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Long-Term 2 RFP Stakeholder Engagement

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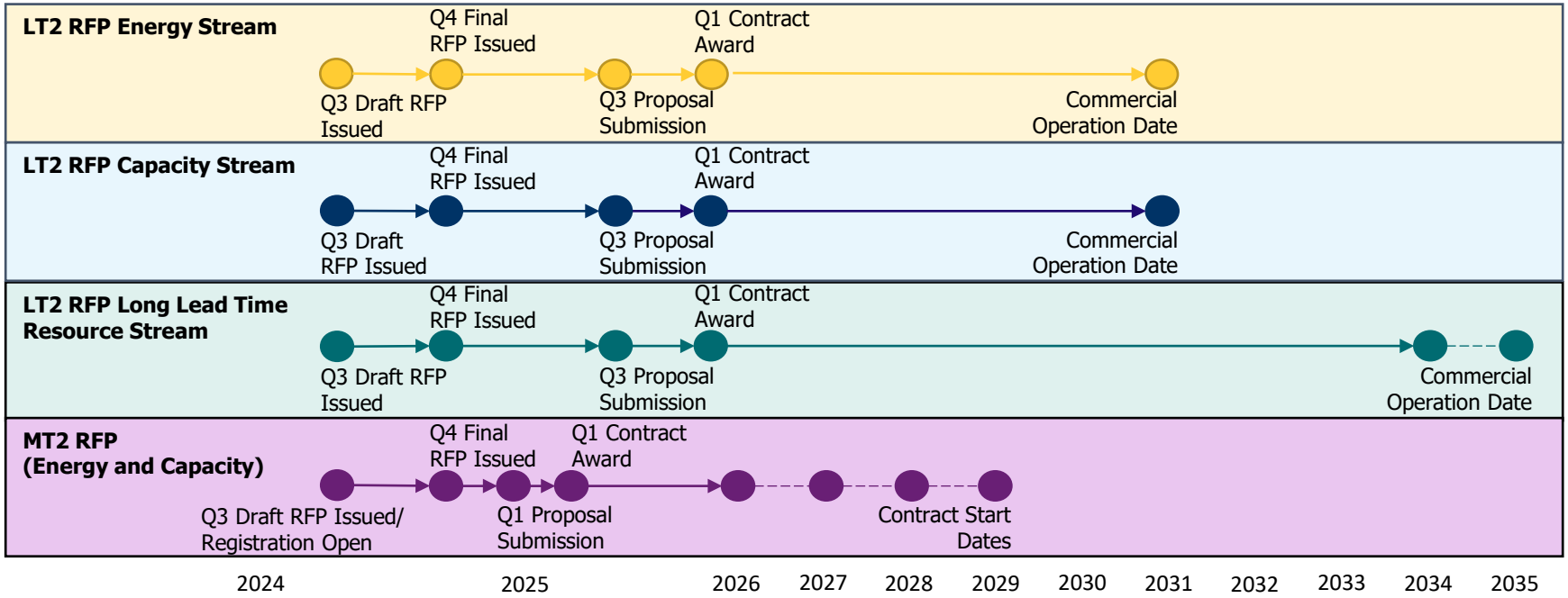
Agenda

1. Medium Term 2 (MT2) RFP
2. Long Term 2 (LT2) RFP Capacity Stream
3. Long Term 2 RFP Proposal Evaluation
4. Long Term 2 RFP Proposal Security
5. Next Steps

LT2 RFP and MT2 RFP Illustrative Timelines



Recap: Procurements Under Development

Mechanism	Target	Resource Types	Anticipated Commitment
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 2026, May 2027, May 2028 or May 2029
LT2 Energy (2025)	5 TWh (~2,000 MW)	Energy-producing Market Participants over 1 MW, including repowered/refurbished facilities	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 in 2034-2035

Recap: Future Procurements

Mechanism	Target	Resource Types	Anticipated 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
LT3 Energy (2027)	1,500 MW (TBC)	Energy-producing Market Participants	TBC - 20 year contracts starting in 2032
LT3 Capacity (2027)	TBC	Capacity-based Market Participants	TBC - 20 year contracts starting in 2032
LT4 Energy (2029)	1,500 MW (TBC)	Energy-producing Market Participants	TBC - 20 year contracts starting in 2034
LT4 Capacity (2029)	TBC	Capacity-based Market Participants	TBC - 20 year contracts starting in 2034

