
SEPTEMBER 18, 2024

Resource Adequacy Request for Information Engagement

Purpose of Today's Webinar

To provide an overview of the IESO's engagement initiative to launch a Resource Adequacy Request for Information (RA RFI)

Agenda:

- Background and Current Initiatives
- RA RFI Objective and Design
- Discussion and Next Steps



Background and Current Initiatives

Resource Adequacy Framework

- The IESO has identified a growing supply need at the end of this decade and beyond. The Resource Adequacy Framework offers a range of procurement mechanisms to address these emerging supply needs while continuing to help ensure cost effectiveness.

Capacity Auction	Medium-Term Procurements	Long Term Procurements	Programs	Bilateral Negotiations
<ul style="list-style-type: none">Balances fluctuations in capacity needs from one year to the next. Executed on an annual basis	<ul style="list-style-type: none">Provides resources with greater certainty through longer forward periods and flexible 5- year commitments	<ul style="list-style-type: none">Secures resources with very long forward periods or commitments, such as new-build facilities	<ul style="list-style-type: none">Meets electricity policy objectives in a more targeted manner, as directed	<ul style="list-style-type: none">Secures resources where a need exists that cannot be addressed in a practical and timely way through competitive processes

Capacity Auction

Resource Eligibility: **Existing** generation, demand response, energy storage, and capacity imports from Quebec and New York.

Procurement Target (November 2024 Auction): Summer 2025 – **1600 MW**, Winter 2025/26 – **1000 MW***

Contract Term: Annual, 6 or 12-month commitment

Commercial Terms: Capacity market participants earn availability payments, based on the auction clearing price, for making their capacity available to the IESO during a defined set of hours on business days during the summer and/or winter obligation periods.

Performance Requirements: IESO may schedule Capacity Auction resources to support the grid at any time during the availability window. Participants must complete a capacity test once per obligation period by demonstrating their resource's ability to deliver into the energy market for up to four hours. Up to two (2) times per obligation period, IESO may conduct a dispatch test to verify resources' ability to comply with dispatch instructions

MT2 RFP Overview

Resource Eligibility: **Existing** resources enabled as market participants with contracts expiring between 2026-2029.

Procurement Target: **80% of capacity** of the total submitted proposals for each stream.

Contract Term: Flexible 5-year term with bridging options similar to the MT I RFP.

Capacity Commercial Terms: Contract be based off of the MTC I / LT1 Contracts.

Energy Commercial Terms: Contract be based off of the LT2 contract (i.e., E-PPA).

Rated Criteria: No rated criteria Points awarded

Municipal Support: Will **not** be required at proposal submission.

LT2(e) RFP Overview

Resource Eligibility: **New or refurbished/expanded** energy producing resources enabled in the IESO- administered markets.

Procurement Target: The IESO is seeking to procure **5 TWh** (~2,000 MW installed capacity) to be in service by 2030.

Contract Term: 20 years.

Commercial Terms: Enhanced PPA (E-PPA).

Rated Criteria: Points available for Indigenous Community Participation, Local Indigenous Participation, Projects sited outside of Prime Agricultural Areas, and Project sited in a territorial district of Northern Ontario.

Municipal Support: Will be required at proposal submission.

LT2(c) RFP Overview

Resource Eligibility: **New** capacity resources.

Procurement Target: The IESO is seeking to procure ~**500-1,000 MW** to be in service by 2031.

Contract Term: 20 years.

Commercial Terms: Contract be based off of the MTC I / LT1 Contracts.

Rated Criteria: Points available for Indigenous Community Participation, Local Indigenous Participation, Projects sited outside of Prime Agricultural Areas, and Project sited in a territorial district of Northern Ontario.

Municipal Support: Will be required at proposal submission.

Long Lead Time Resource Procurement Overview

Resource Eligibility: **New** resources known to have long development lead time, enabled in the IESO-administered market, specifically hydroelectric generation and long-duration storage.

Procurement Target: **~500 -1,000 MW** to be in-service by 2035.

Proposed Contract Term: 40 years

Commercial Terms: Capacity style (i.e., LT1 Contract) for capacity, E-PPA for energy.

Non-Commercial Terms: To be developed with stakeholders – expect broad policy objectives (e.g. community engagement, Indigenous participation) to be consistent with LT2 Energy/Capacity RFPs, though particulars may differ.

