



DECEMBER 15, 2021

Resource Adequacy Engagement

Medium-Term RFP Bridging and Cadence Considerations
Overview of the Long-Term RFP

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Agenda

- Bridging for the MT RFP and Cadence Proposal
- LT RFQ/RFP Overview
 - LT RFQ/RFP Milestones
 - Interdependencies
 - Draft LT RFQ/RFP Engagement
- Next Steps

Purpose

- To provide the IESO's proposed approach for bridging existing contracts with end dates that do not align with the IESO's acquisition commitment periods to the start of the MT RFP commitment period, as well a proposal of how best to ensure that future MT RFPs and procurements can be cadenced.
- To provide an overview of key LT RFQ/RFP milestones, design considerations and topics to be covered in upcoming engagement sessions.



Bridging for the MT RFP and Cadence Proposal

Bridging and Cadence

- Stakeholders have asked questions and provided feedback on the term length and the bridging considerations the IESO initially presented this past summer
- Furthermore, some stakeholders have asked the IESO to provide greater clarity on the cadence approach that underpins the Resource Adequacy framework
- The IESO had previously responded to stakeholder feedback on the term length and the need for greater certainty by adding a 2-year extension to the 3-year Medium-term Contract term
- The IESO is now bringing forward a revised proposal that addresses the feedback around both bridging and cadence considerations

Bridging Proposal

- The IESO recognizes that facilities currently under contract have different contract end dates.
- In order to provide greater certainty while maintaining proponent optionality, the IESO proposes two modifications:
 1. Revise the 3+2 year term to a 5-year term with proponents having the choice to commence the contract term on May 1, 2024, May 1, 2025 or May 1, 2026
 - Proponents would have to choose their start date as part of their proposal submission into the MT RFP

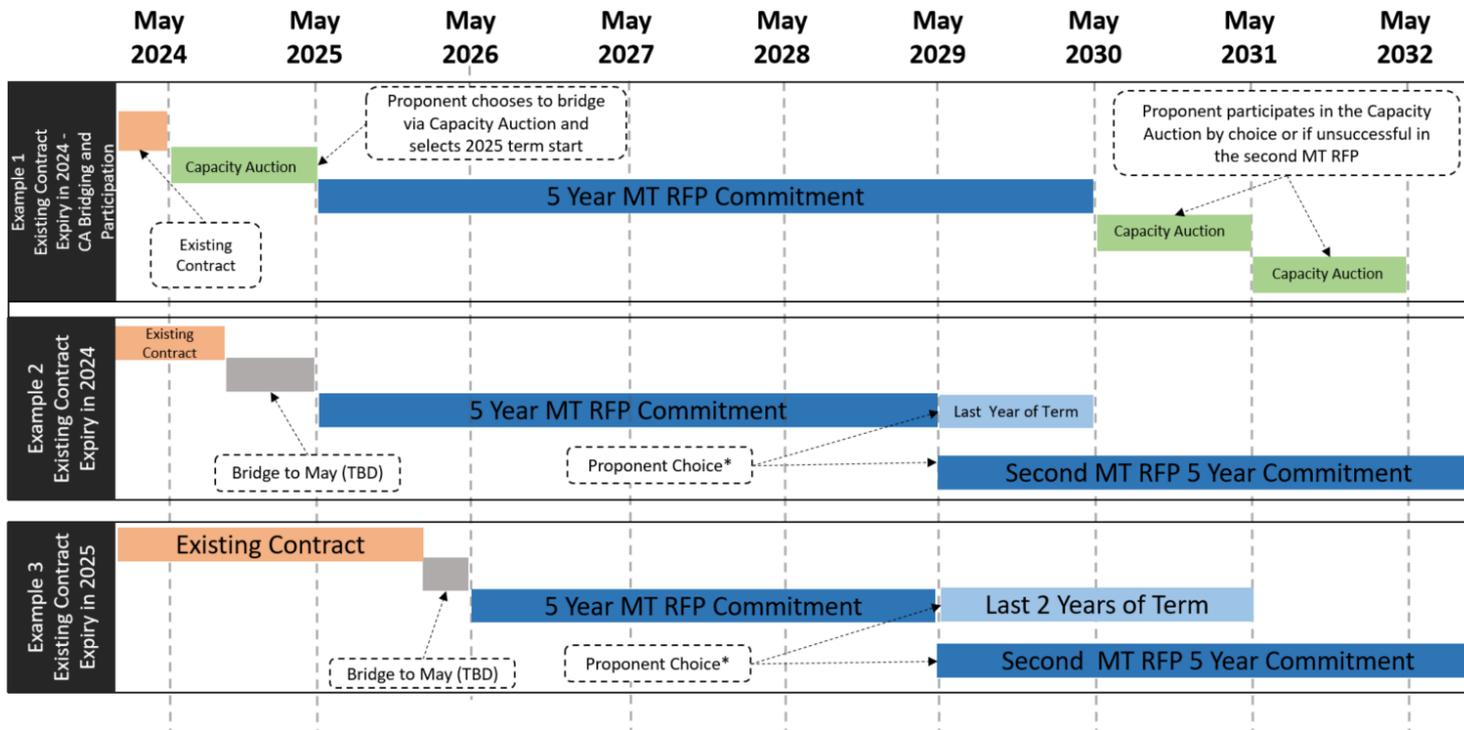
Bridging Proposal (2)

