

Stakeholder Advisory Committee – Challenge Statement

Urgency and Timing of New Resources

Challenge Statement:

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- This is a critical time for Ontario’s electricity sector. Ontario clearly requires significant amounts of supply (capacity and energy) – capacity needs exist now and will increase once the Pickering nuclear generation station retires before 2026, and energy needs emerge in the mid 2020s and increase through the late 2020s.
- This challenge requires a timely and appropriate solution for new resources to be in a position to help fill the gap and solve for the shortfall.

Supportive Facts and Rationale:

- Since IESO’s 2016 Ontario Planning Outlook to IESO’s 2021 Annual Planning Outlook, each subsequent IESO forecast results in larger supply shortfalls and therefore increasing supply needs.
 - Capacity needs emerge in 2025 and grow over the forecast horizon. Nuclear refurbishments and retirements, as well as expiring contracts, create medium-term capacity shortfalls.
 - Energy needs emerge in the mid-2020s, and grow sharply later in the decade reflecting post-pandemic and economic growth.
 - The drive to decarbonize using electricity adds further pressure.
- Ministerial Directive has signalled a path forward via a Long-term RFP competitive process to begin to procure new resources required to meet forecasted demand.
- Additionally, the Minister has requested the IESO to explore options and impacts of moving to a non-emitting grid all the while maintaining affordability and system reliability, as well as enabling new technologies.
- Reliability remains the paramount objective of the IESO
- These objectives create challenges in that they are not all perfectly aligned. This, coupled with the timing of need for new resources, makes the procurement design challenging.
- Investor confidence is not strong within Ontario’s electricity sector and attracting new investment (or continued investment) in this market is at risk.

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IESO Role:

- Providing timely and accurate information and data to support identification and timing of need
- Consulting and developing timely and feasible competitive procurement mechanisms that can address multiple objectives of reliability, affordability and emission reduction policies.
- Maintaining reliability of the system and complying with Ministerial Directives
- Developing and executing the solutions to meet future system needs-in a timely manner.

Role of Others:

- Incremental investment in existing and new assets requires a pool of owners, developers and investors with necessary expertise, capital, and appetite to participate in the Ontario market:
 - These potential participants need sufficient line of sight and information on the Ontario market and supply/demand picture to consider the features, benefits and risks of investing and operating in the Ontario market.
 - Investors can continue to communicate what constitutes a strong market signal and what is required to gain confidence in this market.
 - Suppliers need to communicate feasible options in hope the IESO is able to adopt processes and design mechanisms that will attract investment
- The Government of Ontario should ensure policy clarity (e.g. Long Term Planning), in particular environmental and socioeconomic goals, to help inform the direction of the sector and establish investor confidence, including by providing timely Ministerial Direction when/where required
- Demand side; communities; other stakeholders need to engage in the discussion to ensure alignment with their priorities around electricity needs, planning and operations to take consumer flexibility into account

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Strategic Considerations and Committee Advice:

- The IESO has already begun to move toward solving this problem and has also been Directed by the Minister in this way – timing is getting very tight.
- Planning mechanisms should recognize that some technologies have longer lead times, and to maximize resource optionality to meet those needs, the identification of needs should occur earlier
- IESO should consider greater understanding of demand side trends to ensure it can identify needs in a timely manner
- IESO has technical expertise in the operation of the system and should have ability to take timely actions to meet urgent system needs.
- The IESO needs to be able to recognize and factor in stakeholder feedback to ensure a successful procurement process that meets the multiple objectives of reliability/affordability/emission reduction policies.
- Managing investor confidence must be acknowledged when developing mechanisms to meet needs, and in particular, the IESO should seek an increased understanding of the investment/finance community to ensure revenue other expectations and risks are appropriately considered
- Incorporate the role of DERs to help meet the growing and urgent needs
- Be pragmatic when prioritizing the development of solutions to meet urgent system needs, as different factors and opportunities may influence the mechanisms to meet longer term needs
- The impacts of international resource supply chains and resource security are areas of growing importance and should be considered in meeting future system needs