Feedback Received and IESO Response

Peterborough to Kingston Public Webinar: Draft Scoping Assessment – April 2, 2025

The IESO shared the draft Scoping Assessment Outcome Report and a narrated video presentation summarizing the planning approach to address the electricity needs of the Peterborough to Kingston electrical region. The scoping assessment recommends an Integrated Regional Resource Plan (IRRP) for Peterborough to Kingston. During the presentation, the IESO provided an overview of the regional electricity planning process, the Peterborough to Kingston electrical region, and shared the rationale for the draft scoping assessment recommendation for the region. The materials are available on the Peterborough to Kingston engagement webpage.

The IESO appreciates the feedback received, which will be considered by the Technical Working Group[1] to develop the IRRP. Feedback was received from the following parties and the full submission can be viewed on the Peterborough to Kingston engagement webpage:

- Callidus Engineering
- City of Kingston
- Defence Construction Canada
- Department of National Defence
- Enbridge Gas Inc.
- Hydrostor Inc.
- Kingston Health Sciences Centre
- Mohawks of the Bay of Quinte
- Peterborough Regional Health Centre
- Queen's University

The section below summarizes feedback received related to key developments, projects and initiatives that should be considered in the electricity planning for the Peterborough to Kingston Region.

[1] The Technical Working Group (TWG) consists of IESO as the lead, the local transmitter (Hydro One Networks Inc.), and the local distribution companies (Eastern Ontario Power Inc., Elexicon Energy Inc., Lakefront Utilities Inc., and Utilities Kingston).

Regional Planning Considerations

Several feedback received stressed the importance of ensuring the demand forecast considers growth, development and coordination of electric and gas. Additional information on infrastructure needs was also requested. Feedback also encouraged exploring non-wire options and engagement with Indigenous communities.

Feedback / Common Themes	IESO Response
Ensure the forecast captures anticipated growth, development and additional variables including: • Callidus and PEC Community Partners is planning a residential development at Picton's base 31, comprising of 7,500 units. • City of Kingston is undertaking an official plan review with a scenario that projects the city to grow from 154,100 people in 2021 to 220,900 by 2051 with most of this residential, housing and employment growth within the existing urban boundary (with consideration of an expanded urban boundary). • Department of National Defense is estimating an additional 15-35 MVA by 2050 with incremental gains each year to adhere to federal decarbonization policies. • Kingston Health Sciences Centre is working with the government on planning a new hospital in the Kingston Region, tentatively scheduled for operation in 2030 to 2043, with an estimated load to be 11-12 MW. • Consider growth from the Mohawks of the Bay of Quinte, including new business developments and housing, in the forecast. • Peterborough Regional Health Centre requested the forecast considers their	Thank you for this information. As part of the regional planning process, the IESO has shared this information with the Technical Working Group to confirm inclusion as part of the upcoming forecasting milestones. During upcoming milestones, the Technical Working Group will seek input from customers and communities on upcoming projects that could impact electricity demand such as community and load growth, and developments, in order to develop a draft demand forecast. The IESO will also include the impacts of existing demand-side management programs and distributed generation. The Technical Working Group understands the importance of accounting for temperature trends and extreme weather in the forecasting development. For more details about extreme weather methodology, please read more here. The Technical Working Group appreciates municipalities, customers and Indigenous communities keeping their Local Distribution Companies up to date on any new local developments to ensure electricity planning is aligned. The IESO will present the draft electricity demand forecast in an upcoming engagement session and encourages all interested parties to attend.