2. The IESO is working with the Ministry of Energy on an additional option to extend existing contracts to better align with the start of a MT RFP commitment period or a Capacity Auction obligation period. This options means that the existing contracts of suppliers would be extended to the nearest April 30th date. The terms and conditions of the proposed extensions are still under discussion.
 - For example, a facility with a contract expiring in November 2022, would have its contract extended to April 30, 2023, allowing for it to participate seamlessly in the 2022 Capacity Auction that commits capacity from May 1, 2023 – April 30, 2024
 - A facility with a contract expiring January 2024, would have its contract extended to April 30, 2024. The facility then has the choice to pick their start date for the MT RFP Contract that aligns contract terms or alternatively use the Capacity Auction to bridge

Bridging Proposal (3)

- These two modifications will help with the bridging considerations as it removes the financing issues associated with having to exit current contracts early in order to participate in new IESO acquisitions, while providing the IESO with certainty that the procured capacity would be available for the 'core years' of 2026 to 2029

Bridging Examples for the First MT RFP



* If successful in 2nd MT RFP

Cadence – DRAFT Proposal

- The IESO is considering this approach for subsequent medium-term procurements to assist with providing greater certainty around an enduring cadenced process
- The IESO would focus each subsequent procurements around a 5-year contract with a common 3-year core period:
 - MT RFP 1 Core Years: 2026 to 2029 – with option to start May 1 in 2024, 2025 or 2026
 - MT RFP 2 Core Years: 2029 to 2032 – with option to start May 1 in 2027, 2028 or 2029
 - MT RFP 3 Core Years: 2032 to 2035 – with option to start May 1 in 2030, 2031 or 2032

