OCTOBER 21, 2021

Resource Adequacy Engagement

Medium Term RFP & Long Term RFP



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Agenda

- Stakeholder Feedback Key Themes
- Updates on Medium Term RFP
- High level Overview of Long Term RFP/RFQ
- Next Steps



Purpose

The purpose of this meeting is to address high level feedback received in response to the Medium Term RFP (MT RFP) engagement, provide an overview of the Long Term RFP (LT RFP) and outline next steps for stakeholder engagement on these initiatives.



Stakeholder Feedback – Key Themes

The following slides provide an overview of key themes from written feedback received in response to the August engagement session and verbal feedback heard during the September engagement session. The IESO plans to formally respond to written feedback from the September engagement in November.



Key Theme – Resource Eligibility

Stakeholder Feedback

Eligibility for the MT RFP should not be limited to existing resources

IESO Response

- The first MT RFP is intended to be transitional as the IESO begins to implement the resource adequacy framework
- The upcoming LT RFP and future MT RFPs will include expanded eligibility. The IESO will engage with stakeholders on eligibility for future procurement initiatives



Key Theme – Commitment Term

Stakeholder Feedback

• The proposed 3-year commitment term is insufficient

IESO Response

 The Resource Adequacy Framework outlines a commitment length of 3 to 5 years for the medium-term procurements. The proposed 3 years was chosen to align the second MT RFP commitment to start in 2029, when a large number of existing resources come off contract. Laying a foundation for strong competition is important to drive cost-effective resource adequacy.



Key Theme – Commitment Term

IESO Response (Continued)

- However, the IESO recognizes that stakeholders have expressed a need for greater certainty for this first medium-term RFP. As such, the IESO is proposing to add a 2-year optional extension to the 3-year commitment. For clarity, the contract counterparty would have the sole right to execute this extension
- The IESO extension to the proposed commitment term seeks to address stakeholder feedback while aligning with the start of the commitment period for the second MT RFP in 2029, maximizing competition when a significant number of resources come off contract (detail provided in subsequent slides)



Key Theme – Rated Criteria

Stakeholder Feedback

More information is required regarding the manner in which the various Rated
 Criteria will be valued as part of the overall bid

IESO Response

The IESO presented greater details on the rated criteria in September. The
draft procurement documents will provide even more detail on the criteria and
evaluation process. As with past procurements, prospective proponents have
the opportunity to provide feedback on the draft documents



Key Theme – UCAP Approach

Stakeholder Feedback

Capacity procurement should not be measured through a UCAP methodology

IESO Response

The IESO has embarked upon a change away from resource procurement to acquiring
products and services needed for meeting our operational and system needs. This
change is driven by the IESO's lessons learned about the lack of flexibility and
adaptability in our supply mix to changing needs. Furthermore, in order to procure
effectively in a technology agnostic manner, using a common methodology such as UCAP
is crucial to create a level playing field for the procurements



Key Theme – UCAP Approach

IESO Response (Continued)

 Furthermore, Unforced Capacity (UCAP) is considered a best practice which accounts for the probability that a resource will be available to serve Load, taking into account forced outages/historic availability



Key Theme – Contract Bridging

Stakeholder Feedback

 The proposed bridging approach does not provide enough certainty to expiring resources, especially those that will need to clear multiple Capacity Auctions

IESO Response

• The commitment term for the MT RFP will commence on May 1, 2026. The IESO appreciates stakeholder feedback on this topic and we will be engaging with stakeholders on bridging considerations.



Key Theme – Performance Obligations

Stakeholder Feedback

• What are the 5x16 (16 hours for 5 business days per week) performance obligation requirements?

