Energy Regulator's (CER) Canada's Energy Future, Enbridge's Pathways to Net Zero Emissions in Ontario, and the City of Ottawa's Energy Evolution GHG Modeling to inform forecasts for this study.
- A blended coefficient of performance (COP) was used to convert the amount of energy used by natural gas to electricity or low carbon fuels.
- Historical weather data in Ottawa was used to project electrified space heating load curves and also used efficiency data from similar climates for water heating.
- Roughly 63% of energy used in household appliances is provided by natural gas. In this assessment, the natural gas portion was assumed to be electrified at a varied pace based on the five scenario-specific decarbonization curves.
- Importantly, blended efficiency metrics for both space heating and water heating were reduced in all scenarios for hours at or below -10°C based on historical weather data. This was to account for the assumed diminished efficiency of air-source heat pump technology in extreme temperatures sometimes experienced in Ottawa's climate. For more details on electric heating efficiencies please refer to Table 4 (Reference & Dual Fuel Scenario), Table 6 (Policy Guided Scenario) and Table 8 (High & Low Sensitivities) of Attachment 2-5-4(F) - Decarbonization Study.

INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-9

EVIDENCE REFERENCE:

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]

QUESTION(S):

- 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.

RESPONSE(S):

- a) For the two measures in question, there are general and specific reasons for why Hydro Ottawa has designated the corresponding targets as “Monitor.”

Foremost is a shared characteristic of both measures and their attendant outcomes: a dependence to a considerable degree on customer and/or third-party action (i.e. action outside of the utility's control). While the utility is committed to effectively scoping, administering and promoting non-wires solutions (NWS), the ultimate decision by customers to participate in these programs will be a fundamental determinant of their success. A similar principle applies in the context of efforts to increase installed distributed energy resource (DER) capacity.

In outlining its DER forecast for 2026-2030 in Section 9.3 of Schedule 2-5-4 - Asset Management Process, Hydro Ottawa noted the following:

"Ultimately, customer choice fuels the demand for DERs and this demand is highly sensitive to policy influences, particularly the availability of funding and incentive programs. Predicting the precise timing, magnitude, and likelihood of customer adoption is challenging due to the numerous policy, economic, and technological variables at play - actual growth could deviate if new programs, incentives or technologies are introduced."

Throughout its Application, Hydro Ottawa has acknowledged the rising importance and relevance of DERs and NWS, and has committed to enabling their increased use (see part (e) of interrogatory response 1-PP-7 for further reference). Notwithstanding the challenges associated with forecasting the deployment of these resources and solutions, as well as limitations on the utility's ability to dictate the scope and pace of deployment, the utility believes that the inclusion of the measures in question will help provide a well-rounded, balanced assessment of its performance during the 2026-2030 rate period.

With respect to Customer Participation in Non-Wires Solutions, Hydro Ottawa also wishes to underscore the specific elements which comprise this measure. As noted in Schedule 1-3-2 - Proposed Annual Reporting - 2026-2030, this measure encompasses the following elements: number of customers by class, number of customers by percentage, and NWS by total MW capacity. In light of the variation in the constituent elements of this metric, the utility believes that

1 "Monitor" is an appropriate target.

2
3 b) Net demand reduction, as explained in part (d) of interrogatory response 1-PP-7, is not a
4 universal metric for all DERs because only dependable and dispatchable sources can reliably
5 reduce peak demand. Intermittent DERs, like solar and wind, are excluded from net peak load
6 reduction calculations due to their variability and inability to guarantee output during peak
7 demand periods. Hydro Ottawa specifically considers DERs that offer consistent and predictable
8 peak demand reduction or firm capacity for determining system peak demand, which then
9 serves as a baseline for forecasting. As such, Hydro Ottawa is currently unable to measure net
10 demand reductions for all DERs.

11
12 c) In response to the request for provision of a baseline actual for Customer Participation in
13 Non-Wires Solutions, Hydro Ottawa wishes to draw attention to the following explanation offered
14 in Schedule 1-3-2: "In light of the fact that the NWS programs contemplated for the 2026-2030
15 rate term are new, Hydro Ottawa is not able to present any historical baseline data for this
16 metric."

17
18 With regards to a baseline actual for Distributed Energy Resource Capacity, historical figures for
19 2019-2023 are presented in Figure 7 (Historical and Forecasted DER Capacity) in Schedule
20 1-3-2. For 2024, 185 MW was the forecasted value provided in Figure 7 of Schedule 1-3-2. By
21 way of this response, Hydro Ottawa is confirming 169 MW as the actual value for 2024.

22
23 As per the response provided in part (a) above, Hydro Ottawa is unable to provide target values
24 for these metrics.