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electricity demand needs to provide critical services and emergency power. • Peterborough Regional Health Centre requested the forecast considers population growth, age demographics and new residential developments. • Peterborough Regional Health Centre requested the consideration of technological advancements, such as smart grids, electric vehicles and renewable energy sources could have on demand. • Peterborough Regional Health Centre requests weather impacts and robust plans for outages are considered.	
Enbridge Gas Inc. recommended the demand scenarios consider one or more scenarios with gas and electric systems working together to achieve GHG targets.	The Technical Working Group acknowledges the potential benefits of coordination between electricity planning processes and welcomes further discussion and input on the options available to meet needs. During upcoming regional planning milestones, the Technical Working Group welcomes input and data from Enbridge Gas on the amount of demand that could be supplied from low-carbon fuels and options available to reduce demand. The Ministry of Energy and Mines recently released the Minister's vision for Ontario's Affordable Energy Future. The vision paper reaffirmed the important role of integrated energy resource planning. The IESO looks forward to working with the Ministry of Energy and Mines, Ontario Energy Board, local distribution companies, municipalities, and gas utilities to inform a provincial integrated energy plan.
Share information about current and future station capacity needs such as: • Defense Construction Canada requested information on Belleville TS.	Thank you for this feedback. Typically, as part of the regional planning process, once the demand forecasts are finalized, the technical working group will complete several detailed studies to identify specific needs arising on the system, including location, magnitude and timing. A preliminary assessment of

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• Department of National Defense requested information on Frontenac TS.	these needs were identified in Hydro One's Needs Assessment. The IESO will share the detailed electricity infrastructure needs in upcoming engagement sessions and encourages all interested parties to attend.
Peterborough Regional Health Centre requested the plan explores non-wire alternatives, including renewable energy sources and Battery Energy Storage Systems (BESS) to meet the area's growing electricity needs.	Thank you for sharing this feedback. To ensure that Ontario's electricity system remains reliable, affordable and sustainable, an evaluation of different options to meet the needs is a key step. Typically, as part of the regional planning process, once the forecast scenarios and needs have been finalized, the Technical Working Group will screen and evaluate wire and non-wire options, such as transmission-connected generation or storage, including Battery Energy Storage Systems, electricity demand-side management (eDSM), distributed generation and demand response to meet the needs and consider reliability, cost, technical feasibility, maximizing the use of the existing electricity system (where economic), and community preferences. More details on the upcoming milestones can be found in the final Scoping Assessment Outcome Report (Terms of Reference section) posted on the engagement webpage. For more details regarding the analysis of non-wire alternatives during IRRPs, the IESO has developed a guide to the current general approach for evaluating non-wires alternatives (NWAs). The IESO will present needs and options in upcoming engagement sessions and encourages all interested parties to attend.
Peterborough Regional Health Centre requested the IRRP considers active engagement with Indigenous communities in the region to incorporate	Thank you for the feedback. The IESO is committed to helping to ensure that interested parties are kept informed and are provided with opportunities for purposeful engagement to contribute to electricity planning initiatives such as this one. We are continuously striving to enhance our engagement

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their needs and perspectives into the planning process.	practices to increase opportunities for input. We will endeavour to incorporate this input into future engagements. The IESO regularly communicates with Indigenous communities, municipalities and interested parties through various vehicles including emails, IESO weekly Bulletin, public webinars, and targeted outreach meetings to help these groups stay up to date on the IESO's work and opportunities for engagement participation. We encourage any interested parties to visit the IESO website to subscribe to receive updates. Throughout the IRRP process, we will invite interested parties to a series of webinars and targeted outreach activities to seek input on the regional demand forecast, electricity needs, options analysis, and recommendations including the evaluation of technically feasible and cost-effective solutions. Through these engagement and outreach activities, communities will have the opportunity to provide feedback and discuss the potential solutions identified.

General Feedback

Several feedback received suggested enhancing the scope of the IRRP by considering customer connection requests and broadening the Technical Working Group.

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Consider customer connections including: • Callidus and PEC Community Partners encouraged the IESO to engage directly with Hydro One's subdivision planning group and Prince Edward County (PEC) on the regional planning approach. • Defense Construction Canada has submitted a customer connection to	Thank you for sharing information around anticipated connections. As part of the regional planning process the IESO works with the local distribution companies (LDCs) and the transmitter to ensure forecasted growth, regional issues and requirements are effectively integrated into the electricity planning processes. In fact, the transmitter and local distribution companies are part of the Technical Working Group that will evaluate the electricity needs and identify solutions to meet the needs.

