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Ongoing Activities to Address Ontario's Growing Electricity Needs

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Today's Session

Purpose

To provide an update on the IESO's recent and upcoming procurements for new electricity resources in the province

Agenda

- Introduction
- Meeting Ontario's Future Electricity Needs
- Expedited Long-Term (E-LT1) Request for Proposal (RFP) Process Final Results
- Long-Term Request for Proposal (LT1 RFP) Design and Next Steps
- Discussion: opportunity for communities to provide input and prepare for the next steps in the procurement process



Context

- Significant electricity system needs are expected over the next decade
- This growth is driven by strong economic development, decarbonization initiatives, a changing supply mix and evolving consumer preferences
- Communities have an integral role in Ontario's energy transition
- Your continued engagement is critical to help acquire the supply needed to prepare the electricity system for the expected growth and ongoing decarbonization



Introduction



About the IESO



Operate Ontario's province-wide electricity system on a 24/7 basis



Support innovation and emerging technologies



Oversee the electricity market, driving competition to maintain affordability



Work closely with communities to explore sustainable options



Plan for Ontario's future energy needs



Enable province-wide energy conservation



Factors Driving the Energy Transition





How to Get Involved

- Learn about the important role of communities in Ontario's electricity system (ieso.ca/learn)
- Receive information and updates about electricity planning in your area and how to get involved (ieso.ca/subscribe)
- Email us at <u>communityengagement@ieso.ca</u> for information on a range of engagement forums
- Explore <u>www.saveonenergy.ca</u> for information about energy conservation

We look forward to working with you and your community

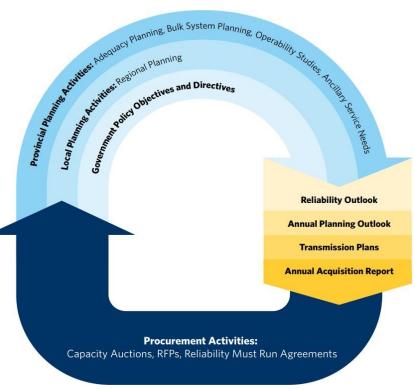


Meeting Ontario's Future Electricity Needs



Addressing Electricity Needs into the Future

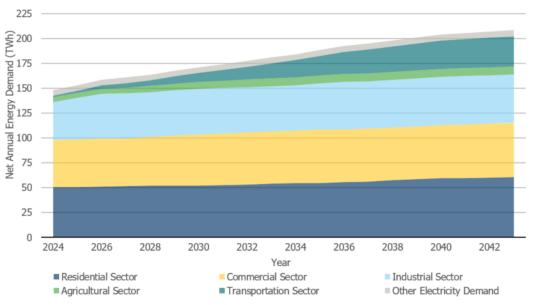
- The IESO uses its planning activities and products, including the Annual Planning Outlook (APO), to identify future system needs
- Different acquisition mechanisms are available to acquire the needed resources to meet Ontario's future needs, identified in the Annual Acquisition Report (AAR)
- The IESO revisits Ontario's electricity needs on an annual basis to adjust how we meet those needs as circumstances change





Annual Planning Outlook: 20-Year Supply & Demand Forecasts

2022 Annual Planning Outlook (APO)



- Electricity demand increasing ~2% annually due to economic growth and decarbonization
- Pressure on supply due to nuclear retirements and refurbishments, expiring generator contracts
- Current procurements addressing mid-decade capacity needs
- Increased overall energy production will be needed by end of decade, requiring more supply options and new transmission infrastructure



Summary of Planned Actions

		2024-2026	2027-2029	2030+	
		Solutions identified in previous AARs are underway.	Supply needs increase following Pickering retirement and increasing demand. Solutions underway are expected to help address needs and IESO will work with the sector on additional actions that will be needed.	Longer-term electricity demand continues to grow with economy-wide decarbonization. The IESO will begin working with the sector to determine additional solutions to meet growing needs.	
	Short Term	Increase annual capacity auction target		Capacity auction target adjusted based on need	
		Proposed Pickering B extension			
	Medium Term	Capacity secured from the first Medium-Term RFP			
SOLUTIONS			Capacity reacquired from existing resources coming off contract		
	Long Term	Capacity secured from Same Technology Upgrades Solicitation & Expedited Long-Term Procurement			
			Capacity secured from the first Long-Term RFP		
				Capacity secured from new resources	
		New and expanded energy efficiency programs	Persisting savings from new and expanded energy effic	iency programs	
		Contracts with generators to meet local reliability needs or policy direction			



