

Memorandum

To: Strategic Advisory Committee

From: Dave Devereaux, Director, Resource Planning

Date: March 20, 2024

Re: IESO Business Update – Annual Planning Outlook

Summary of the 2024 Annual Planning Outlook (APO)

Following policy announcements in 2023 that include the provincial government’s Powering Ontario’s Growth (POG) report and accompanying Ministerial Directives, and the federal government’s draft Clean Electricity Regulations (CER), the APO publication was shifted from December 2023 to March 2024. To provide a more complete picture of future reliability needs and required actions, this APO has integrated content from the Annual Acquisition Report (AAR). The APO continues to provide an updated demand forecast, supply and transmission outlooks, and system needs, but now includes more discussion of risks and uncertainties, and identifies a set of planned actions to meet identified needs.

The 2024 APO:

- Forecasts demand that will, on average, increase two per cent a year over the coming decades, driven primarily by economic and population growth, mining and steel industry electrification, electrification of transportation, and growth in electric vehicle related industries.
- Demonstrates that capacity shortfalls in the mid-2020s due to nuclear refurbishments/retirements and expiring contracts have been addressed as a result of previous actions that leverage the Resource Adequacy Framework, increased conservation and demand management targets, and other government policy decisions.

- Indicates an approximately 5,000 MW and 15 TWh supply shortfall emerging in the 2030-2034 period as a result of increasing demand and expiring contracts.
- Sets increased firm capacity auction targets of 1,600 MW and 1,000 MW for summer 2025 and winter 2025/2026 obligation periods, respectively.
- Identifies a regular cadence of procurements to come, including the second medium-term procurement expected to launch in Q4 2024, and the second long-term procurement launching in 2024 with an expected target of 2,000 MW of non-emitting energy supply.
- Describes bulk transmission studies (beginning in 2024 and covering southern, central, northern, and eastern Ontario) required to assess transmission system capabilities and to enable economic growth and decarbonization goals.

The IESO presented an overview of the APO demand, supply, and preliminary needs in December 2023 in coordination with the first Long-Term 2 RFP engagement. A subsequent APO-specific engagement session will be held in March/April 2024 to present an overview of the final 2024 APO and address any stakeholder questions.

Stakeholder Feedback from the October 2023 APO and AAR Engagement

An engagement session was held in October 2023 to update stakeholders on the timing of the merged APO and AAR (now referred to as the APO), and to address feedback received through the February 2023 AAR engagement on the future participation of resources and consideration of market exit in the IESO's adequacy assessments. Moreover, the IESO used the October session to request stakeholder feedback to inform the evolution of the APO.

The initiative to evolve the APO is informed by the policy direction noted above and with recognition that there is an opportunity to streamline the development of provincial planning products and better provide stakeholders with the information they need. To inform this work, feedback was solicited on specific topics that included relevancy and/or redundancy of content, areas of potential enhancement, and frequency and timing of publication.

The key themes from the feedback, which were [posted](#) with the IESO's responses on February 28, 2024, are summarized below.

- **The APO and AAR already provide crucial planning information and data** that are used by stakeholders to develop market, planning and investment analytics, understand demand trends and drivers, validate and refine models, make investment decisions, and identify risks and opportunities. Some stakeholders suggested that sections on reliability needs were redundant between the APO and AAR.
- **Consistency of report publication is important**, with a strong preference for a comprehensive planning document with an annual cadence that presents assumptions and methodologies together, to reduce potential confusion or inconsistencies across multiple documents.
- **Increased granularity of information is required** – both geographically (i.e., transmission constraints by region or station) and temporally (i.e., hourly demand profiles by end use), to help stakeholders better understand system needs and support participation in the IESO’s markets and procurements.
- **Scenario-based planning can help inform investment decisions**, by capturing potential end-states and market conditions of the energy transition and providing insight on impacts to reliability and ratepayer cost, and also provide proponents with signals for investment decisions.

Next Steps and Future APOs

Integrating the AAR into the APO is the first step to evolving the IESO planning products. Consistent with stakeholder feedback received through the October engagement, the next APO will be published next year, in early 2025, and will include information and analysis that is comparable to the 2024 APO’s. However, the IESO will continue to evaluate and engage on ways to enhance and streamline planning product development in 2024.

February 2024	IESO responses to feedback on evolution of APO/AAR
March 2024	Publication of 2024 APO
Q1/Q2 2024	Webinar presenting the 2024 APO, and continued engagement on the evolution of planning products
