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**JULY 7, 2022**

# Deliverability Assessments for the LT1 RFP and Additional Mechanisms

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# Agenda

- Overview of LT1 RFP and Additional Mechanisms
- Deliverability Test Overview
- Next Steps

# Purpose

- Present an overview and key considerations for the LT1 RFP, Expedited Long-Term Request for Proposals (Expedited Process/E-LT RFP) and Same-Technology Expansions
- Provide additional information and seek feedback on the proposed deliverability assessment process



# Overview of the Long-Term Request for Proposals (LT1 RFP), Expedited Process and Same-Technology Expansions

# Planned Actions Work Together to Ensure Reliability & Manage Uncertainties

2022  
-  
2024

Solutions are in place to meet needs as a result of efforts already underway.

2025  
-  
2026

Supply needs increase following Pickering retirement. The IESO will work with sector participants and communities this summer to confirm options to best meet these needs.

2027  
+

Longer-term electricity demand continues to grow requiring new supply solutions beyond what is already planned.

SOLUTIONS

Short  
Term

- Increase annual capacity auction target

Medium  
Term

- Five-year contracts with existing resources (MT I RFP)

Long  
Term

- Contracts with generators to meet local reliability needs or policy needs

- Increase annual capacity auction target
- Capacity Sharing Agreement with Quebec

- Multi-year capacity auction
- Five-year contracts with existing resources (MT I RFP)

- New energy efficiency programs
- Expansion of existing facilities
- Expedite new facilities

- Capacity auction target adjusted based on need

- Five-year contracts/expansions and upgrades (MT II RFP)

- New capacity, including new facilities (LT RFPs)

# Overview of Proposed Additional Mechanisms

## Expedited Process

- An Expedited Process stream for qualified proponents with advanced **new-build resources** that are able to enter service by 2025

## Same Technology Expansions

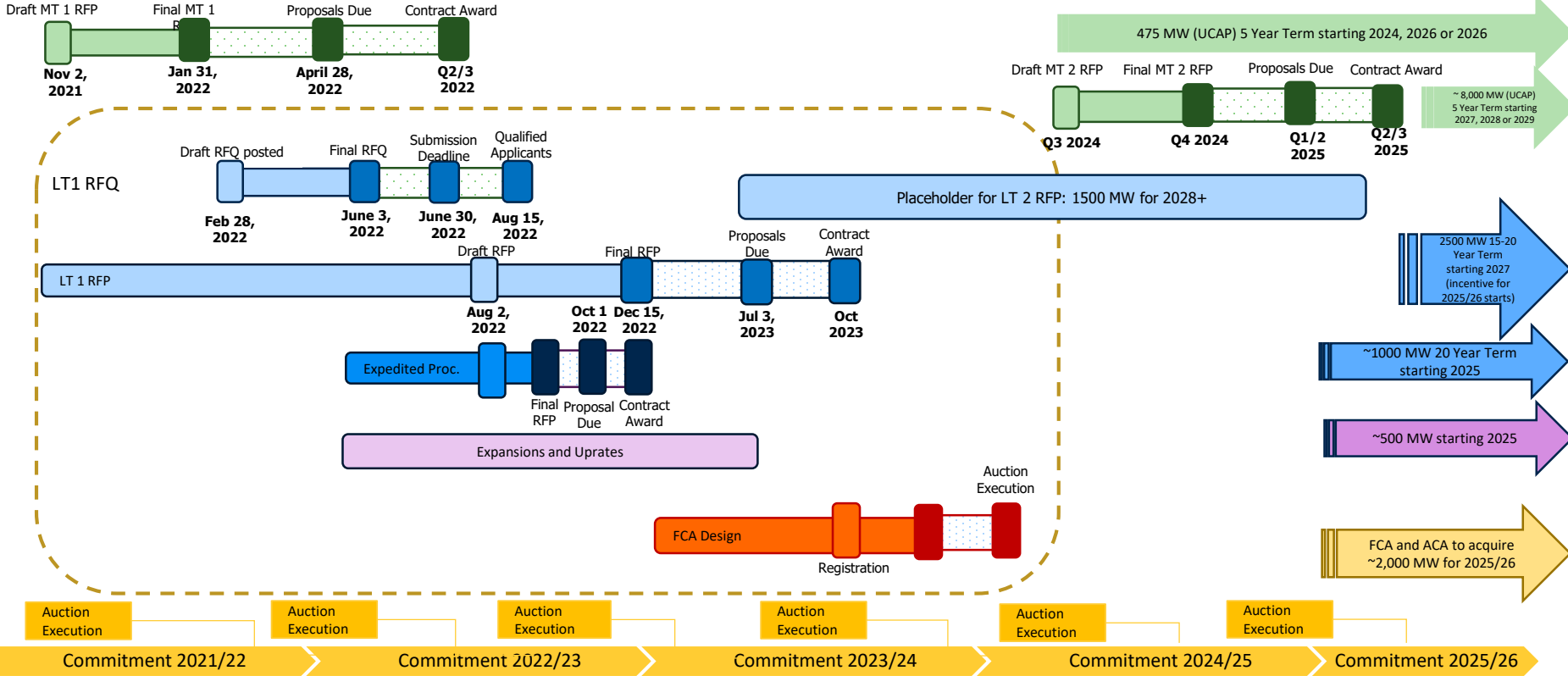
- Upgrade or Expansions or updates to **existing contracted resources** that can provide firm capacity as their primary product