Overview of LT2 RFP Design Considerations

Closed Design Items

- E-PPA Conceptual Design
- Resource Eligibility: DERs, Hybridized Facilities, Repowered Facilities
- Municipal Support Confirmations
- Agricultural Land Use Policy

Open Issues – IESO Proposals

- LT2 RFP Deliverability Assessment
- LT2 Contractual Obligations
- Indigenous Community Participation
- Community Engagement
- Rated Criteria
- LT2 RFP: Capacity Stream
- LT2 RFP Proposal Evaluation
- MT2 RFP: Design and Coordination with LT2 RFP

Outstanding Items

- Long Lead-Time Resources Procurement

Housekeeping: LT2 RFP Connection Guidance

- Updated Preliminary Connection Guidance Document for LT2 RFP Energy Stream (Issue 2.0) to be posted ASAP.
- Procedure to request access to the transmission system map to be posted shortly after the updated Guidance Document is published.
- Provide draft evaluation stage deliverability test methodology by end-July for stakeholder feedback.
- Conduct pre-submission consultations, coordinated through engagements (engagement@ieso.ca).

Medium Term 2 RFP

MT2 RFP

- In accordance with the January 28, 2022 Directive: The IESO shall procure electricity products and services when these products and services are deemed to be required for ensuring the reliability of the Ontario's electricity system.
- The focus of the MT2 RFP is meeting Ontario's energy needs by competitively reacquiring existing resources coming off of contract.
- The MT2 RFP (and future MT RFPs) will include both **capacity** and **energy** streams to enable the competitive reacquisition of all eligible resource types.
- Cadenced process will provide IESO flexibility to adjust to changes in system needs and adapt processes to lessons learned.

MT2 RFP Stakeholder Feedback

- Support to advance the MT2 RFP timelines to run in coordinated fashion with the LT2 RFP.
- Support to run an expedited medium-term RFP with a simple evaluation.
- Provide facilities with expiring contracts in 2026, 2027, 2028, and 2029 certainty so that proponents have the necessary assurance to justify investments needed to extend asset lifespan.

Overview of MT2 RFP Design Considerations

Closed Design Items

- Rated Criteria

Open Issues – IESO Proposals

- MT2 RFP: Capacity Stream
- MT2 RFP: Energy Stream
- MT2 Contractual Obligations
- MT2 RFP Proposal Evaluation
- MT2 Capacity Qualification

Outstanding Items

- Municipal Support Confirmations
- Community Engagement

MT2 RFP Capacity and Energy Timeline

Dec 2023 Engagement kick-off

March 2024 Report back to government

August 2024 Draft RFP & Contract

September 2024 Registration open

November 2024 Final RFP & Contract

January 2025 Proposal Submission

March 2025 Evaluation and Contract Awards

May 2026,2027, 2028, 2029 Contract Start Dates

On-going engagement

MT2 RFP Resource Eligibility

The following criteria must be satisfied by all proponents to be eligible to participate in the MT2 RFP:

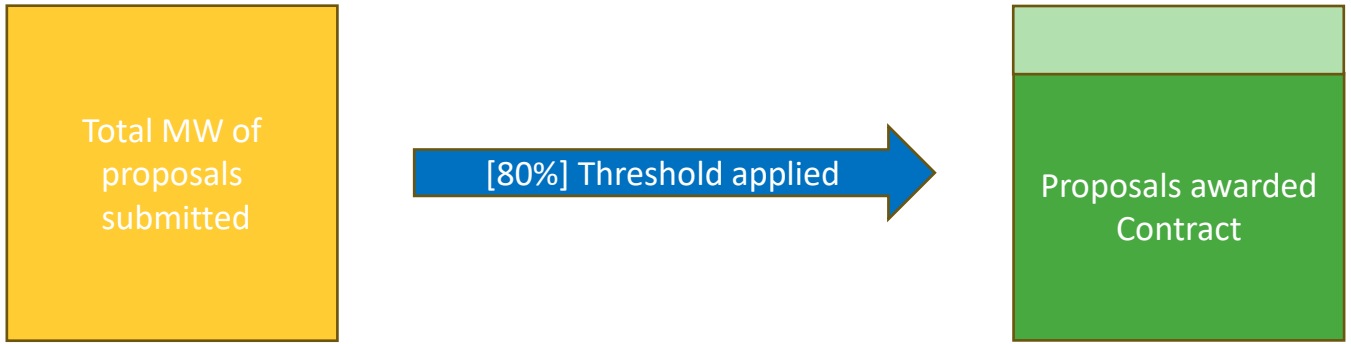
- A facility that is directly connected to a Transmission or Distribution system and has all necessary permits and authorizations required to continue operating for the length of the MT2 Contract.
- A facility that is currently, or has previously been, the subject of a contract with the IESO, the OPA or the OEFC and whose contract has expired or been terminated (or will expire or be terminated) on or before April 30, 2029.