25
26 d) Hydro Ottawa disagrees with the premise that advancing as a Distribution System Operator
27 necessitates a move away from utility-owned solutions, like battery storage, in favour of
28 market-driven alternatives. Instead, Hydro Ottawa believes that the optimal mix of approaches
29 to meet future grid needs remains unclear. It is possible that a combination of approaches could
30 be required, and that utility-owned battery energy storage systems will continue to play a role as

1 they have different operational attributes compared to other NWS. To foster learnings with
2 respect to the mix and viable options within the service territory, Hydro Ottawa is actively
3 pursuing NWS customer programs (refer to Section 9.2.2.1 of Schedule 2-5-4 - Asset
4 Management Process) and piloting technology solutions for managing NWS through the
5 ODERA project (refer to Section 9.2.4.2 of Schedule 2-5-4 - Asset Management Process).

INTERROGATORY RESPONSES TO POLLUTION PROBE

1-PP-10

EVIDENCE 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.

QUESTION(S):

- 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).

RESPONSE(S):

While the general concept of a DSO has been in discussions for some time, the specifics of the model, its implementation, and the exact roles and responsibilities of LDCs are still very much in flux, as evidenced through the Distribution System Operator Capabilities¹ consultation process

¹ EB-2025-0060 - Distribution System Operator Capabilities -
<https://engagewithus.oeb.ca/distribution-system-operator-capabilities>

1 launched by the OEB in January 2025 and specifically the discussions at the June 23, 2025
2 stakeholder symposium.

3 a) The activities which can be classified as “new and/or innovative DER / NWS programs” along
4 with their relevant references are listed below.

- 5 ● Non-Wires Customer Solutions Program
 - 6 ○ Section 9.2.2.1 of Schedule 2-5-4 - Asset Management Process
 - 7 ○ Response to interrogatory 2-Staff-67
- 8 ● Battery Energy Storage Systems
 - 9 ○ Section 9.2.2.2 of Schedule 2-5-4 - Asset Management Process
 - 10 ○ Response to interrogatory 2-Staff-111
- 11 ● ODERA project
 - 12 ○ Section 3 of Schedule 2-5-8 - System Service Investments
 - 13 ○ Response to interrogatory 2-Staff-69

14
15 b) Hydro Ottawa does not require any incremental approvals to implement the projects outlined in
16 response (a) above. Hydro Ottawa will evaluate the requirement for additional incremental
17 approvals once the OEB issues direction based on the outcomes of the DSO Capabilities
18 consultation process.

19
20 Of note, as the successful deployment of these NWS programs is contingent upon several
21 external factors, including the pace of DER technology advancements, evolving policies, and
22 customer adoption rates. Because of this uncertainty, Hydro Ottawa is proposing a variance
23 account to record the difference between projected and actual NWS costs for NWS projects,
24 offset by any external funding. Refer to part (b) of the response to interrogatory 1-Staff-18 for
25 further details with respect to NWS variance account.

26
27 c) Hydro Ottawa has not developed a specific plan; however, actively engages with and learns
28 from other LDCs through participation in working groups, industry associations, events, and
29 conferences, as well as through relationships with peers from other LDCs. Additionally, Hydro

- 1 Ottawa regularly engages with the IESO to identify opportunities for collaboration and shared
- 2 learning.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-11

EVIDENCE 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.

QUESTION(S):

- 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.

RESPONSE(S):

a) As per Section 2.1.12 of Schedule 1-3-2 - Proposed Annual Reporting 2026-2030, Hydro Ottawa utilizes the IESO's definition of DER's: *"Electricity resources that generate electrical energy, store and discharge electrical energy, or dynamically modify electric load, and that are connected directly to an electric distribution system or to an end-use customer's premises within a distribution system. They can include but not be limited to solar photovoltaics (PV), combined heat and power plants, backup generators, energy storage, electric vehicles, and consumer devices that can reduce or increase electricity use on demand."* The IESO's definition used by Hydro Ottawa places an emphasis on the dynamic and controllable nature of DERs.

b) The DER resources considered by Hydro Ottawa for forecasting generation are Battery Energy Storage Systems (BESS), renewable sources (solar, hydraulic, biogas), and non-renewable sources (natural gas, petroleum, diesel). All these DER resources are on the host customer side of the utility interconnection point (i.e., behind the meter). Please refer to Section 9.3.2 of Schedule 2-5-4 - Asset Management Process for more details. Hydro Ottawa does not monitor gross and net impact for each DER and hence cannot provide that information.

c) Hydro Ottawa is unclear on what DERs are not identified and controlled by the IESO and assumes these DERs to be the ones that are not managed through wholesale market mechanisms, LT1/LT2 procurements, or demand response programs. Hydro Ottawa is not able to provide a forecast for these specific DERs as the utility is unaware of their specific locations and capacities.

d) Please refer to the response to part c) above.

e) As detailed in parts c) and d) of the response to interrogatory 1-PP-3, Hydro Ottawa does not generate local Distributed Energy Resources (DER) and Electricity Demand Side Management (eDSM) forecasts for regional planning; instead, the IESO leads this process, integrating eDSM and DER assumptions into LDC-furnished gross demand forecasts to derive the net demand

- 1 forecast. Hydro Ottawa actively participates in the IESO's Regional Planning process and
- 2 studies like the Local Achievable Potential Study (L-APS), which guide these assumptions and
- 3 inform the evaluation of non-wires solutions.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-12

EVIDENCE REFERENCE:

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](#))

QUESTION(S):

- 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.