## Forward Capacity Auction

- An additional auction in 2023/24 that would commit capacity for a **three-year period** from 2025 to 2027

# Procurements and Timelines

**Note:** Timelines are subject to change based on volume of applications/ proposals received. IESO is currently evaluating LT1 RFQ Submissions and reserves the right to modify timelines, as required.





# Summary – LT1 RFP and Expedited Process

	LT1 RFP	Expedited Process
<b>Target capacity</b>	2,500 MW of effective capacity with a minimum duration of 4 consecutive hours	~500 to ~1000 MW of effective capacity with a minimum duration of 4 consecutive hours
<b>Term Start</b>	No later than May 1, 2027	No later than May 1, 2025
<b>Term length</b>	IESO considering potential for 20-year term with potential additional term available for resources able to come online early	Minimum of 22-year base term
<b>Locational considerations</b>	Global need with strong preference for resources in the <b>West and East of FETT</b> zones. Deliverability assessment will be completed to ensure electricity can be delivered when and where it is needed.	Global need with strong preference for resources in the <b>West and East of FETT</b> zones. Deliverability assessment will be completed to ensure electricity can be delivered when and where it is needed.
<b>Eligible Resources</b>	Technology agnostic; new-build resources at greenfield sites or co-located at existing sites able to achieve commercial operation no later than 2027.	Technology agnostic; new-build resources at greenfield sites or co-located at existing sites; achieve commercial operation by 2025.
<b>Qualification</b>	Participation in LT1 RFQ required with a minimum project size of 1MW and maximum size of 600MW	Participation in LT1 RFQ required with a minimum project size of 1MW and maximum size of 600MW

# Summary of Additional Acquisition Mechanisms

	Upgrades and Expansion	Forward Capacity Auction
<b>Target capacity</b>	~500 to ~1000 MW of effective capacity with a minimum duration of 8 consecutive hours	To be determined – Targets for the FCA to be set together with those for the Capacity Auction
<b>Term Start</b>	No later than May 1, 2025	May 2025
<b>Term length</b>	New contract or extension of existing contracts. Length of contract/extension dependent on stakeholder feedback	Three summer and/or winter obligation periods
<b>Locational considerations</b>	Targeted at meeting global need. Deliverability assessment will be completed to ensure electricity can be delivered when and where it is needed.	Zonal
<b>Eligible Resources</b>	Expansions or uprates to existing resources that are under contract and operating in IESO-administered markets. Expansion or uprate must be the same technology as the existing resource and able to achieve commercial operation in 2025.	Existing and off-contract demand response, generation, storage and capacity import resources
<b>Qualification</b>	Existing counterparty in good standing with existing contract	Similar requirements to annual capacity auction

# Proposed Expedited Process Timeline

Note: Timelines are subject to change based on volume of applications/ proposals received. IESO is currently evaluating LT1 RFQ Submissions and reserves the right to modify timelines, as required.

**June 3,  
2022**

- Final LT1 RFQ Issued

**October – November**

- Final Expedited RFP/Contract issued
- Expedited process open period

**August 2,  
2022**

- Draft Expedited RFP/Contract issued

**December, 2022**

- Successful proponents announced and contracts offered

# Proposed LT1 RFP Timelines

Note: Timelines are subject to change based on volume of applications/ proposals received. IESO is currently evaluating LT1 RFQ Submissions and reserves the right to modify timelines, as required.