MT2 RFP Procurement Target

- There will be separate targets for energy and capacity streams.
- The IESO is proposing to set the targets as a percentage of submitted proposals to drive competition in a technology agnostic manner without anchoring proponents' bids to a single reference price.
- Given the nature of the need, the IESO is also proposing to introduce measures to use its discretion to take any eligible resources over and above the target, provided that their proposal prices are within a percentage threshold (yet to be determined) of the marginal proposal, so as to leverage all existing assets that submit competitive proposal prices.

MT2 RFP Procurement Target (2)

- The IESO will set an initial target based on the results of the registration process. The final target will be set as a percentage of total proposals submitted, the IESO is proposing [80%].



- The IESO will be including flexible provisions to award contracts beyond the set procurement target; provided the prices are within a set percentage threshold of the marginal successful bid.

MT2 Capacity Stream Contract

The IESO proposes the contract be based on the **LT1 contract:**

- A "**capacity style**" contract that pays suppliers on a "**pay-as-bid**" basis to make their contract capacity available on a day-ahead basis for all **qualifying hours** (07:00 to 23:00 EST on business bays, or such other continuous 16-hour period over a maximum of five (5) days in any calendar week, as prescribed by the buyer).
- All other revenue opportunities, including from the real-time energy market and from the monetization of environmental attributes, will remain with the supplier.

MT2 Energy Stream Contract

The IESO proposes the contract be based on the **LT2 contract** (i.e., E-PPA):

- The facility participates in the IESO administered market and earns revenues associated with their production.
- A contract payment (known as a Grid Reliability Payment) is paid by the IESO to the supplier (if/when necessary) to meet the facility's revenue requirements. The Grid Reliability Payment is based on the difference between deemed energy revenues and the supplier's monthly revenue requirement.
- E-PPA performance obligations will be based on a single year instead of a 3-year rolling average; with no exception granted in the first year.

MT2 Contract Term

- The contract term for both energy and capacity will be the same.
- The contract term will be 5 years beginning either May 1st 2026, 2027, 2028, 2029, whichever is closest to the facility's current contract end date.
- To account for any gaps between facilities' current contract end dates and MT2 term start date, and in alignment with the January 28, 2022 directive, IESO will be offering bridging extensions up to a maximum of 6-months.
- Proponents would have the option to exit their existing contract early to meet an earlier MT2 start date.

MT2 Capacity Qualification

- Contract Capacity for the capacity stream will be defined as submitted by the proponent at proposal submission.
- Contract Capacity for the energy stream will be defined as the Nameplate Capacity of the Facility, expressed in MW.
- In both cases, the IESO is considering a qualification process:
  - For the capacity stream, the IESO is considering a UCAP qualification process similar to that used for the MT1 RFP
  - For the energy stream, rather than qualifying capacity, the IESO is considering qualifying production factors based on each facility's historic performance

MT2 RFP Registration

- In order to better assess potential participation in the MT2 RFP, the IESO will open a registration period for prospective Proponents to express interest in participating in the MT2 RFP following the posting of the draft MT2 RFP and Contract.
- Expected posting of the draft MT2 RFP and Contract will be in August of 2024.
- Proposed registration fee will be $500, consistent with the MT1 RFP.
- Based on the amount of capacity identified through the MT2 RFP registration, the IESO may adjust the Target Capacity accordingly to ensure competition.