Small Hydro Program (SHP)

Program Status: Launched in December 2023

Resource Eligibility: **Existing** hydroelectric facility with capacity of **10MW or less**

Contract Term: Up to 20 years; all contracts expire 20 years after program launch in 2043

Commercial Terms: Power Purchase Agreement (PPA)

Application Process: Open application period – can apply anytime

Treatment of Upgrades & Expansions: Upgrades & expansions enabled; no premiums provided (incremental energy receives base contract rate)

Northern Hydro Program*

Program Status: Under development

Resource Eligibility: **Existing** hydroelectric facility with capacity greater than **10MW**

Contract Term: Up to 20 years; all contracts to expire 20 years after program launch

Commercial Terms: Enhanced Power Purchase Agreement (E-PPA)

Application Process: Open application period – can apply anytime

Treatment of Upgrades & Expansions: Upgrades & expansions enabled, no premiums provided (incremental energy receives base contract rate)

*Program aspects still subject to change as program is under development

Current Planned Future Procurements

Medium-Term (MT 3/4/5...):

- Existing energy and capacity resources that are uncontracted or nearing the end of their contract term, with flexible 5-year contracts.

Long-Term (LT 3/4/5...):

- Energy-producing and capacity-based Market Participants, with up to 20-year contracts.

Future Medium-Term and Long-Term procurements to be launched with a cadenced approach starting in 2027.

Resource Adequacy Request for Information

- Today, the IESO is launching the Resource Adequacy Request for Information (RA RFI) to explore how both existing and new facilities can support Ontario's growing energy supply needs.
- The RA RFI will gather insights from resource owners and developers on the future of current facilities and the development of new projects, in alignment with the Resource Adequacy Framework.
- Stakeholder participation in the RA RFI is crucial for shaping procurement design and supporting regional and provincial energy planning to ensure a resilient and efficient electricity system.

Request for Information: Long Lead Time Resources

- As a separate initiative, the IESO has launched a targeted Request for Information (RFI) on Long Lead Time Resources, focusing on long duration energy storage (LDES) and new-build hydroelectric generation
- The RFI aims to explore how LDES and hydroelectric resources can enhance the reliability and efficiency of Ontario's electricity system
- The initiative seeks insights on LDES and hydroelectric technologies, developer experiences, and challenges anticipated in a potential IESO procurement for long lead time resources
- For more information or to access the RFI, please visit: [Request for Information: Long Lead Time Resources](#) webpage



Resource Adequacy Request for Information (RA RFI) - Objective and Design

Target Audience for RA RFI

- **Existing Resources with Expiring Contracts:** As many contracts are set to end in the next decade, understanding their future plans is crucial for maintaining resource adequacy and supporting effective re-procurement through future procurement plans.
- **New Projects:** Identifying new projects that could be developed in the province will provide valuable insights into how they may be best integrated into future Resource Adequacy Framework programs or procurements.

Objective of the RA RFI

The overarching objective of this RFI is to gather current market intelligence that will support program and procurement designs as well as regional and provincial planning.

More specifically, this RFI will help:

- Build a better understanding of the long-term business plans of existing facilities as well as those of new projects
- Understand the risks and challenges that assets owners and developers are concerned about, in order to continue operations, expand, and/or develop new projects
- Open a new, ongoing channel of communication with the developer community by releasing the RFI on a regular basis

RA RFI Design

- The RA RFI will be a concise exercise conducted using an online survey platform.
- The RA RFI aims to gather insights from stakeholders that are tailored to where their assets or projects may fit within the Resource Adequacy Framework.
- The RA RFI is divided into categories based on the type (new or existing) and size of the resources, with questions tailored to each category.

Note: The RA RFI is not intended to be part of or related to the Registration Process for the Medium-Term Request for Proposals (MT2 RFP)

Key Focus Areas of the RA RFI

- **Facility Plans:** Understanding plans for the future of existing facilities and new projects, including interest in providing additional services.
- **Technology and Innovation:** Assessing interest in incorporating new technologies or innovative solutions.
- **Development Challenges:** Understanding the key risks and barriers that proponents expect to face in developing their projects.
- **Stakeholder Feedback:** Engaging participants to provide feedback on procurement processes.

Key Points for Respondents

- **No Publication of Individual Responses:** Your individual responses will not be published and will be kept confidential by the IESO.
- **Aggregated Results:** The IESO may present aggregated and anonymized responses from the RA RFI at a later date.
- **Legal Disclosure:** Your response may be disclosed if required by law (e.g., under the Freedom of Information and Protection of Privacy Act).

What Information Do I Need to Complete the RFI?