## August 2, 2022

- Draft LT1 RFP/Contract issued

## July 3, 2023

- LT1 RFP Proposals Due

## December 15, 2022

- Final LT1 RFP/Contract issued
- LT1 RFP open period starts

## October 2023

- Contract Execution

# LT1 RFQ Overview

- LT1 RFQ Qualification Submission Deadline was June 30, 2022
- IESO is currently evaluating of Qualification Submissions
- The IESO proposes to notify RFQ applicants of their status:
  - End of July 2022: Expedited Process
  - End of August 2022: LT1 RFP
- Qualified Applicants will be eligible to participate in any potential LT1 RFP and Expedited Process, based on their eligibility per the LT1 RFQ
- Only Qualified Applicants, or contracted facilities in the same-technology expansions stream, will be able to submit projects for deliverability testing

# Expedited Process and LT1 RFP Linkages

- The IESO is considering allowing for projects that are unsuccessful in the Expedited Process an opportunity to bid into the LT1 RFP. The IESO will need to ensure that the general process ensures fairness and transparency and will outline additional considerations to stakeholders at a later date
- Proposals in the Expedited Process will also be assessed in the LT1 RFP deliverability assessment
- If they were deemed to be “deliverable” or “deliverable but competing” as part of the Expedited Process, the expectation is that they will be assessed as “deliverable” or “deliverable but competing” for the LT1 RFP; allowing Proponents to bid into the LT1 RFP if unsuccessful in the evaluation for the Expedited Process



# Deliverability Test

# Deliverability Test

- The Deliverability Test was designed to ensure that electricity produced by successful resources in the LT1 RFP, Expedited Process and Expansions mechanism process can be delivered to where it is needed on the grid when it is needed
- The Deliverability Test will be carried out ahead of proposal submission for these three acquisition mechanisms
- The Deliverability Test is not a substitute for the connection assessments processes that are required by the IESO, Transmitters and Local Distribution Companies (LDCs), after contract award
- Those parties that have already started those connection assessment processes will not be viewed more favourably than those that have not, and all are reminded that after contract award, these processes are still required



# Deliverability Test Process

- The Deliverability Test for transmission connected projects will be carried out by the IESO and the test for distribution system connected projects will be carried out by the IESO with support from LDCs
- The results from the deliverability test will remain valid for each of the Expansions mechanism, Expedited Process and the LT1 RFP proposal review processes
- If necessary, an additional test may be carried out **during proposal review stage** for projects deemed to be “Deliverable but Competing”
  - Proposals may be re-tested in sequence based on their Evaluated Proposal Price

# Deliverability Test Results

The test will provide one of three answers:

- **Deliverable:** No deliverability concerns
- **Not Deliverable:** Deliverability concerns on distribution and/or transmission systems; **projects with a “not deliverable” result will not be eligible for the RFP stage**
- **Deliverable but Competing:** Multiple resources interested in the same deliverability path in distribution and/or transmission systems, where the total combined capacity is higher than the path’s capability.

Note: The deliverability test will only provide one of the three answers above and will not include information on what project size or upgrades are required to be deliverable.

## Deliverability Test Concept (1 of 2)

- A project connecting to a distribution system needs to be deliverable from the connection point up to and including the transformer station (TS) or transmission system connected distribution station (DS).
- A project connecting to the distribution system should not increase the short circuit levels beyond the acceptable levels in the distribution system.
  - Local Distribution Companies (LDCs) will assess these for the distribution system and the capacity of TSs and transmission connected DSs.
- Further to this, there needs to be capacity on the transmission circuit(s) that the TS or the DS connects to, and through the bulk transmission system paths to the electricity demand load centres
  - These will be tested by the IESO including the short circuit impact consideration on the transmission system

## Deliverability Test Concept (2 of 2)

- In the previous assessments of this nature were carried out at the bid evaluation stage. Tests were done one by one in sequence of ranking by price or other parameters.
- Deliverability Test was designed to provide firm information early to proponents in preparing their bids.
- Since the ranking information is not established before the bid review stage, the concept is to do one test with all projects under consideration included.
- We will provide one of the three answers for each project:
  - Deliverable, Not Deliverable or Deliverable but Competing

# Information Required for the Deliverability Test

- Resource type or types (if hybrid) and nameplate capacity for each project
  - For upgrades to existing facilities, the increase in seasonal registered maximum capability