RESPONSE(S):

- a) As described in Section 2.4.3 of Schedule 1-4-1 - Customer Engagement Ongoing, Hydro Ottawa has a history of local program collaboration with the IESO, supporting the delivery of IESO's Local Initiatives. Furthermore, Hydro Ottawa has executed the Electricity Demand-Side Management agreement with the IESO and is committed to support the enduring provincial

eDSM framework in a supporting role, beginning with the initial 2025-2027 eDSM plan.¹ Hydro Ottawa assumes that the reference to “local eDSM actions” is referring to eDSM “Stream 2” programs. As described in Section 9.2.4.3 of Schedule 2-5-4 - Asset Management Process, the “Stream 2” mechanism does not yet exist. On July 23, 2025, the OEB initiated a consultation on the file.² As such, there are currently no local “Stream 2” funding agreements in place with the IESO, however, Hydro Ottawa intends to deploy the Non-Wires Customer Solutions Program (NWCSP) to address distribution system needs in a targeted area, in collaboration with the IESO where applicable. For additional information on the NWCSP, refer to Section 9.2.2.1 of Schedule 2-5-4 - Asset Management Process and the response to interrogatory 2-Staff-67.

b) For energy and demand savings forecast and as noted in Section 10 of Schedule 3-1-1 - Revenue Load and Customer Forecast, Hydro Ottawa has incorporated the following assumptions into its revenue load forecast:

- For 2025-2029: estimated provincial-wide annual energy efficiency savings of 2%, 3%, 4%, 5%, 5.5% respectively, then 6% from 2030 through 2035
- Total demand savings of 3,000 MW as announced by the Minister of Energy and Electrification³

The percentages listed above represent Hydro Ottawa's share of the IESO's total estimated targets for the 12 year eDSM framework that came into effect January 1, 2025. These figures were developed based on historical savings and detailed calculations and support can be found in the response to interrogatory 9-Staff-219.

c) Hydro Ottawa expects to achieve 7.18% total energy savings (in GWh) and 8.12% of the peak demand savings (in MW) related to the eDSM framework between 2026 and 2030. These targets are based on the company's past performance relative to the provincial totals. The peak demand savings were calculated first, then converted to kilowatt-hour (kWh) savings using a

¹<https://ieso.ca/-/media/Files/IESO/Document-Library/eDSM/2025-2027-DSM-Plan-with-Beneficial-Electrification.pdf>

²https://engagewithus.oeb.ca/nws_review/news_feed/oeb-consultation-on-regulatory-framework-for-local-energy-efficiency-programs

³<https://news.ontario.ca/en/backgrounder/1005539/ontarios-new-and-expanded-energy-efficiency-programs>

1 historical ratio. Detailed calculations and support can be found in interrogatory response
2 9-Staff-219.

3
4 d) As described in Section 2.4.1 and 2.4.3 of Schedule 1-4-1 - Customer Engagement Ongoing,
5 Hydro Ottawa has been raising awareness, engaging with customers, and supporting the IESO
6 in its procurement and delivery of its Local Initiatives Program (LIP) in order to maximize results
7 for distribution system benefit. Hydro Ottawa also intends to deliver its Non-Wires Customer
8 Solutions Program in collaboration with the IESO, where feasible, to address distribution system
9 needs in targeted areas. Please refer to Section 9.2.2.1 of Schedule 2-5-4 - Asset Management
10 Process and the response to interrogatory 2-Staff-67 for additional details. If new local eDSM
11 initiatives are identified by the IESO through Save On Energy in Hydro Ottawa's service territory,
12 the utility will evaluate what is required to maximize the results of those programs. Hydro
13 Ottawa is also actively participating in the consultation process for eDSM Stream 2
14 (EB-2025-0156 OEB)⁴ funding and intends to leverage available funding to supplement the
15 Non-Wires Customer Solutions Program, as applicable.

⁴Ontario Energy Board, Consultation on the Regulatory Treatment of Local Electricity Demand-side Management (Stream 2) Programs, EB-2025-0156, (July 23, 2025).

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-13

EVIDENCE 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]

QUESTION(S):

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.

RESPONSE(S):

a) Post the energization of Cambrian MTS in Q2 2022, 26 renewable DERs, totaling 212 kW, have been connected at customer locations normally supplied by Cambrian MTS.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-14

EVIDENCE REFERENCE:

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

Existing Foundations & LDC Progress

Hydro Ottawa is taking proactive steps towards grid modernization



Hydro Ottawa's activities represent significant investments that provide concrete, real-world insights into LDC readiness and the tangible technical complexities of DSO capabilities.