IESO Response

 The 5x16 requirement does not refer to a scheduling or operational requirement but the window during which the contracted resource has to make their capacity available in the day-ahead market



Key Theme – Performance Obligations

IESO Response (Continued)

 During this availability window, dispatchable resources will be required to submit energy market offers. The actual scheduling and operation of the resource will be driven by the energy market. Non-dispatchable resources will be subject to the Minimum Capacity Factor (MCF) requirements in lieu of participating in the energy market



Key Theme – Resource Adequacy Framework

Stakeholder Feedback

Overall concerns regarding the sufficiency of the proposed Resource Adequacy
 (RA) framework for supporting necessary project investment and development

IESO Response

 The IESO appreciates the feedback put forward by stakeholders and we will continue to engage on the implementation of the RA framework and Annual Acquisition Report (AAR) later this year



Key Themes - Timelines and Milestones

Stakeholder Feedback

 Some stakeholders highlighted concerns regarding the timelines proposed for the MT RFP as not achievable

IESO Response

- The proposed MT RFP timelines are consistent with what has been presented in the past through the RA framework and the AAR
- In setting the timelines, the IESO considered (1) the fact that the capacity needs start to emerge mid-decade and (2) previous stakeholder feedback for near-term desire for certainty as resources are coming up to the end of their contracts
- The IESO will continue to engage with stakeholders on the draft MT RFP materials



Updates on Medium Term RFP



Proposed MT RFP Schedule

| Milestone | Date |
|--|---------------------|
| Release of Draft Medium-Term RFP and Contract | October 29, 2021 |
| Engagement on Draft Documents/ Formal Question and Comment Period(s) | Nov./Dec. 2021 |
| Release of Final Medium-Term RFP and Contract | January 31, 2022 |
| Question and Comment Period – Final Documents (public) | February 1-14, 2022 |
| Deadline for Submission of Proponent Registration (including Capacity Qualification) | February 21, 2022 |
| Deadline for the IESO to respond to Registration and Qualified Capacity Confirmation | March 7, 2022 |
| Deadline to Confirm Target Capacity Based on Registration Results | March 10, 2022 |
| Proposal Submission Deadline | May 19, 2022 |



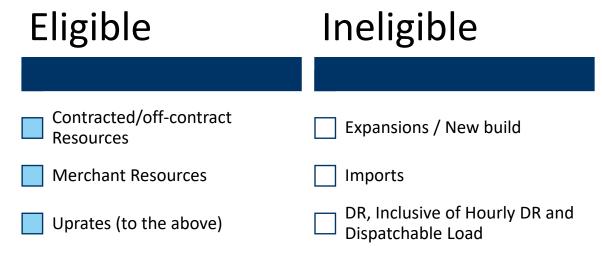
MT RFP Design Overview

- The MT RFP will procure Qualified Capacity from existing resources on a UCAP basis
- Pricing evaluation will be "pay-as-bid"
- Proposal evaluation will include mandatory criteria and rated criteria
- Rated criteria will be factored into the evaluation process, but will not impact ultimate contract pricing



MT RFP Resource Eligibility

The MT RFP will look to procure up to 750 MW UCAP of existing Ontario resources to meet the province's reliability needs





MT RFP Contract Overview

- The MT RFP will present a capacity style contract that will pay resources their submitted bid in a \$/MW-month basis over a 3 +2 year term
 - Contract will cover all capacity from the facility, splitting capacity will be restricted
- Resources will retain any other revenues they can earn, such as energy, ancillary services revenues and/or the monetization of environmental attributes
- The proposed contract will be aligned with post-Market Renewal Program (MRP)
 market and will rely on those mechanisms, including the Day-Ahead-Market to
 drive efficient outcomes



MT RFP Commitment Term

- The IESO proposes an optional 2-year extension to the 3-year commitment term for the MT RFP, i.e., a 3+2 year* term; the commitment period would start on May 1, 2026 and, expire on April 30, 2029 or April 30, 2031, if the optional extension is activated
- Due to the volume of resources coming off contract in 2029, the commitment period for the second MT RFP will commence on May 1, 2029
- Contract holders from the first MT RFP, who participate and are successful in the second MT RFP, will have a seamless transition from the first to the second MT contract and thereby forego the need for the extension
- Those who are unsuccessful or choose not participate in the second MT RFP will have the sole right to choose to extend their commitment by 2 years