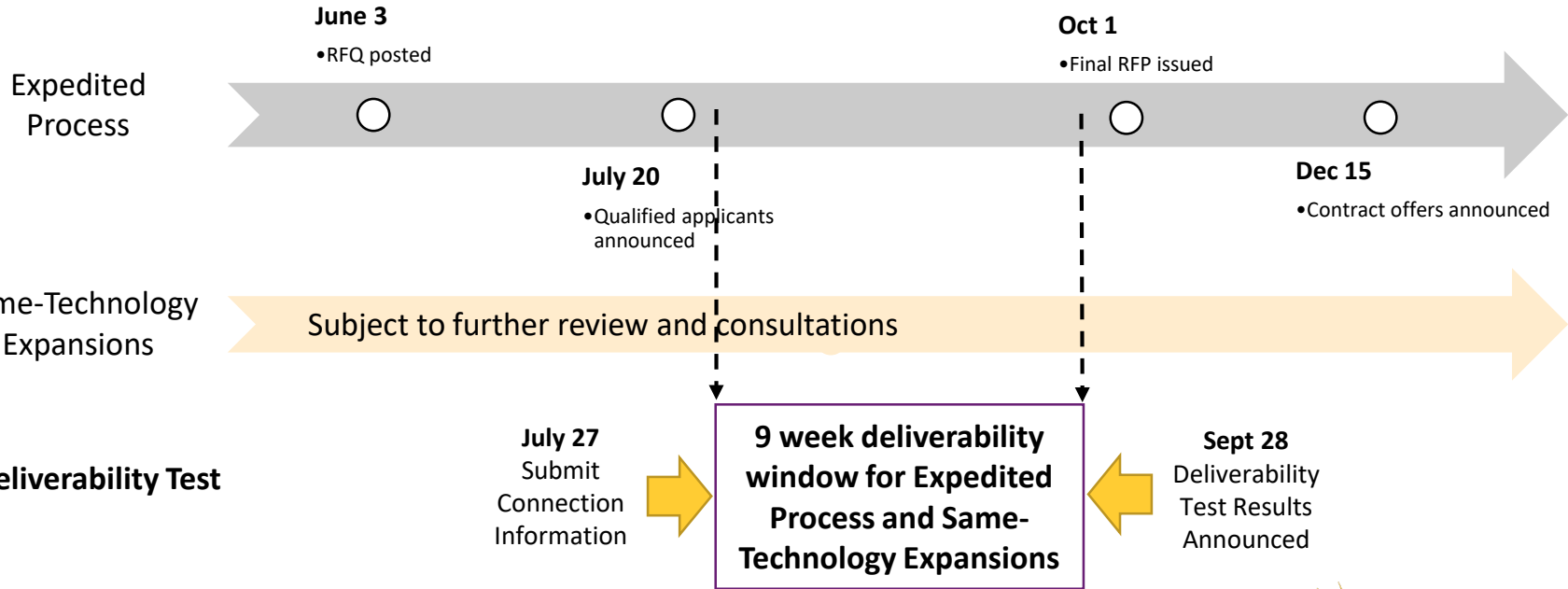
Transmission Connected (TX)	Distribution Connected (DX)
GPS data for the proposed point of connection to the IESO controlled grid	GPS data for the proposed point of connection to the distribution system and the name of distribution system feeder and the associated TS or DS
Transmission station name (for directly connecting to a transformer station (TS) or switching station (SS))	Name of upstream TS or transmission connected DS, if the connecting DS is not directly connected to the transmission system
The circuit and station information is to be obtained from the connecting transmitter.	TS and feeder information is to be obtained from the connecting LDC

# Options on Connection and Project Size Information

- Applicants can submit **up to 3 options** involving project sizes (nameplate capacity) and connection points for **each project** at a specific site
- They can be any 3 combination of project sizes and connection points.
- Applicants will be asked to indicate the priority sequence among the three combinations for the test
- The IESO will try to provide answers to all combinations, but, if time does not permit, we may stop once a “deliverable” result is obtained
- We will start the test with all 1<sup>st</sup> choices.

# Expedited Process / Expansions Deliverability Test Illustrative Timelines

Note: Timelines are subject to change based on volume of applications/ proposals received. IESO is currently evaluating RFQ Submissions and reserves the right to modify timelines, as required.



# Expedited Process and Same Technology Expansions Deliverability Test Steps

- Deliverability Test submission deadline will follow the announcement of Qualified Applicants. Only Qualified Applicants, or contracted facilities in the same-technology expansions stream, will be eligible to submit projects for testing.
- The IESO will compile the Deliverability Test requests and make them available to LDCs in August. The exact timing will depend on the volume of requests
- IESO will inform LDCs who do not have applications in their service territory
- Approx. 4 weeks have been scheduled for LDCs to carry out the required support.