QUESTION(S):

- 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.
- 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?

RESPONSE(S):

a) Table A below presents a summary of activities and results achieved within the six categories defined by Hydro Ottawa. It also outlines proposed incremental activities and outcomes for the 2026-2030 rate term, as well as the NWS assessments that have been completed. All entries include evidence references from this application.

1

Table A - Grid Modernization Activities Related to DSO Capabilities - Achieved & Proposed

Activity		2021-2025 Achieved	2026-2030 Proposed
Advanced Systems			
ADMS	Reference	<ul style="list-style-type: none"> • Schedule 1-2-3 - Business Plan <ul style="list-style-type: none"> ○ 5.1.3 - System Service • Schedule 2-5-5 - Capital Expenditure Plan <ul style="list-style-type: none"> ○ 5.3.2 - Historical Variances - Grid Technology, p. 86/87 • ADMS Timing Update Letter, July 4, 2025¹ • Response to interrogatory 2-CCC-15, part (d) 	<ul style="list-style-type: none"> • Schedule 1-2-3 - Business Plan <ul style="list-style-type: none"> ○ Section 3.6 - Technological Innovation & Cyber Security ○ Section 5.1 - Capital plans, p.30 ○ 5.1.3 - System Service, p. 41 • Schedule 2-5-8 - System Service Investments <ul style="list-style-type: none"> ○ 5 - Grid Technologies ○ 7 -Control & Optimization • ADMS Timing Update Letter, July 4, 2025² • Response to 2-CCC-15, part (f) • Attachment 2-CCC-15(F) - ADMS Program Charter • Response to interrogatory 2-Staff-33, part (c)

¹ Hydro Ottawa Limited, Letter RE: *ADMS Correspondence*, EB-2024-0115 (July 4, 2025).

² Ibid.

Activity		2021-2025 Achieved	2026-2030 Proposed
	Results	<ul style="list-style-type: none"> During the 2021-2025 rate period, the utility initiated the development of a comprehensive Advanced Distribution Management System (ADMS), comprising a suite of operational features and tools which elevate grid performance, efficiency and flexibility; optimize functions that automate outage identification; and position the grid for expanded integration of DERs. 	<ul style="list-style-type: none"> ADMS is the foundation of the utility's grid modernization architecture and the next five years will focus on enhancing this platform. Planned upgrades include the application of superior cyber security protections; development of a centralized hub for both real-time and historical operational data, with advanced analytics and reporting tools; a long-term transition towards a DSO model in the province will only be made possible through the capabilities afforded by ADMS. Release 1: <ul style="list-style-type: none"> Engineering Model Management Distribution Powerflow - Engineering Network Visualization Release 2: <ul style="list-style-type: none"> Operational Model Management Distribution Powerflow - Control Room Outage Management System Reporting Switch Order Manager - Planned Work Training Enablement Advisory FLISR Release 3: <ul style="list-style-type: none"> Distribution Powerflow for advanced applications Field Mobility Switch Order Manager - Operations Automated FLISR Load Shedding & Restoration Volt Var Optimization and Conservation Voltage Reduction

Activity		2021-2025 Achieved	2026-2030 Proposed
DERMS	Reference	<ul style="list-style-type: none"> See ADMS, EV Everywhere, Load Forecasting, and Customer Solutions 	<ul style="list-style-type: none"> Schedule 1-2-3 - Business Plan <ul style="list-style-type: none"> 5.1.3 - System Service Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 9.2.4.2 - Ottawa DER Accelerator Project (ODERA) Schedule 2-5-8 - System Service Investments <ul style="list-style-type: none"> 3 - Distribution Enhancements <ul style="list-style-type: none"> 3.6.3.1 - ODERA Pilot Project 7 - Control & Optimization
	Results	<ul style="list-style-type: none"> See ADMS, EV Everywhere, Load Forecasting, and Customer Solutions 	<ul style="list-style-type: none"> This program builds on the foundation of the ADMS with new capabilities such as DER management, optimization and automation of grid operations. The primary focus in the 2026-2030 rate period is the implementation of the Distributed Energy Resource Management System (DERMS). The DERMS module will enable Hydro Ottawa to manage and optimize the growing complexity of DERs, thereby enhancing grid stability, reliability, efficiency, and resilience in a cost-effective manner. ODERA is a partially funded technology project designed to inform the broader DER strategy and implementation of DERMS.