MT2 RFP Proposal Submission Fee

- Minimum Proposal Submission Fee of $3,000, with a variable fee ($/MW) of $100/MW for existing MWs, up to a Maximum of $10,000 (including Registration Fee), consistent with MT1 RFP.

MT2 RFP Proposal Security

Consistent with the MT1 RFP, the IESO is proposing the following amounts for Proposal security:

- Proposal Security in the amount of $10,000/MW of the maximum Contract Capacity, subject to a maximum $2,000,000.
- The Proposal Security shall be in the form of an Irrevocable Standby Letter of Credit.

MT2 RFP Evaluation

- Proposals will first be evaluated to ensure the proposal is complete and contains all required information per Proposal submission requirements in the RFP.
- The IESO has designed mandatory criteria that ensure proponents have ownership/control of the resource, while also ensuring relevant registration requirements/agreements are in place.
- The IESO is proposing **no rated criteria** points be awarded for the MT2 RFP.
- **Proposals will be ranked based on their Proposal Price only.**

Additional Considerations

- Suppliers will retain all revenue opportunities associated with the Environmental Attributes in relation to their facility.
- The contract will contain provisions for successful proponents to exit their MT2 contract early if the proponent is successful in the Long Term 3 RFP.

Long Term 2 RFP Capacity Stream

LT2 RFP Capacity Stream

- Building on the recent LT1 RFP, the IESO is seeking to acquire additional capacity through the capacity stream of the LT2 RFP which is intended to help address system reliability needs.
- The LT2 RFP Capacity Stream will incentivize technological diversity by valuing long-duration resources that are able to provide continuous injections over an extended period.
- The IESO is planning to implement a cadenced and predictable approach to long-term procurements that will provide better planning opportunities for developers and expects to also execute a capacity stream in subsequent LT RFPs (e.g. LT3, LT4).

LT2 RFP Capacity Stream Recap

- The IESO is proceeding with a LT2 RFP Capacity Stream and is currently developing a LT2 Capacity Stream RFP and Contract.
- Open to **new and eligible expansion** capacity resources.
  - Eligible expansion resources will be the same as those defined under the LT1 RFP (e.g. separately metered).
- The IESO is seeking to procure ~**500-1,000 MW** to be in service by 2031.
- Contract Term will be 20 years.

Procurement Overview

- Unlike the E-LT1 RFP and LT1 RFP, the IESO is proposing to evaluate and contract all resources within the LT2 Capacity Stream equally under the LT2 Capacity Stream procurement target. For clarity, **the IESO is not considering a bifurcation of the LT2 RFP Capacity Stream based on resource type**.
- The IESO is not considering a preliminary deliverability process for the LT2 RFP Capacity Stream and will be providing connection guidance on deliverable and non-deliverable areas of the transmission system.

LT2 RFP and Contract Design Considerations

- The LT2 RFP Capacity Stream **RFP** and **Contract** will largely mirror those of the LT1 RFP. The IESO is considering the following changes for which it encourages stakeholder feedback:
  - The award of rated criteria points for long-duration assets with the number of points awarded to be based on the duration that a facility can provide continuous injection into the grid;
  - A requirement for proponents to obtain a municipal support confirmation prior to the proposal submission deadline;
  - The removal of materials cost indexing and early operation payment incentives.

Process and Next Steps

- The IESO is currently in the development phase of the LT2 RFP Energy Stream and expects to continue engagement on the LT2 RFP Capacity Stream through the summer with the associated draft RFP and Contract to be issued as early as possible.
- Community engagement with Indigenous Communities and Municipalities for the LT2 RFP Capacity Stream will be harmonized with the on-going community engagements for the LT2 RFP Energy Stream.

Long Term 2 RFP Proposal Evaluation

LT2 RFP Energy Stream Proposal Inputs

Suppliers will offer three bid parameters to the IESO as part of their proposal price submission:

- A **proposal price** expressed in $/MWh;
- A **contract capacity** expressed in MW;
- **Monthly energy production factors** which are the expected production as a percentage of the contract capacity for each month.
  - NOTE: These values do **NOT** need to include any assumptions regarding energy curtailments resulting from market conditions. However, proponents should consider fuel availability (wind availability, solar irradiance) at their location and outage assumptions to inform their actual expected production when establishing these values.