^{*} Additional 2 years are an option

MT RFP Registration and Target Capacity

- The IESO will open a registration period for prospective proponents to express interest in participating in the MT RFP in early 2022
- Prospective proponents will submit a nominal fee in order to become
 Registered Proponents and the IESO will provide them with their Qualified
 Capacity (in UCAP) so that they can effectively structure their proposals in
 advance of proposal submission
- The Registration stage also provides the IESO with an early indication of the level of competition it can expect ahead of finalization of the RFP
- Based on the volume of registration, the IESO may adjust the target capacity accordingly in order to ensure competition



High Level Overview of Long Term RFP



Long Term RFP Overview

- The 2020 APO also showed that over the longer-term, Ontario will need additional unforced capacity, likely greater than 1,000 MW, that could be satisfied using a wide range of both conventional and emerging resources
- The Annual Acquisition Report (AAR) confirmed this need and identified that the development of new facilities will be required to meet needs in this decade and into the next
- The long-term RFP will provide a significant opportunity for new and incremental supply, allowing for longer commitment periods to provide certainty for larger capital investments

Long Term RFP Design

- The proposed LT RFP will target new and incremental capacity from resources that can enter service in between 2026-2028
- The proposed LT RFP will rely on the product/service based procurement approach built through the MT RFP, while acquiring at least 1,000 MW of qualified capacity on a UCAP basis to address Ontario's additional needs
- As per the RA framework, the proposed LT RFP will provide commitments between 7 and 10 years to provide investors with a higher level of certainty to make investments in new and incremental resources

Long Term RFP Eligibility

- The LT RFP will outline the technical requirements that resources have to meet to further support a move towards a technology agnostic approach. The IESO expects the following resources would be well-suited to participate:
 - ☐ New-build facilities e.g. renewables, storage, etc.
 - ☐ Expanded, uprated and upgraded existing facilities that meet certain thresholds
 - ☐ Co-located/Hybrid facilities e.g. renewables plus storage
- The IESO will work with stakeholders in order to identify pathways for those resources successful in the MT RFP that wish to make additional investments in upgrades or install new energy storage resources, to participate in the LT RFP



Long Term RFQ & RFP

- The LT RFP will employ a two stage procurement process that will include a Request for Qualifications (RFQ) stage, followed by a Request for Proposals (RFP) stage
- The RFQ stage will provide a greater degree of assurance that there are interested parties with the technical and financial resources and the capability to undertake project development
 - The RFQ is expected to evaluate proponents based on their past experience and financial wherewithal
- The RFP approach and evaluation process is expected to build upon the MT RFP, with a continued focus on acquiring products and services from resources that provide high system value

Long Term RFP Engagement

- The IESO will commence an engagement on the LT RFP to discuss key parameters such as eligibility and product definition
- Engagement with stakeholders will help inform the development and drafting of the RFQ and RFP documents
- Engagement on the LT RFQ/RFP is expected to continue through the Resource Adequacy engagement
- Additional clarity and detail on the LT RFP engagement will be provided in an engagement plan at an upcoming webinar



Next Steps



MT RFP Next Steps

- Starting in November, the IESO will transition the MT RFP engagement to a procurement specific engagement, separate from the Resource Adequacy engagement
- The MT RFP engagement process will be monitored by a fairness advisor
- Details on the procurement and the MT RFP engagement will be published on a procurement specific webpage
- Webpage details, including how to register for MT RFP specific updates and engagement information will be shared with stakeholders once available



MT RFP Next Steps Continued

- Prior to transitioning to the MT RFP procurement engagement, the IESO will respond to feedback received from the September engagement session, as well as any feedback received after this session
- After today's webinar, stakeholders are encouraged to participate in the upcoming procurement Q&A engagement sessions if they have further feedback regarding the MT RFP
- The IESO will be posting the draft MT RFP and contract for stakeholder review and comment on October 29, 2021



LT RFP Next Steps

- Engagement on the LT RFP will continue within this Resource
 Adequacy engagement, similar to the path taken on the MT RFP
- When the LT RFP is further defined, with draft RFP documents available, a similar approach to establish a dedicated space for LT RFP proponents will be launched
- Specific Q&A sessions to support RFP proponents will be scheduled once the RFP parameters have been defined



Thank You

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