# Required LDC Support

- The first task for LDCs will be to review Deliverability Test applications and validate information.
- The Qualified Applicant will be provided with an opportunity to correct information provided.
- We are aware of the situation where system configuration can change from the time the connection information was provided to proponents to the time they are reviewed. Applicants will be allowed to update data in this situation.
- The second task is to complete the Deliverability Test for the distribution system including the consideration of transformer capacity, for power flow and short circuit considerations.

# Communication Logistics

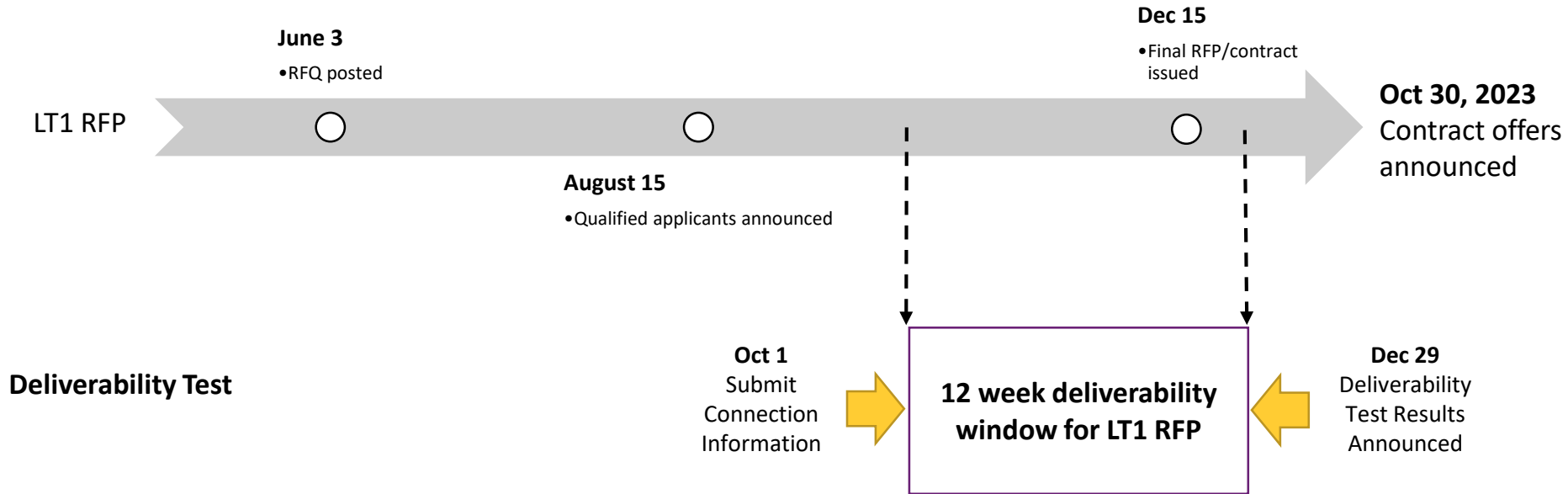
- The communications between the LDCs and the IESO will be conducted via email. We will need to establish contact persons or group email addresses in order to consolidate communications and ensure relevant parties are included.
- Throughout the Deliverability Test process, all communications with Qualified Applicants that pertain to the Deliverability Test should solely be conducted by the IESO.
- LDCs should not contact Qualified Applicants regarding their Deliverability Test. If contacted by a Qualified Applicant, please inform him/her to contact the IESO.

# New Connection Assessment Applications

- The IESO is not imposing any restriction for proponents participating in the Same Technology Expansions procurement mechanism or the Expedited Process. This is in recognition of the tight schedule the proponents are working on.
  - Applicants are to identify if they have any CIA associated with their project submitted for the Deliverability Test.
- The following are under consideration.
  - **LT1 RFP: restricted** until Deliverability Test for LT1 is completed
  - **LT2: restricted** until after LT2 contract announcements

# LT1 RFP Deliverability Test Illustrative Timeline

Note: Timelines are subject to change based on volume of applications/ proposals received. IESO is currently evaluating RFQ Submissions and reserves the right to modify timelines, as required.





# Next Steps

# Deliverability Test Guidance Document

- The IESO will publish a Deliverability Test Guidance Document to provide stakeholders with the methodology and assumptions that will be used in the deliverability test.
- This document will be available very soon along with the Deliverability Test request form.