Activity		2021-2025 Achieved	2026-2030 Proposed
AMI 2.0	Reference	<ul style="list-style-type: none"> Schedule 2-5-5 - Capital Expenditure Plan <ul style="list-style-type: none"> 5.4 General Plant Expenditures, 5.4.2 Historical Variances, Meter to Cash 	<ul style="list-style-type: none"> Schedule 2-5-7 - System Renewal Investments <ul style="list-style-type: none"> 5 - Metering Renewal <ul style="list-style-type: none"> 5.3.1 - Main and Secondary Program Drivers 5.4.5 - Coordination and Interoperability 5.5.1 - Metering Replacements 5.6 - Alternatives Considered <ul style="list-style-type: none"> 5.6.3 - Preferred Alternative Schedule 2-5-9 - General Plan Investments <ul style="list-style-type: none"> 2 - Meter to Cash <ul style="list-style-type: none"> 2.3.2 - Current Issues 2.7 - Implementation 6 - Grid Technology <ul style="list-style-type: none"> 6.3.1 - Main and Secondary Drivers 6.7 - Implementation Plan
	Results	<ul style="list-style-type: none"> Meter-to-Cash Program successfully upgraded its critical smart meter data infrastructure, setting up for a future upgrade in 2028 that's aligned with AMI 2.0 	<p>Metering Renewal Program</p> <ul style="list-style-type: none"> A secondary driver to the metering renewal program is its contribution to the AMI 2.0 technology, which improves grid observability by providing customer outage data from the meter and aligns with Hydro Ottawa's Grid Modernization Strategy Phased metering renewal allows for a progressive and affordable introduction of advanced metering technologies and grid observability by upgrading 161,000 Meters by 2030 <p>Meter-to-Cash Program</p> <ul style="list-style-type: none"> Current CIS infrastructure requires upgrading in order to support platforms for critical systems such AMI, enabling grid modernization and DER capabilities. AMI head end upgrades are required to support AMI 2.0 meters <p>Grid Technology Program</p> <ul style="list-style-type: none"> Current capacity does not support data requirements for AMI 2.0, requiring upgrades to enable the rapidly evolving technology landscape

Activity		2021-2025 Achieved	2026-2030 Proposed
Non-Wires Solutions			
Customer Programming	Reference	<ul style="list-style-type: none"> See Collaboration & Integration (IESO Programs) 	<ul style="list-style-type: none"> Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 9.2.2.1 - Non-Wires Customer Solutions Program Response to interrogatory 2-Staff-67
	Results	<ul style="list-style-type: none"> See Collaboration & Integration (IESO Programs) 	<ul style="list-style-type: none"> The NWCSP will implement a portfolio of programs involving all customer classifications to acquire capacity and enhance reliability for system benefit. See response to interrogatory 2-Staff-67 for the business case for the Non-Wires Customer Solutions Program
BESS	Reference	<ul style="list-style-type: none"> See EV Everywhere 	<ul style="list-style-type: none"> Schedule 1-2-3 - Business Plan Schedule 1-3-2 - Proposed Annual Reporting <ul style="list-style-type: none"> 2.1.1.11 - Incremental System Capacity Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 9.1 - Capacity Needs Assessment 9.2 - Non-Wires Solutions to Address System Needs Schedule 2-5-5 - Capital Expenditure Plan <ul style="list-style-type: none"> 5.3.3 - Forecast to Historical Variance by Program Schedule 2-5-8 - System Service Investments <ul style="list-style-type: none"> 2 - Capacity Upgrade Response to interrogatory 2-Staff-111, part (d)
	Results	<ul style="list-style-type: none"> See EV Everywhere 	<ul style="list-style-type: none"> Implementation of 4 Utility-Owned BESS: <ul style="list-style-type: none"> 2.5MW BESS in the West 28 kV system (2028) 7MW BESS in the Bells Corners/Bayshore 8 kV system (2029) 5MW BESS at Casselman DS (2028) 10MW BESS in the Core 13 kV/West 13kV system (2030) See response to interrogatory 2-Staff-111 for the business case for BESS.

Activity		2021-2025 Achieved	2026-2030 Proposed
Advanced Planning			
Load Forecasting	Reference	<ul style="list-style-type: none"> Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 4.4.6 Decarbonization Study 9.4 Planning Load Forecasting Attachment 2-5-4(F) - Decarbonization Study 	<ul style="list-style-type: none"> See DERMS Response to interrogatory 2-ED-10, part (d) Response to interrogatory 2-PP-15, part (b)
	Results	<ul style="list-style-type: none"> To gain an understanding of the evolving energy landscape and strategically navigate its associated complexities, Hydro Ottawa commissioned Black & Veatch in 2023 to conduct a Decarbonization Study. This study evaluated the potential impacts of societal electrification trends on the Hydro Ottawa distribution system, projecting outcomes in five-year increments through 2050 with a scenario based approach. Five scenarios with varying assumptions of decarbonization initiatives on the distribution system were assessed. To support the transition to a more advanced forecasting methodology for medium to long-term system needs, Hydro Ottawa leveraged the Decarbonization Study to examine the impact of decarbonization initiatives on Hydro Ottawa's distribution system through 2050. 	<ul style="list-style-type: none"> Implementation of DERMS for supporting Flexible Hosting Capacity Evolve DER modeling to incorporate contracted DER capacity procured through Non-Wires Customer Solutions Programs, or other contract offerings