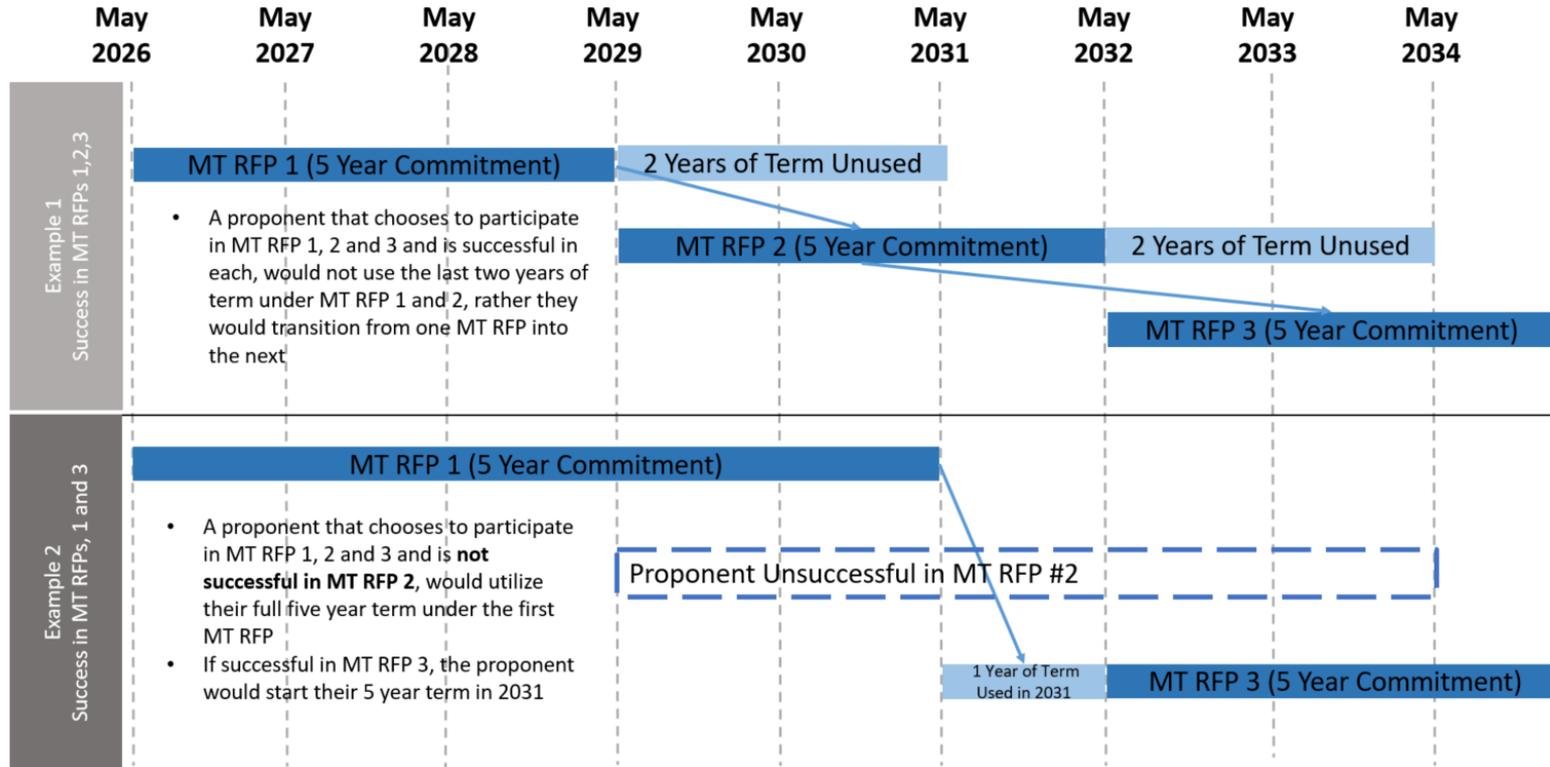
Cadence – DRAFT Proposal (2)

- Merchant resources and resources with legacy contracts would be eligible to select a flexible start date
- Contracted MT RFP 1 resources would only be eligible for the May 2029 MT RFP 2 contract start date
- Contracted MT RFP 1 resources without a MT RFP 2 contract would be eligible for a flexible MT RFP 3 start date, as long as they complete the full 5-years MT RFP 1 term

Forward Periods for MT RFPs

- The IESO is proposing to run the medium-term procurements at a regular interval:
 - MT RFP 1: 2021 – 2022
 - MT RFP 2: 2024 – 2025
 - MT RFP 3: 2027 – 2028
- This proposed schedule would provide a forward period of a minimum of 2 years for those picking the earliest term commencement date and 4 years for those with the latest commencement date

