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Northern Hydro Program

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Today's Discussion

- Background
- Design Concepts
- Discussion and Next Steps



Background

Minister's Letter to the IESO

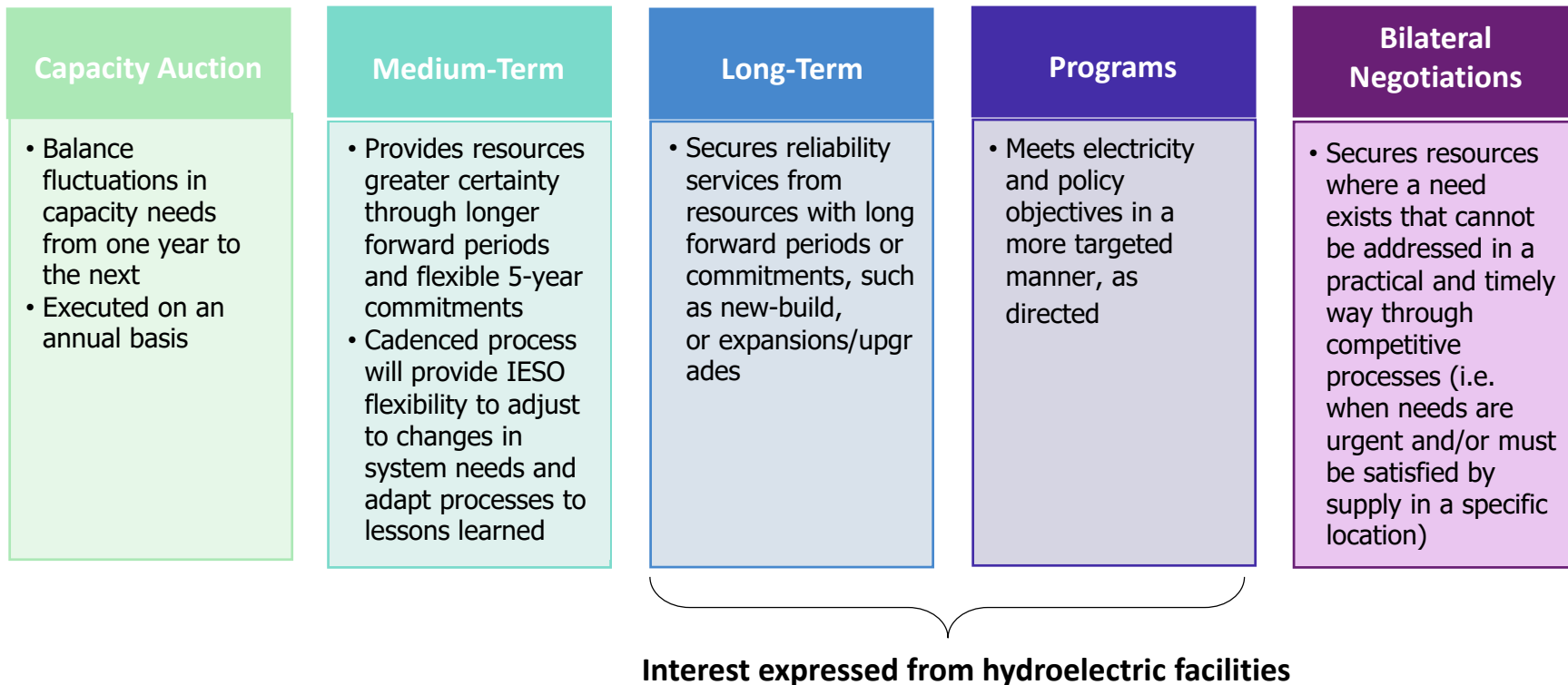
Following the successful launch of the Small Hydro Program in December 2023, the Minister of Energy has asked the IESO to design a Northern Hydro Program (NHP) for existing facilities that have:

- Installed capacities above 10MW
- Contracts with the IESO or the Ontario Electricity Financial Corporation (OEFC) expiring on or before April 30, 2043

By the end of 2024, the IESO shall provide a report to the Ministry of Energy that contains:

- A draft design for a Northern Hydro Program
- A timeline to potential launch, including an analysis of implications of launch

