Feedback Form

2024 Annual Planning Outlook – April 23, 2023

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To promote transparency, feedback submitted will be posted on the Long-Term RFP engagement page unless otherwise requested by the sender. If you wish to provide confidential feedback, please mark "Confidential".

- Following the APO Information Webinar on April 23, 2024, the Independent Electricity System Operator (IESO) is seeking feedback and comments from stakeholders on the items discussed. The webinar presentation and recording can be accessed from the engagement web page.
- **Please submit feedback to** engagement@ieso.ca **by May 7, 2024.**

General Comments/Feedback

APPrO is pleased to offer the following comments on the 2024 APO.

The APO provides solid groundwork in identifying the need and the gaps over the planning period. It identifies that Ontario's electricity demand is expected to increase, the supply mix will undergo significant change, transmission system expansion is important, uncertainties and risks exist, and planned actions are necessary to ensure reliability and prepare for the energy transition;

Importantly, it concludes that Ontario is expected to transition from a summer-peaking region to a dual-peaking region by 2030, and is the first APO to identify such energy needs.

However, APPrO believes the APO does not adequately address the urgency of addressing these issues. APPrO believes that there is a need for a more proactive approach to energy transition planning, including a coordinated plan for electricity and natural gas.

From APPrO's perspective, the purpose of a planning document is to consider future scenarios with different risks in the context of well identified and clear objectives, and evaluate and explain how risks have been considered, and the trade-offs made in planning decisions.

The APO (as well as other previous planning documents) notes that system needs post-2035 are highly dependent on government policy. This significant policy uncertainty and risk could affect Ontario's longer-term electricity needs. The IESO notes that it will continue to monitor and assess changes in policy, technology, and customer behavior to update its forecasts and planning assessments, but there are no alternative scenarios offered or risk mitigation plans included in this current iteration. What are the IESO's plans if projects are late or do not materialize? This underscores the importance of options and getting value from existing resources through expansions and uprates that present the most economical option for Ontario, as well as conservation.

The APO proposes two scenarios: the "As Is case" and the "High Nuclear case." The "As Is case" includes existing and committed resources, while the "High Nuclear case" includes the continued safe operation of Pickering B Nuclear Generating Station and the addition of new generation at Bruce NGS.

However, regulatory and environmental approval processes, policy changes, municipal and Indigenous communities, and other stakeholder issues together with the overall scale and complexity of energy projects could all result in capacity being delayed or unavailable as assumed within the two planning scenarios.

This risk is especially true for the large-scale storage, transmission, and nuclear projects, nuclear refurbishments, and emerging technologies that are not yet in commercial operation.

In our view, this uncertainty requires additional work on scenarios and the identification of risks within each; i.e., scenarios need to be broader and capture the possibility that demand may grow at a different pace: faster or slower.

Further discussion on operability (e.g., dispatchability, frequency response, inertia, and system security) is also desirable.

Such risks and other developmental challenges are foreseeable, could have substantial implications on reliability, and could result in costly or less than optimal solutions if appropriate mitigations are not effectively planned. For example, data centres are a significant new energy load and it is expected that Ontario will see more projects materialize as well as new manufacturing announcements for EV plants. How will these be reflected in future iterations? For data centres and industrial facilities, will IESO project load growth beyond discrete announced projects?

This suggests that the IESO should consider conducting and sharing scenario analyses on demand. With the uncertainty in demand growth, relying solely on one or two demand scenarios may no longer be appropriate.

The document provides information about procurement in relation to Ontario's electricity needs, including long-term and medium-term procurements, the targets for new resources, and the eligibility considerations for participating in the procurements, and highlights the importance of a regular cadence of procurements, the risks and uncertainties associated with procurement, and the need for continuous assessment and adaptation.

While the IESO notes that it plans to continue with regular procurements to meet Ontario's near-to long-term needs, the actual sequence of planned procurements and amount - previously done a couple of years ago, is missing. Providing this information in a graphic form would be helpful.

The government has directed actions to power Ontario's growth, including the development of long-lead asset projects and initiatives for reliability risk mitigation. APPrO is concerned that Ontario's current planning approach is too focused on near-term solutions, which puts Ontarians at risk of reliability and affordability risks. Long term planning allows for resources like nuclear to be procured offering the best opportunity for economies of scale.

Additionally, while procurements will introduce more low-emitting generation sources, natural gas will continue to play a crucial role as a backup to wind and solar due to its dispatchability and load-following capabilities. This should be factored into the APO's needs assessment. Natural gas is essential for maintaining grid reliability and affordability for the ratepayer during the transition period, until comparable non-emitting generation options are operational. This requirement is projected to last over the next two decades.

This sense of urgency is not present in the APO and given the success of the "no regret" actions presented in the EETP report, P2D and POG, perhaps similar reflections should be included here.

The APO emphasizes the importance of municipal support and engagement in the planning and procurement processes of the electricity system, and highlights the role of municipal councils in decision-making.

Given the breadth and pace of the energy transition, APPrO believes that working with municipalities on a better understanding of Ontario's and regional electricity needs is a vital for the success of addressing growing demand and alignment with local priorities.

There is clearly a lack of local knowledge and capacity to make well informed decisions at the municipal level. As this is critical to moving forward with projects it would be helpful for the IESO increase the work it is already doing with municipalities by discussing the energy transition, the APO and risk management at dedicated presentations or open houses for each region. In addition, an IESO representative or support line could be assigned to answer questions and obtain information for the municipalities to support them in making a decision similar to what is being done for Market Renewal.

There should be further discussion between the IESO, government and stakeholders on approvals and approvals processes for all projects. The current requirement for municipal support resolutions for all projects has the potential to hamper energy development due to inadequate information or powerful NIMBY groups. This could be problematic when the energy transition demands resources, as large supply gaps could result in severe negative economic and human safety consequences. Perhaps this requirement can be modified to apply to only Greenfield sites or expansions versus upgrades.

Financial incentives for municipalities who approve projects in their area may be a worthwhile consideration. This incentive could be in the form of a material dollar commitment by the IESO that ratchets with the size of the facility.

The IESO notes that transmission system expansion is key to delivering new energy supplies and supporting the energy transformation in Ontario. As APPrO noted in its September 2023 ERO submission on *Critical Transmission Infrastructure in Northeast and Eastern Ontario*, the development of an Integrated Ontario Transmission Plan that collects and links the various regional planning studies currently being done by the IESO into a focused and actionable plan needs to be undertaken by the IESO as part of its Annual Planning Outlook (APO), in concert with electricity stakeholders, including Ontario's Indigenous communities.

Additional work on all of these issues would be useful and may present an opportunity to advance discussions on scenarios, barriers, options, opportunities and uncertainties. A series of white papers with sector input might be useful on all of these topics.