Cadence Examples



Medium and Long-Term Procurements

- As part of the Resource Adequacy framework, the IESO remains committed to resources that have a medium-term contract being eligible to participate in a long-term procurement, assuming they meet the eligibility requirements
- The IESO is exploring the possibility of allowing for early term starts for this first LT RFP; the applicability of those early start dates for resources with MT RFP contracts will be further explored

Feedback on Draft Cadence Proposal

- The IESO is considering the applicability of this approach to subsequent medium-term procurements to assist with providing greater certainty around the cadenced process
- The IESO is still undertaking internal due diligence in particular around the impact of accounting for the MWs under each of the processes
- In parallel, the IESO would like to get early stakeholder feedback on the proposal, especially on:
 - Timing of running the subsequent MT RFPs (i.e. the forward period)
 - The eligibility for using the flexible start date
 - Interaction between medium and long-term procurements, as well as the capacity auction



Long-Term RFQ/RFP Overview

LT RFQ/RFP Milestones

Procurement Phase	Date	Milestone
RFQ	31-Jan-22	Draft LT RFQ Posted for Stakeholder Feedback
RFQ	Apr-22	Final LT RFQ Issued
RFP	Jan-22	LT RFP design engagement
RFP	Aug-22	Draft LT RFP Posted for Stakeholder Feedback
RFQ	Sep-22	LT RFQ Qualified Applicants Announced
RFP	Jan-23	Final LT RFP Issued
RFP	Q3 2023	LT RFP Contracts Offered