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Hydro One that could result in 25-30 MVA.	One of the critical first steps is to develop the draft demand forecast. Forecast data is provided by each of the local distribution companies in the Peterborough to Kingston electrical area. The forecast data is based on established forecasting assumptions, customer connection requests, and insights from municipalities and stakeholders. The forecast forms the basis of the regional electricity planning process in identifying how much power is needed in the region over the next 20 years based on the inputs provided on current, planned and potential growth. Once the forecast is finalized, technical studies will be undertaken to identify specific needs arising on the system, including location, magnitude and timing. Both wires and non-wires options will be considered in addressing the needs once they are identified.
The Mohawks of the Bay of Quinte shared there is a feasibility study on the electrical infrastructure in the area and requests the distribution system is evaluated as part of the study, specifically: • Examine the distribution poles in the area for reliability during extreme weather events. • Extend hydro servicing and 3ph investment into the community.	The Technical Working Group appreciates this information being brought to our attention. Regional planning addresses local electricity system needs at the transmission system level. For distribution-level concerns, we encourage you to work with your local distribution company (LDC)s to share this feedback. The IESO will also share this feedback with your LDC and is looking forward to continuing to engage with the Mohawks of the Bay of Quinte on this and other initiatives.
Consider broadening the Technical Working Group including: • Enbridge Gas Inc. expressed an interest to be included in the Technical Working Group. • Hydrostor Inc. recommended building a Resource Technical Working Group to inform the IESO of different resources under development in the region.	The Technical Working Group recognizes the potential coordination of electricity planning and other resources. The Ministry of Energy and Mines recently released the Minister's vision for Ontario's Affordable Energy Future. The vision paper reaffirmed the important role of integrated energy resource planning. The IESO looks forward to working with the Ministry of Energy and Mines, Ontario Energy Board, local distribution companies, municipalities, and gas utilities to inform a provincial integrated energy plan.

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	Throughout the IRRP process, the IESO will invite interested parties to webinars and host targeted outreach activities to seek input on the regional demand forecast, electricity needs, options analysis, and recommendations including the evaluation of technically feasible and cost-effective wire and non-wire solutions. As planning work advances, the IESO welcomes views and preferences of communities and stakeholders, which will be considered in the development of the plan and helps lay the foundation for successful implementation.
Hydrostor Inc. recommended considering how new resources through the IESO's procurements can provide value to the regional planning system and what upgrades are required to enable such resource development in the region.	Regional planning addresses local electricity system needs at the transmission system level. In our regional planning, we consider new resources by assessing their contributions to meeting regional needs. With respect to enabling resource development, we recognize the importance of aligning resource procurement with regional system needs. We will continue working internally to explore how locational considerations can be more effectively factored into future resource procurement efforts. The IESO's procurements are separate initiatives that are outside the scope of the IRRP process and aligned with government policy. Industry stakeholders can find information on our stakeholder engagement webpage and is encouraged to share detailed feedback, such as barriers for applicants, through this channel. Questions and comments regarding the procurement process, should be directed to engagement@ieso.ca. The IESO has several active bulk studies that are assessing the bulk system's ability to enable new resource connections. To learn more, visit the engagement webpages of the South and Central Bulk Study, Northern Ontario Bulk Study and Eastern Ontario Bulk Study.
Consider potential projects such as:	Thank you for this feedback. In order to ensure that Ontario's electricity system remains reliable, affordable and sustainable, an evaluation of wire and non-wire

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• Hydrostor Inc. is developing the Quinte Energy Storage Centre to be interconnected at the Lennox TS with a targeted commercial operations date (COD) in the early 2030s. • Queens University has the capacity for distributed energy resources (DER) electricity generation that could provide grid benefits.	options to meet the needs is a key step. Wires and non-wires such as electricity demand-side management (eDSM) and resources including BESS, solar or wind generation, or any combination, will be evaluated to meet the region's identified electricity needs. Should a non-wire option be recommended in the IRRP, implementation mechanisms will be determined by the IESO following plan publication. The IESO will present needs and options in upcoming engagement sessions and encourages all interested parties to attend.