Hydroelectric Facilities & the Resource Adequacy Framework



Progress to Date

- In June, the IESO engaged directly with owners of NHP eligible facilities during individual meetings to get their perspective on a number of key elements of program design
- These discussions provided the IESO an opportunity to gain insights from the owners of eligible facilities
- After the initial discussions, feedback was submitted to the IESO to help inform the design development



Northern Hydro Program: Design Goals, Eligibility & High-Level Design Elements

NHP Design Goals

In the development of the NHP, the IESO will consider, as per the Minister's letter:

- Electricity system benefits provided by facilities
- Social value provided by facilities
- Capital investments needed for maintenance and operation
- Delivery of ratepayer value

Additionally, the IESO aims to:

- Incentivize resources to be responsive to electricity system needs through market signals

Eligibility

To be eligible for the NHP, a facility must have:

- A nameplate capacity greater than 10 MW
- A direct connection to a distribution or transmission system
- In operation before May 8, 2024
- An existing contract with the IESO or OEFC that will expire before April 30, 2043

Initial Design Concepts

- Contract Payment Model
- Contract Term
- Contract Transition
- Upgrades & Expansions

Contract Payment Model: Options

There are three main approaches for the NHP payment model:

- Traditional Power Purchase Agreement (PPA) (as utilized for the Small Hydro Program (SHP))
- Capacity Contract (as initially developed for the SHP)
- Enhanced Power Purchase Agreement (E-PPA)

Given that the majority of resources eligible for the Northern Hydro Program are market participant facilities, the IESO's preferred payment model for the NHP is the E-PPA. This payment model has been discussed extensively through the [LT2 stakeholder engagement process](#), which began in late-2023.

Contract Payment Model: E-PPA

Compared to the traditional PPA, the E-PPA has numerous benefits for the Supplier and the IESO. This payment model:

- Provides revenue certainty which is less reliant on water conditions year over year and is protected from the impacts of transmission congestion.
 - Payments are based on a monthly revenue requirement – not solely tied to the amount of production in a given time period.
- Encourages suppliers to generate electricity at their location when it is most valuable.
 - All market revenues earned under the E-PPA are retained by the Supplier. This rewards operational flexibility without penalizing less flexible resources, such as run-of-river facilities who still retain revenue certainty.

Contract Payment Model: Establishing a Base Year

The IESO is considering the following approach:

- Establishing a base price in the year the program is launched (the base year).
A portion of the contract price which will be escalated each year to incorporate inflation.

Rationale:

This is consistent with the approach developed for the Small Hydro Program. It is also aligned with the expressed preferences of NHP stakeholders

- Provides price certainty and a level of escalation protection to suppliers through the duration of the program.

Contract Term

The IESO is considering the following approach to contract term:

- Contracts extend to 20 years from the launch of the program

Rationale:

- Approach developed for the Small Hydro Program, based on stakeholder feedback and consistent with expressed preferences of most NHP stakeholders
- Contract durations that will support appropriate capital planning and investment by suppliers

Contract Transition

The IESO is considering how to transition existing contracts into the NHP contract form using an approach that will incorporate:

- administrative simplicity
- limiting IESO exposure to contractual risk
- providing sufficient contract certainty for suppliers

Upgrades

- Hydro facilities that are interested in upgrading or expanding their facilities are eligible for the LT2 (or future long-term procurements). If suppliers are unsuccessful in the LT2 (or future procurements), they may still be eligible to upgrade the facility under the NHP.
- The approach to upgrades in the SHP will be used in the NHP:
 - No payment premiums for upgrades → contract payments under the NHP would extend to the facility post upgrade

Rationale:

- Aligned with the SHP and the Minister's recommendation
- Incentivizes new capacity to be competitively procured, which helps ensure affordability for ratepayers.



Next Steps

Next Steps

- IESO to continue to work directly with eligible NHP participants and the Ontario Waterpower Association on developing a high-level design that will identify recommendations for:
 - The payment model, price and approach to inflation
 - Contract term and transition
 - Treatment of environmental attributes and tax credits
 - Timelines for program launch, application process, application windows
- Report back to the Ministry of the Energy to be drafted and submitted to the government by the end of this year

Next Steps

- Participants are invited to provide feedback on today's session using the Feedback Form on the [NHP engagement webpage](#)
- Feedback is being requested by **August 9, 2024**
- All submissions and questions should be directed to IESO Engagement at engagement@ieso.ca