Resource Adequacy Update

The IESO is continuing to make important progress on meeting energy needs driven by economic growth, electrification and nuclear refurbishments/retirements. This includes:

- Moving forward with the largest procurement of storage capacity in Canada via the E-LT1 RFP, complemented by the Oneida Battery Storage facility
- Leveraging existing natural gas assets to provide a cost-effective, efficient and reliable way to prepare for coming needs and support Ontario's energy transition
- Securing supply at cost-effective rates by taking a competitive and flexible approach to procurements
- Striking the right balance between ensuring reliability and setting the stage for system transformation in these procurements

Future procurements and new government policy are now taking shape, and community support will be critical to their success

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Expedited Long-Term (E-LT1) RFP Final Results



E-LT1 RFP Update

- The E-LT1 RFP is complete with 1,176.7 MW of long-term capacity secured; results described on the next slide
- The list of the 17 Selected Proponents' projects are available on the IESO website



E-LT1 RFP High Level Results

	Number of Projects	Maximum Contract Capacity (MW)
Proposals Received	44	3,335.9
Non-Storage* Contracts Awarded	2	295
Storage Contracts Awarded	15	881.7
Storage Category 1	7	739.2
Storage Category 2**	8	142.5
Total Contracts Awarded	17	1,176.7

^{*}Includes upgrades and expansions at existing gas facilities

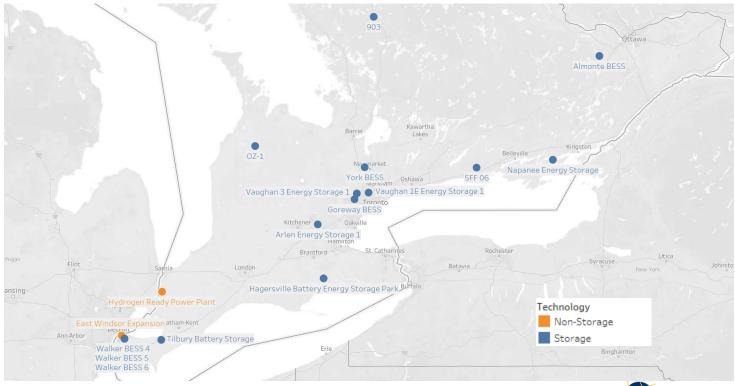
^{**}Storage Category 2 contracts have been offered, not yet executed

	Summer Contract Capacity (MW)	Winter Contract Capacity (MW)	Weighted Average Proposal Price (\$/MW- Business Day)
Non-Storage	256	295	\$1,093.22
Storage***	881.7	881.7	\$881.09

Note: Only those Proposals evaluated in Stage 4 are included in the above values
*** Includes Storage Category 1 and Storage Category 2 Proposals



E-LT1 Successful Projects



Long-Term RFP (LT1 RFP) Details



LT1 RFP Overview

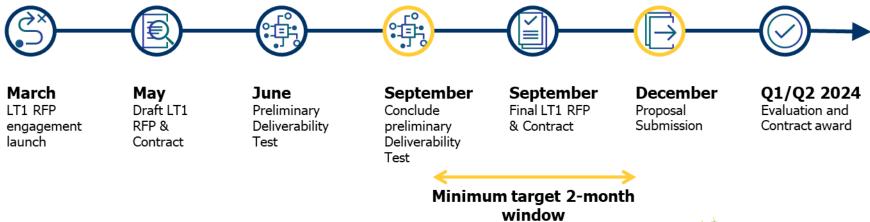
- The LT1 RFP will procure new-build resources as well as eligible expansions at existing facilities to meet capacity needs that emerge mid to late 2030s
- Proponents unsuccessful in the E-LT1 RFP evaluation process will have the opportunity to re-submit projects into the LT1 RFP
- Contracts will be awarded for projects coming into service in the 2028 timeframe with proposed incentives for early operation; however natural gas contracts will not be permitted to go beyond 2040
- Community engagement and Municipal Council Support Resolution will continue to be required and can start as early as February 17, 2023



LT1 RFP Timeline

In response to concerns regarding development timelines, as well as revised reliability assumptions, the IESO is **proposing to modify the Commercial**Operation Date (COD) for the LT1 RFP to May 1, 2028.