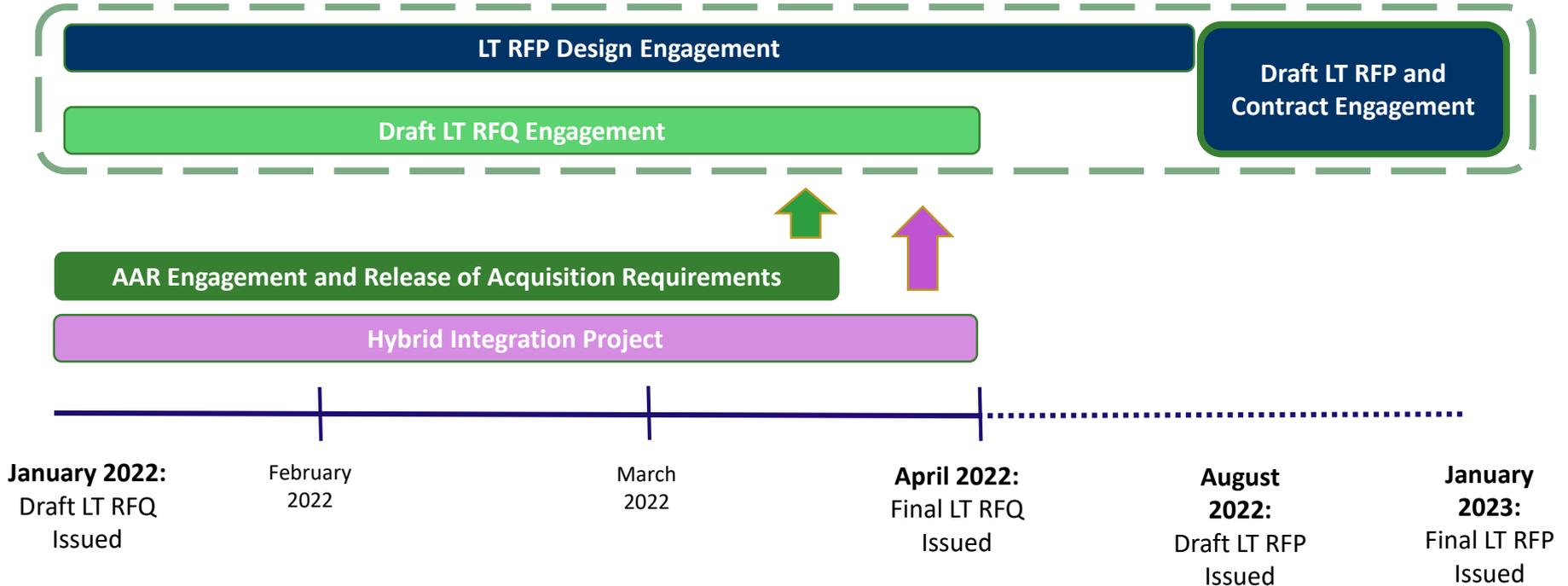
Interdependencies January to April 2022

- As the IESO engages on the long-term procurement design, a number of ongoing initiatives have linkages and will feed information into the design
- The LT RFP is downstream from these initiatives and its design will be influenced and driven by their outcomes and findings
- **The APO**, released in December 2021 will identify capacity and energy needs and speak to the Province's ability to meet them
- **The AAR** will translate the needs identified in the APO into acquisition requirements; to be met via the LT RFQ/RFP and other mechanisms, as well as outlining any operability and locational requirements to be met

Interdependencies January to April 2022 (2)

- **The Hybrid Integration Project** will detail the participation models for hybrid resources that might be interested to participate in the LT RFQ/RFP (see Appendix), which will help guide contract design (e.g., energy market participation and performance obligations), as well as provide guidance on project development considerations
 - The two models, the Co-Located Hybrid and the Integrated Hybrid, and their applicability to the LT RFQ/RFP will be presented to stakeholders at the Enabling Resources engagement session
 - The Hybrid Integration Project will provide stakeholders with an overview of hybrid resource energy market participation for both models, before finalizing the design document in Q2 2022
 - As the IESO and stakeholders finalize the design models, that information will be reflected in the LT RFQ/RFP engagement and design, to the extent possible

Timelines and Interdependencies



Draft LT RFQ and Engagement

- The IESO will release the draft LT RFQ for stakeholder feedback at the end of January. Stakeholders will have an opportunity to provide feedback on the process and the draft document
- In parallel with the interdependent initiatives identified in previous slides, ongoing engagement on procurement design considerations will continue, in order to help inform the design of the draft RFP and Contract
- The IESO expects to engage on a number of these considerations from January to March 2022, before the final RFQ is issued, and continue these discussions until the issuance of the draft RFP in August 2022

Engagement Topics – January to March 2022

AAR Development

- The IESO will post a written response to stakeholder feedback on the AAR received following the November 23 Resource Adequacy engagement
- Stakeholder sessions will provide an overview of 2021 Annual Planning Outlook (APO) and considerations for translating system needs identified in the 2021 APO into the 2022 AAR planned actions
- Considering stakeholder feedback, the IESO will share its plans on how to improve the AAR, including potential topics for the 2022 AAR

Engagement Topics – January to March 2022

Eligibility

- The IESO is committed to running a procurement that is focused on meeting system reliability needs
- As such, specific eligibility requirements cannot be detailed until the needs are articulated via the AAR
- However, there are some eligibility considerations, such as the participation of existing facilities in the LT RFP, that can be considered early in 2022
- Given the IESO's intent to allow for existing facilities wishing to make investments in major upgrades or to install new energy storage resources, discussions with stakeholders will be crucial to understanding the development timelines and investments required

Engagement Topics – January to March 2022

Term length and commercial operation dates

- While the Resource Adequacy Framework established 7–10-year term lengths for the LT RFP and the IESO favours the system flexibility that shorter term lengths provide, stakeholder feedback on the topic has been varied
 - While some stakeholders support shorter term lengths as a means of ensuring newer/innovative technologies are able to participate in procurements; others have raised concerns over the lack of investment certainty that they provide
- The IESO will engage with stakeholders on term length, specifically as it pertains to the LT RFP and the urgency of addressing emerging needs
- Given the timing of those emerging needs, the IESO will further explore the idea of early commercial operation dates or term starts for those proponents able to develop and deploy their projects early