For Existing Contract Holders:

- **IESO Contract Identification Number** or your **Facility Address** is required
 - Your Contract Identification Number is located on the cover page of your IESO contract
- If you do not have a copy of your IESO contract:
 - Enter your **Facility Address** in the appropriate section of the RFI

For New Project Developers:

- **Company Name** or **Respondent Name**

Examples of IESO Contract Identification Numbers

RESOP CONTRACT, VERSION 2.0



RENEWABLE ENERGY STANDARD OFFER PROGRAM CONTRACT

1. CONTRACT IDENTIFICATION #: RESOP-_____
2. CONTRACT DATE: _____
3. PAYOR: Ontario Power Authority
4. GENERATOR: _____
5. GENERATOR'S ADDRESS: _____
Contact Person: _____
Fax: _____
Phone: _____
E-Mail: _____



FEED-IN TARIFF CONTRACT (FIT CONTRACT)

Version 5.0.2, July 14, 2017

SUPPLIER INFORMATION & ADDRESS

1. SUPPLIER'S ADDRESS
Fax: _____
Phone: _____
E-mail: _____
2. COMPANY REPRESENTATIVE
3. SUPPLIER INFORMATION Not a Non-Resident of Canada
 Non-Resident of Canada

MATERIAL INFORMATION

4. SUPPLIER
5. CONTRACT IDENTIFICATION # F-_____

How to Complete the RFI Multiple Times

- You may need to complete the RFI multiple times if you:
 - Have multiple existing facilities
 - Have an existing facility and would like to build a new facility
- After completing the RFI, click "Done". The survey will automatically restart, or you can restart it anytime using the RA RFI link.

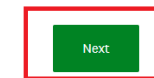
Thank you for completing the Resource Adequacy RFI survey. If you would like to complete this survey again for another facility you own or operate in Ontario, or for a new facility you are interested in developing in Ontario, please select 'Done,' and the survey will restart. If you do not wish to complete the survey again, please select 'Done' and close the survey.



Survey Landing Page

The Independent Electricity System Operator (IESO) invites existing energy contract holders and potential new developers in Ontario to take part in this Request for Information (RFI) survey. Your input is key to shaping future energy projects and procurement initiatives. By sharing your insights, you'll help us better understand the needs and challenges faced by developers in the energy sector. The survey will take about 10-15 minutes to complete.

Thank you for your participation. Your feedback is important.





Discussion and Next Steps

Next Steps

- Participants are invited to complete the RA RFI using the link provided on the [Request for Information - Resource Adequacy Framework webpage](#).
- Please complete RA RFI by November 1, 2024.
- IESO will publish a summary of feedback from the RA RFI by year-end on the [Request for Information - Resource Adequacy Framework webpage](#).
- For any questions related to the RA RFI, please contact resourceadequacy.rfi@ieso.ca

Thank You

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[@IESO Tweets](https://twitter.com/IESO)



[linkedin.com/company/IESO](https://www.linkedin.com/company/IESO)

Active and Under Development Procurements

Mechanism	Target	Resource Types	Commitment
Capacity Auction (Annually)	1,600 MW (2025, summer) 1,000 MW (2025/26, winter)	All Market Participant resources	6-month commitments running from May through October (summer) and November through April (winter)
MT2 RFP (2025)	Energy: TBC Capacity: TBC	Existing energy and capacity resources that are uncontracted or coming to the end of their contract term	5-year contracts starting May 2027, May 2028, or May 2029
LT2 Energy (2025)*	5 TWh (~2,000 MW)	Energy-producing Market Participants over 1 MW	20-year contracts starting in 2030
LT2 Capacity (2025)*	500-1,000 MW	Capacity-based Market Participants over 1 MW	20-year contracts starting in 2031
Long-Lead Time (2025)*	500-1,000 MW	Energy and capacity resources with long-lead times	40-year contracts starting 2034 - 2035
Small Hydro Program	~200 MW	Existing hydroelectric facilities <i>under</i> 10 MW	Contracts until 2043
Northern Hydro Program	~1,000 MW	Existing hydroelectric facilities <i>over</i> 10 MW	TBD

Currently Planned Future Procurements

Mechanism	Target	Resource Types	Commitment
MT 3/4/5...*	Energy: TBC Capacity: TBC	Existing energy and capacity resources that are uncontracted or coming to the end of their contract term	Flexible 5-year contracts
LT 3/4/5...*	Energy: TBC Capacity: TBC	Energy-producing and capacity-based Market Participants	TBC – 20-year contracts

*Future Medium-Term and Long-Term procurements to be launched with a cadenced approach starting in 2027