Together these three bid parameters establish the **revenue requirement** for the facility and will drive the deeming mechanism inherent to the Enhanced PPA design.

LT2 RFP Annual Imputed Production Factor

- Monthly imputed production factors will average to the annual imputed production factor that will be used to calculate monthly revenue requirements.
- Example where annual (8760 hours) production factor is calculated as 0.3.

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.3

- **Submitted values as part of input form**
- **Values calculated as part of input form**

LT2 RFP Energy Stream Proposal Price Formation

The Proposal Price submitted by proponents must be inherently derived by the submitted **Monthly Production Factors**, **Contract Capacity** and the project's **Annual Revenue Requirement**; proponents will be required to submit an excel based Proposal Price input form as part of proposal submission to demonstrate as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Simple Average of:	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.3

= **Annual Production Factor (%):** **30%**

Annual Revenue Requirement **$15,000,000**

+

[**Contract Capacity (MW)** **50**

× **Annual Production Factor (%)** **30%**

× Hours per year 8760]

= **Proposal Price ($/MWh)** **114.16 $/MWh**

LT2 RFP Energy Stream Illustrated Proposal Formation and Ranking

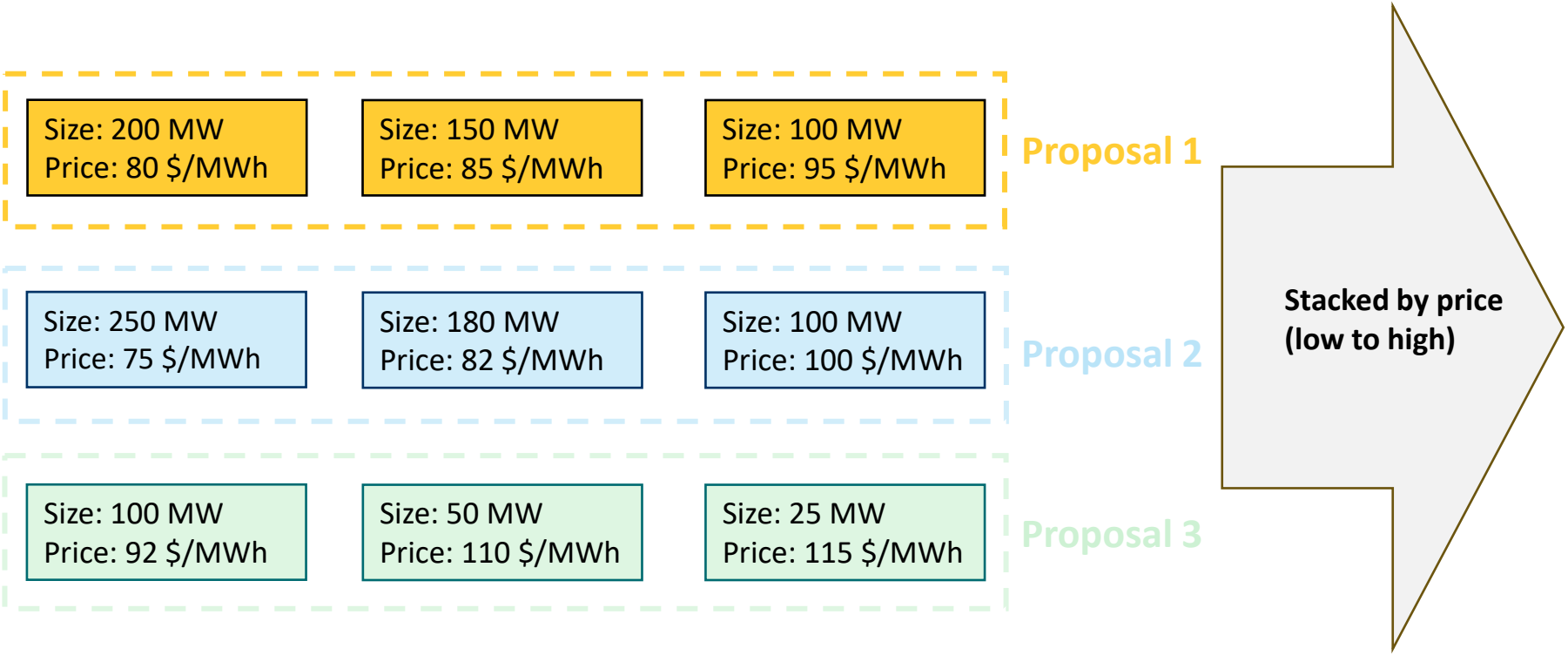
Proposal Formation and Ranking				
Proposal Rank	**Contract Capacity (MW)**	**Monthly Revenue Requirement**	**Imputed Production Factor**	**Proposal Price ($/MWh)**
1	50	$ 15,000,000.00	40%	$ 85.62
2	50	$ 15,000,000.0	30%	$ 114.16
3	50	$ 15,000,000.00	20%	$ 171.23
4	50	$ 15,000,000.0	10%	$ 342.47