Activity		2021-2025 Achieved	2026-2030 Proposed
Disaggregation	Reference	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Schedule 1-2-3 - Business Plan Schedule 2-5-9 - General Plant <ul style="list-style-type: none"> 3 - Customer Engagement Platforms
	Results	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> This investment will enhance customer engagement with expanded energy management tools that will give customers personalized insights into energy consumption, identify opportunities for enhanced energy efficiency and cost savings, and enable greater control and informed decision making through end-use disaggregation analytics Hydro Ottawa is exploring other potential use cases for the disaggregation data which includes supporting Dynamic Planning and monitoring the impacts of electrification.
Dynamic Planning	Reference	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> See DERMS, Disaggregation and Load Forecasting Response to interrogatory 2-ED-10, part (d)
	Results	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> See DERMS, Disaggregation and Load Forecasting Hydro Ottawa is developing options to enable dynamic planning and flexible hosting capacity assessments.
Collaboration & Integration			
EV Everywhere	Reference	<ul style="list-style-type: none"> Schedule 1-2-3 - Business Plan Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 9.2.4.1 - EV Everywhere Pilot Response to interrogatory 2-Staff-68 Response to interrogatory 2-DRC-7 	<ul style="list-style-type: none"> Response to interrogatory 2-Staff-68 Response to interrogatory 2-DRC-7

Activity		2021-2025 Achieved	2026-2030 Proposed
	Results	<ul style="list-style-type: none"> The BESS units were installed in July 2025 Key learnings through BESS commissioning: building communication capabilities, data management, and data security. EV dispatch has been ongoing with coordination of communication with EVs, and analysis of the DR system, and the actual response rates ongoing. 	<ul style="list-style-type: none"> N/A
IESO Programs	Reference	<ul style="list-style-type: none"> Schedule 1-4-1 - Customer Engagement Ongoing <ul style="list-style-type: none"> 2.4.3 - IESO Local Initiatives Program Collaboration 2.4.7 - Customer Engagement within the 2025-2036 IESO Electricity Demand Side Management (eDSM) Framework 2.4.6 - Industry efforts to increase LDC Customer Engagement on CDM Response to interrogatory 2-PP-12 	<ul style="list-style-type: none"> See Customer Programming Schedule 1-4-1 - Customer Engagement Ongoing <ul style="list-style-type: none"> 2.4.7 Customer Engagement within the 2025-2036 IESO Electricity Demand Side Management (eDSM) Framework
	Results	<ul style="list-style-type: none"> Supported the delivery of 3 local programs funded by IESO to address regional needs (BizEnergy Saver, Coolsaver, Ottawa DER Large Solar PV Funding Incentive) Executed the Electricity Demand-Side Management agreement with the IESO to support provincial eDSM Framework from 2025-2027 	<ul style="list-style-type: none"> The NWCSP expected to be delivered in collaboration with the IESO where feasible, building upon provincially funded programming already in place. The eDSM agreement provides Hydro Ottawa with funding to support marketing and business development efforts and increase uptake of eDSM provincial programming, including local initiatives funded by the IESO.

Activity		2021-2025 Achieved	2026-2030 Proposed
Business Case Analysis			
West 28kV (North) Planning Region	Reference	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> See BESS See Customer Programming Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 9.2.2.1 - Non-Wires Customer Solutions Program, p. 276 Response to interrogatory 2-Staff-67
	Results	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Attached to interrogatory response 2-Staff-67 is Hydro Ottawa's completed Benefit-Cost Analysis and accompanying report for the NWCSP, including both a DST and EST.
Integrated Regional Resource Plan			
Integrated Regional Resource Planning	Reference	<ul style="list-style-type: none"> Schedule 2-5-2 - Coordinated Planning with Third Parties <ul style="list-style-type: none"> 4 - Regional Planning, p. 6, 8, 12 	<ul style="list-style-type: none"> Response to Interrogatory 2-SEC-36 Schedule 2-5-4 - Asset Management Process <ul style="list-style-type: none"> 9.2.2.1 - Non-Wires Customer Solutions Program, p. 276

