Feedback Form

2025 Annual Planning Outlook – May 21, 2025

Feedback Provided by:

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To promote transparency, feedback submitted will be posted on the 2025 Annual Planning Outlook engagement page unless otherwise requested by the sender.

- ☐ **Yes – there is confidential information, do not post**
- ☒ **No – comfortable to publish to the IESO web page**

Following the May 21 engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed. The presentation and recording can be accessed from the 2025 Annual Planning Outlook.

Note: The IESO will accept additional materials where it may be required to support your rationale provided below. When sending additional materials please indicate if they are confidential.

Please submit feedback to engagement@ieso.ca **by June 4.**

General Comments/Feedback

Do you have any general comments or feedback regarding the information shared or recommendations for the IESO to consider regarding future outlooks?

Ontario Power Generation (OPG) thanks the Independent Electricity System Operator (IESO) for the publication of the 2025 Annual Planning Outlook (APO) and its associated modules. This APO represents a significant step forward in Ontario's energy planning framework and offers valuable transparency into the assumptions, methods, and direction of Ontario's electricity system planning.

OPG commends the IESO for continuing to provide such a comprehensive and public-facing reference document. The APO serves as an essential resource for utilities, developers, investors, and policymakers across the energy sector. It helps align planning efforts and allows the broader industry to better anticipate the evolving needs of the electricity system, thereby supporting more effective and coordinated investment and development decisions.

In particular, OPG expresses its appreciation for the inclusion of an illustrative capacity expansion scenario and associated emissions outlook. These additions provide meaningful insight into the types and scale of resources that will be needed to meet Ontario's growing electricity demand, and they reinforce the importance of a diverse and balanced supply mix. The example pathway laid out in the report clearly demonstrates that no single technology can meet Ontario's needs in isolation. Rather, an "all-of-the-above" approach—incorporating nuclear, hydro, natural gas, renewables, and storage—is necessary to ensure reliability, affordability, and sustainability. This supply outlook aligns well with the diversity of supply in Ontario's current electricity system. OPG believes this message is both timely and important, and thanks the IESO for delivering it clearly and credibly as the system planner.

OPG also offers a few suggestions for future planning work, and hopes these may be helpful as the IESO continues to evolve and refine its outlooks. These are offered in the spirit of collaboration and are not meant as criticisms of the current work, which is considered both rigorous and valuable.

First, a suggestion for more explicitly incorporating the diminishing marginal capacity value of different technologies as more are added to the system, if this has not already been done. Ongoing research by OPG and the IESO suggests that it is important to account for the declining ability of different technologies to contribute to resource adequacy as penetration increases. We believe that transparently embedding this dynamic in planning scenarios would offer a more complete picture of long-term role and limitations of different supply technologies.

Second, it is important to note the many uncertainties inherent in such a long-term outlook and the APO includes a broad discussion of this topic. OPG encourages the IESO to explore the use of stochastic capacity expansion modeling to further account for uncertainty. Rather than relying on a single deterministic set of assumptions to derive a least-cost supply mix, stochastic modeling evaluates a range of uncertain parameters—such as future demand growth, renewable generation profiles, and supply costs—and identifies supply portfolios that perform well across a wide spectrum of possible futures. This type of approach can improve the robustness of planning recommendations and help decision-makers understand which investment pathways are resilient under uncertainty.

OPG notes that the IESO has already taken meaningful steps in this direction in other work that is in progress, such as including the use of multiple historical weather years in developing renewable generation profiles. OPG views this as a strong foundation and encourages continued progress in this area. To support this conversation, OPG would be pleased to share reference materials and recent work on this topic.

In closing, OPG again thanks the IESO for its leadership in developing and publishing the 2025 APO. These planning materials represent an invaluable contribution to the province's energy dialogue and support the shared goal of ensuring a reliable, affordable, and sustainable electricity system for Ontario.