- Assuming all else is equal, 4 proponents proposing 50 MW facilities, with the same **annual revenue requirement**, will have varying proposal prices that correspond to their varying imputed production factors. In this case the IESO would value the facility with the highest production factor and correspondingly the lowest proposal price.
- Proponents should reflect expected production in their **proposal price** allowing the IESO to rank the proposals accordingly.

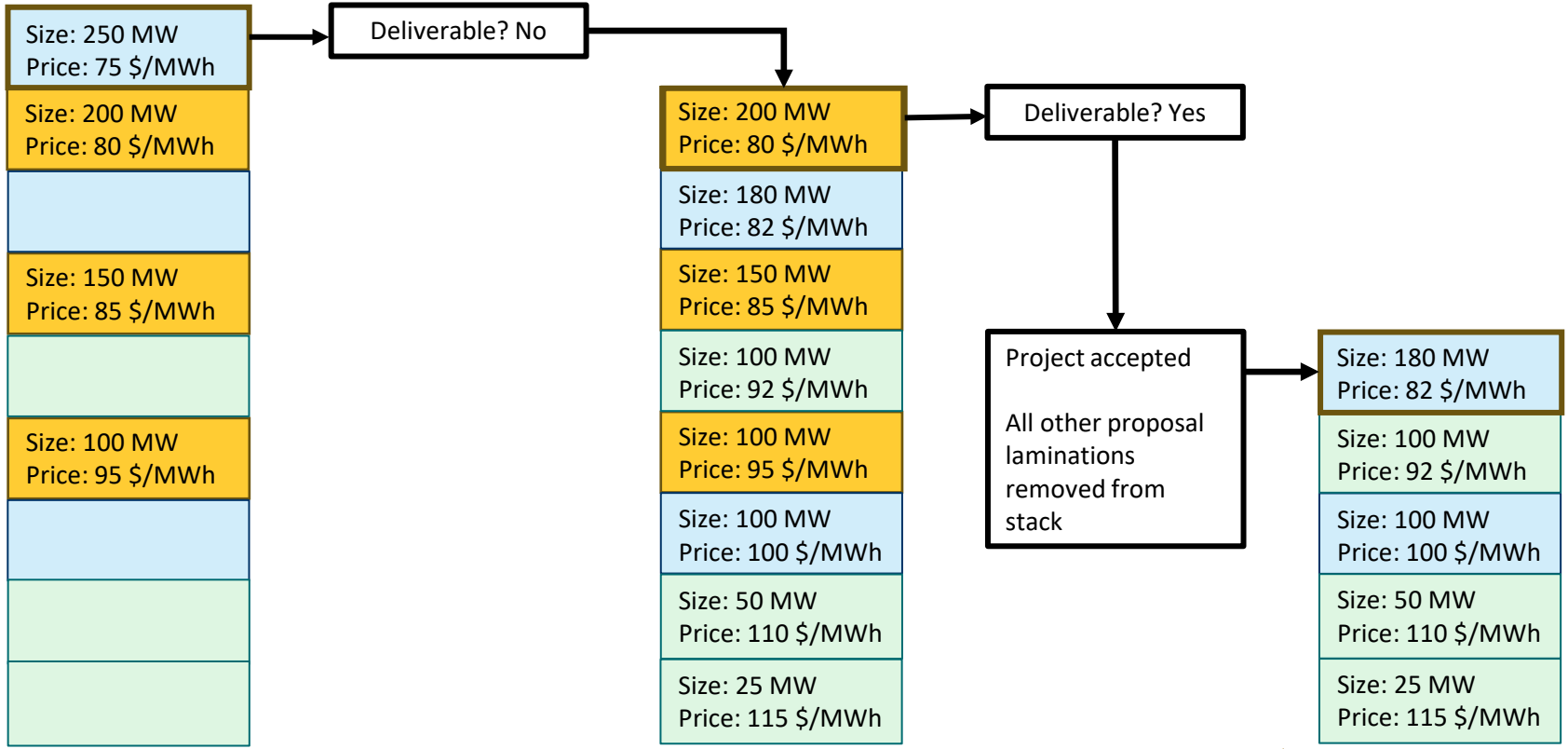
LT2 RFP Proposal Evaluation Overview

- Proposal Evaluation will occur separately for the Energy and Capacity Stream.
- The LT2 RFP Energy Stream will be given priority in terms of deliverability.
- Proponents will be able to submit 3 price/size laminations for each proposal.
- All 3 laminations of each proposal will be ranked according to Evaluated Proposal Price; projects will be evaluated for deliverability and crown land overlap, starting with the lowest priced project.

LT2 RFP Energy Stream Proposal Evaluation (1)



LT2 RFP Energy Stream Proposal Evaluation (2)



LT2 RFP Capacity Stream Evaluation

- The IESO is still determining how proposals will be evaluated under the LT2 RFP Capacity Stream and expects the evaluation process to be the same as that of the LT1 RFP, whereby Proposals are evaluated in rank based on an Evaluated Proposal Price and subsequently evaluated for deliverability.

Long Term 2 RFP Proposal Security Requirements

LT2 RFP Proposal Security Overview

- Following the LT1 RFP, many stakeholders have requested that proposal security requirements under the LT2 RFP be clear and easily calculated using a single formulaic approach.
- Stakeholders have also indicated that proposal security requirements should not create a barrier to participation in the LT2 RFP and consider reducing the amount of security needed so that more capital can be available for project development.