	Results <ul style="list-style-type: none"> Hydro has collaborated with the IESO and Hydro One for the IESO regional planning process in the Greater Ottawa Area. This collaboration helped identify the current and future capacity needs of the electrical system to ensure a reliable, cost-effective and sustainable electricity supply for the region. Study includes Non-Wires Solutions (NWSs), local utility-scale generation or storage (DERs - including distribution-connected generation and demand response), Conservation Demand Management (CDM), electricity Demand-Side Management (eDSM), and distribution-level load transfers, in forecasting. 	<ul style="list-style-type: none"> Upcoming projects that were identified as part of the 2023 scoping assessment Participate in the Regional Infrastructure Planning Process for further review of IRRP recommended wires solutions starting in August 2025 Continue to support the IESO and the Local Achievable Potential Study (L-APS) currently underway to determine achievable potential for DERs and other demand-side resources to further inform Hydro Ottawa's planning and NWS assessment process
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Activity		2021-2025 Achieved	2026-2030 Proposed
		<ul style="list-style-type: none"> Hydro Ottawa has collaborated with the City of Ottawa and Hydro One through the Decarbonization Sub-Working Group for the purpose of developing forecast scenarios that reflected local community energy plans and priorities around electrification. Hydro Ottawa engaged Black & Veatch to develop 2024-2050 load scenarios considering various decarbonization factors. These scenarios were refined based on feedback, leading to the adoption of three: Reference, Policy-Driven, and Dual Fuel. The Reference Scenario was selected as the primary for investment planning and is used by Hydro Ottawa in its capacity planning to align with IRRP recommendations and ensure reliable investments. IRRP Report released on July 31, 2025³ 	

1

³ <https://www.ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/Greater-Ottawa/Ottawa-Area-20250731-IRRP.pdf>

1 b) Please refer to part a) above.

2
3 c) Please refer to the response to interrogatory 2-Staff-67 for additional details about Hydro
4 Ottawa's Non-Wires Customer Solution Program (NWCSP).

5
6 d) Hydro Ottawa has developed a Grid Modernization Strategy and Roadmap, which can be found
7 in Attachment 2-Staff-57(A) - Hydro Ottawa Grid Modernization Strategy 2025. The roadmap
8 outlines key milestones over the next five years in support of Grid Modernization Objectives that
9 provide guidance in the foundational enablers of DSO capabilities. Please also refer to part (a)
10 of the response to interrogatory 2-Staff-119.

11
12 e) Aside from regulatory funding approval, Hydro Ottawa does perceive that it will face any direct
13 barriers to develop and implement results related to each of the six categories during the
14 2026-2030 term. Hydro Ottawa does however note that many uncertainties still exist in relation
15 to the DSO Consultation process and that outcomes may have an effect on Hydro Ottawa's
16 ability to deliver results on the six categories, including outcomes of IESO initiatives. As such,
17 Hydro Ottawa will continue to participate in and identify barriers through the DSO Consultation
18 process.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-15

EVIDENCE 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]

QUESTION(S):

- 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.

RESPONSE(S):

1 a) Hydro Ottawa's current Grid Modernization Roadmap can be found attached to the response to
2 interrogatory 2-Staff-57 as Attachment 2-Staff-57(A) - Hydro Ottawa Grid Modernization
3 Strategy.

4
5 b) Please refer to Section 9.2 and Section 9.3 of Schedule 2-5-4 - Asset Management Process for
6 details on Hydro Ottawa's current methodology to forecast DERs and adoption of non-wires
7 solutions to address system needs. This methodology is continuously monitored and updated to
8 account for new technologies and incentives. Specifically, as Hydro Ottawa increases
9 understanding of and confidence in the use of contracted DER capacity procured through the
10 Non-Wires Customer Solutions Program or other programs or contract offerings, they will be
11 incorporated into modeling.

12
13 The types of DERs currently considered within modelling, aligned with the existing trends of
14 local DER solutions driven by the energy transition include:

- 15 • Battery Energy Storage Systems (BESS);
- 16 • Renewable (solar, hydraulic, bio-gas); and
- 17 • Non-renewable (natural gas, petroleum, diesel).

18
19 c) Hydro Ottawa is not currently delivering DSO activities.

20
21 d) Please see part b) of the response to interrogatory 2-Staff-70.

22
23 e) Hydro Ottawa does not have plans to deliver DSO services, as these are not yet defined by the
24 OEB through its consultation process.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-16

EVIDENCE REFERENCE:

QUESTION(S):

- 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.

RESPONSE(S):

- a) The increase in spending outlined in the 2026-2030 Distribution System Plan is not a result of previous plans failing to provide a stable foundation. Rather, it reflects a necessary and proactive adjustment to significant, evolving challenges that are impacting Hydro Ottawa's distribution grid. While previous plans established a stable foundation based on the best data available at the time, the current plan accounts for several major, and largely unanticipated, factors that have emerged since the last plan was developed including:
- A rapid surge in demand directly linked to discrete large load requests and increased adoption of electric vehicles, heat pumps, and other technologies (Section 2.3.1 of Schedule 2-5-1 - Distribution System Plan Overview);