The IESO will aim to conclude LT1 RFP and offer contracts by end of Q2 2024





LT1 RFP Procurement Targets

- The IESO is proposing to increase LT1 RFP procurement targets to account for the final results of the E-LT1 RFP
- As per the October 2022 directive, natural gas is limited to 1,500 MW across the Same Technology Upgrades, E-LT1 RFP and LT1 RFP mechanisms

	Non-Storage Capacity (MW)	Storage Capacity (MW)	Total Capacity (MW)
E-LT1 RFP Target	600	900	1,500
E-LT1 RFP Results	295	882	1,177
E-LT1 RFP Remainder	305	18	323
Original LT1 RFP Target	600	1,600	2,200
Revised LT1 RFP Target	905	1,600*	2,505

Reserved right to accept marginal bid above target; not necessary to add 18 MW Storage remainder



LT1 RFP – Locational Considerations

- In the E-LT1 RFP, the IESO awarded Rated Criteria Points to projects proposing to connect in several priority areas, which was successful in driving a sufficiently high level of interest in those targeted areas (per Deliverability Testing submissions)
- As a result, the IESO will be eliminating locational Rated Criteria Points from the LT1 RFP, shifting the focus to meeting only province-wide system needs
- Local reliability needs will guide how location is valued in the IESO's future procurements and, as a result, the treatment of location may vary from procurement to procurement



LT1 RFP – Indigenous Support

The Ministry of Energy presented at the IESO's <u>June LT1 RFP webinar</u> in which they proposed revised Indigenous Participation considerations for the LT1 RFP, including provisions related to Rated Criteria Points for Indigenous Participation and Duty to Consult:

- Rated Criteria Points for Indigenous participation will, alongside the existing
 economic interest thresholds, include an additional point for Indigenous support
 where the project is located on Indigenous lands of the partnership of the
 Indigenous community or where at least one of the partnering Indigenous
 community(ies) attest to the project being on their traditional territory or homeland.
- Where a project is located on Indigenous Lands (as defined in the RFP), evidence of Indigenous Support (e.g., Band Council Resolution) will be required in advance of Proposal Submission. (This requirement will also add an automatic 3 points as it satisfies the Rated Criteria Local Governing Body Support Confirmation)



LT1 RFP – Duty to Consult

- Like the expedited RFP, proponents will be required to a submit a Community and Indigenous Engagement Plan with their RFP submission.
- Typically, Indigenous consultation requirements are fulfilled through the environmental approvals required for the project. However, some technology types are not subject to a provincial environmental approvals framework that the Crown may rely on to fulfill its duty to consult. This includes certain standalone battery storage projects.
- For such project types only, the Ministry of Energy intends to direct the IESO to include Indigenous consultation requirements in the LT1 contract.



LT1 RFP - Municipal Council Support Resolutions

Based on feedback received from stakeholders regarding development timelines:

- Maintaining similar framework as for the E-LT1 RFP; Municipal Council Support
 Resolutions can be provided after proposal submission (where Rated Criteria
 Points not awarded), but must be secured within 18 months of contract award
- However, Rated Criteria Points will still be awarded to proposals that have obtained Municipal Council Support Resolutions prior to Proposal Submission
- Considering whether blanket Municipal Council Support Resolutions would be sufficient to meet LT1 RFP requirements



Community Engagement

The IESO has clarified the requirements for the Community and Indigenous Engagement (section 2.1(f) of the LT1 RFP) based on feedback and lessons learned from the E-LT1 RFP evaluation process:

- Public community meetings must be made available to members of the public at large, collectively (i.e. not in targeted one-on-one meetings)
- The IESO is proposing that community engagement must happen no earlier than February 17, 2023 in order to provide municipalities and the public with the most up to date and relevant information regarding specific projects seeking to participate in the LT1 RFP



Recap

- The IESO is continuing to **acquire new electricity resources** to support meeting energy needs driven by economic growth, electrification and nuclear refurbishments/retirements
- The evaluation of the Expedited Process (E-LT1) proposals are complete; results are available on the IESO website.
- The engagement on the design of the upcoming Long-Term Request for Proposals
 (LT1 RFP) is underway; draft procurement documents are available for review on the IESO
 website
- Procurement designs and requirements are continuing to be shaped by input from communities, stakeholders and other interested parties



Next Steps

- The IESO invites written feedback on the LT1 RFP process and design considerations by August 1
- All written feedback should be submitted to engagement@ieso.ca
- The IESO will be continuing engagement on the LT1 RFP design throughout the summer
- The final LT1 RFP and contract is expected to be posted in September



Thank You

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