Proposed LT2 RFP Proposal Security Requirement

- The IESO is proposing a proposal security requirement of [$35,000/MW] of the Maximum Contract Capacity for the LT2 RFP.
- Proponents will be required to submit a minimum proposal security of [$500,000] and a maximum security of [$15,000,000] in the form of a Letter of Credit.
- Proponents awarded an LT2 Contract will have their Proposal Security automatically converted to Completion and Performance Security which will be held until the LT2 RFP Commercial Operation Date (COD). After the COD, and until the end of the LT2 Contract Term, security will be held in the amount of [$20,000/MW] of the Maximum Contract Capacity.

Next Steps

Upcoming Engagements

The IESO is planning a series of engagements over the next few months. In addition, expect **targeted engagements** for both the MT2 RFP and Long Lead Time Resource Procurement.

TODAY	July 24	TBD
• MT2 RFP • LT2 RFP Capacity Stream • LT2 RFP Proposal Evaluation • LT2 RFP Proposal Security • LT2 RFP Preliminary Connection and Guidance Update	• Community Engagement • Indigenous Participation • Rated Criteria • Draft LT2 Contract (Energy)	• TBD

Next Steps

- The IESO invites written feedback by **July 19**. All written feedback should be submitted to engagement@ieso.ca utilizing the provided IESO Feedback Form.
- LT2 RFP Energy Stream Preliminary Connection Guidance Issue 2.0 to be posted ASAP; transmission system maps to follow shortly after.
- Draft LT2 Energy Contract to be posted in the coming weeks; Draft LT2 Energy RFP to follow shortly after.
- Draft MT2 RFP and Contracts to be posted in August.
- Draft LT2 Capacity RFP and Contract to be posted ASAP.

Thank You

ieso.ca

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca

@IESO_Tweets

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