Engagement Topics – January to March 2022

Permitting and siting requirements

- The IESO will be seeking stakeholder feedback on specific permitting and siting requirements for their proposed projects and/or technology types
- While permitting and siting requirements will generally be left to individual proponents, this feedback will be crucial to the IESO will assess project development risks through requirements for Municipalities and Indigenous communities under the RFP
- Furthermore, understanding current project development timelines will feed into discussions around term lengths and options for early commercial operation

Engagement Topics – January to March 2022

Locational considerations, connection and deliverability

- While the MT RFP provided certain initial signals to stakeholders regarding locational values for meeting regional and system needs, the AAR will further refine and update these considerations
- The IESO will engage with stakeholders on through the AAR and the pre-procurement engagements on these locational considerations and how they may be incorporated into the procurement design
- Furthermore, the IESO will present high level principles and an approach to the connection and deliverability requirements in the LT RFP, as well as initial discussions around the process for evaluating those requirements

Engagement Topics – January to March 2022

Additional procurement design

- As the information from the APO, the Enabling Resources Program/Hybrid Integration Project and the AAR flow downstream to the LT RFP, the IESO will engage with stakeholders on how these aspects will impact the RFP and contract design
- In addition, the IESO will seek to build on the Medium-Term RFP engagement and continue to discuss the interaction between the reliability needs and the contract design, with a focus on energy market participation and performance obligations for resources

Engagement Topics – January to March 2022

Contract design

- As the IESO exits a period of surplus, the focus on reliability has heightened and as such it will be important to ensure that procurements deliver on those reliability needs
- The IESO remains committed to a product/service based acquisition model and contract design for the LT RFP, however, we recognize that technical, commercial/financing and policy elements will need to be taken into account when designing the procurement
- The IESO will seek to engage with stakeholders to better understand how commercial considerations such as lending requirements, investment thresholds and macroeconomic factors should impact contract design

Next Steps and Feedback Requested

- Prior to the January 25-27, 2022 engagement days, the IESO will be publishing a draft engagement plan for stakeholder feedback and are interested in your feedback on the elements of that engagement noted in this presentation by **January 7, 2022**
- On January 31, 2022 the IESO will post the draft RFQ and stakeholders will be asked to comment on the document itself so that it can be refined ahead of the final posting in April 2022
- In January 2022, the IESO will begin engagement on the pre-procurement design considerations outlined in this deck



Appendix

Hybrid Resource Models – Procurement Considerations

- As development begins towards the Long-Term RFP, the IESO has begun to assess the potential applicability of the foundational hybrid resource models to the procurement. The foundational models are anticipated to apply to the LT RFP in two distinct scenarios:

Co-Located Hybrid

- Should existing resources with active contracts during the LT RFP commitment period be eligible to participate, the IESO believes the Co-Located Hybrid model to be preferred from a procurement and contracting perspective.
- Would allow contracting with a new storage resource through the LT RFP, while maintaining the existing resource's active contract.

Integrated Hybrid

- For existing off-contract resources and new-build resources eligible to participate in the LT RFP, the IESO believes the Integrated Hybrid model to be preferred from a contracting perspective.
- Would allow a single contract for the entire hybrid resource.

Hybrid Integration Project Timelines

- The IESO plans to engage with stakeholders on a monthly basis until mid-2022 to complete the design for the two hybrid resource participation models

Month	Key Activity
Dec 2021	Introduction and overview of Design Phase
Jan 2022	Present “day-in-the-life” participation models
Feb 2022	Present draft design models for stakeholder discussion; discuss feedback
March 2022	Address stakeholder feedback, as required; finalize design models
Q2 2022	Publish Design Document