- 1 • An enhanced approach in assessing the risk of deteriorating assets.(Sections 2.1.1 and
- 2 2.3.2 of Schedule 2-5-1 - Distribution System Plan Overview);
- 3 • An increased focus, based on customer input, on enabling the energy transition and
- 4 facilitating customer participation through technology adoption and optimizing DER
- 5 integrations. (Section 2.3.3 of Scheduled 2-5-1 - Distribution System Plan Overview); and
- 6 • Incremental investments directed at improving grid resilience following several major
- 7 adverse weather events that caused extensive damage to the electricity grid (Section 2.3.4
- 8 of Schedule 2-5-1 - Distribution System Plan Overview).
- 9

10 These factors have created a critical need to accelerate investments, particularly in System
11 Service and System Renewal categories. Hydro Ottawa's comprehensive investment strategy
12 for 2026-2030 aligns with both customer expectations and the evolving needs of the distribution
13 system, ensuring a reliable and resilient grid for the future. A detailed breakdown of these
14 investments is provided in Table 5 of Schedule 2-5-5 - Capital Expenditure Plan.

- 15
- 16 b) The 2026-2030 DSP integrates crucial enhancements such as improved asset management
- 17 processes, expanded grid modernization and resilience planning, updated system capacity
- 18 assessments, and refined mid to long-term forecasting, all informed by evolving customer
- 19 feedback and system requirements. These modifications reflect the dynamic nature of the
- 20 contemporary utility landscape, where prior planning methodologies proved insufficient to
- 21 address the accelerating rates of growth, electrification, and climate-related issues. For more
- 22 details please refer to Section 2.1 of Schedule 2-5-1 - Distribution System Plan Overview.

23

24 Notably, to support the growing demand associated with electrification, Hydro Ottawa has

25 updated its approach to planning to include both a near-term forecast: Planning Forecast and a

26 mid-to-long-term forecast: IRRP forecast, as outlined in Sections 9.1 and 9.4 of Schedule 2-5-4

27 - Asset Management Process. This also allows Hydro Ottawa to validate that capacity

28 investments for immediate needs (informed through Hydro Ottawa's planning forecast)

29 strategically align with indications of long-term needs, ensuring efficient capital deployment and

30 optimizing asset utilization. Please refer to the responses to interrogatories 2.5-BOMA-2 for

- 1 details on this process, and part (a) of 2-PP-14 for Hydro Ottawa's 2026-2030 investments in
- 2 Advanced Planning.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-17

EVIDENCE REFERENCE:

QUESTION(S):

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.

RESPONSE(S):

Local DER/NWS solutions are considered as part of IESO's Regional Planning Process as described in Section 4 of Schedule 2-5-2 - Coordinated Planning with Third Parties, which Hydro Ottawa contributes to. The IESO-published IRRP report, issued on July 31st, 2025 takes both wires and non-wires into consideration. In parallel, and to further enhance and supplement the regional planning work underway for Ottawa, the IESO is also conducting a Local Achievable Potential Study (L-APS) to identify the potential for behind-the-meter DERs, demand response and energy efficiency programs to reduce demand. For more details on the L-APS, please refer to the response to interrogatory 2-PP-18. For details on what activities Hydro Ottawa has underway to enable local DER/NWS, please refer to part e) of the response to interrogatory 1-PP-7.

INTERROGATORY RESPONSES TO POLLUTION PROBE

2-PP-18

EVIDENCE REFERENCE:

QUESTION(S):

- a) Please provide a copy of the current version of the Ottawa DER Potential Study. Please explain what this means 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.

RESPONSE(S):

- a) Hydro Ottawa is assuming the study referenced is the Local Achievable Potential Study (L-APS) that is led by the IESO, referenced during the public engagement webinar held by the IESO on June 9, 2025¹. The study is not yet complete. IESO's engagement webinar indicated that draft results of the study are expected to be published in July 2025 and the report and final results will be available in August 2025 on the Ottawa IRRP engagement webpage². The results from the L-APS will be used to inform the Ottawa Integrated Regional Resource Plan (IRRP) recommendations on using eDSM (electricity demand-side management) to address system

¹Ottawa Area Sub-Regional Electricity Planning - Engagement Webinar #3. Options Analysis and Draft Recommendations, Slide 15. June 9, 2025:

<https://ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/Greater-Ottawa/greater-ottawa-20250609-presentation.pdf>

²Regional Electricity Planning - Greater Ottawa:

<https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Regional-Electricity-Planning-Greater-Ottawa>

1 planning needs and will also be used by Hydro Ottawa to inform its Non-Wires Solutions
2 Assessment Process described in Section 9.2 of Schedule 2-5-4 - Asset Management Process.

3
4 b) Hydro Ottawa is not responsible for the scope of this study. Hydro Ottawa expects that the IESO
5 will provide details in a public consultation, summarizing the methodology, results, and timeline
6 as part of their stakeholder engagement process.

7
8 c) Results of the study will be used as important inputs to Hydro Ottawa's Non-Wires Solution
9 assessment process. For more details about Hydro Ottawa's NWS Assessment Process, please
10 refer to Section 9.2 of Schedule 2-5-4 - Asset Planning Process.