Feedback Form

Repowering Existing Facilities – October 20, 2025

Feedback Provided by:

Name: Paul Norris

Title: President

Organization: Ontario Waterpower Association

Email: [redacted]

Date: November 20, 2025

To promote transparency, feedback submitted will be posted on the Long Lead-Time engagement page unless otherwise requested by the sender.

- ☐ **Yes – there is confidential information, do not post**
- **X** **No – comfortable to publish to the IESO web page**

Following the Repowering Existing Facilities engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed. The presentation and recording can be accessed from the LLT RFP Stakeholder Engagement Webpage.

Note: The IESO will accept additional materials where it may be required to support your rationale provided below. When sending additional materials please indicate if they are confidential.

Please submit feedback to engagement@ieso.ca **by November 21, 2025 .**

Technology-Specific Considerations

- What types of repowering are technically and economically feasible for each generation technology (e.g., hydro, wind, solar, gas)?

  Note that for hydroelectric facilities Ontario Regulation 124/02 provides specific definitions of "redevelopment" and "upgrade", as follows

  - "redeveloped station" means a station at which improvements come into service after December 31, 2000 that include a substantially replaced power house and associated physical infrastructure for the conveyance and utilization of water
  - "upgraded station" means a station at which improvements come into service after December 31, 2000 that increase the station's generation of electricity by at least two per cent on an annual basis.

  Policy and procedure to implement the Regulation can be found at:

  https://www.ontario.ca/page/gross-revenue-charge-policy-under-electricity-act-wr-30201

  As perpetual assets, waterpower facilities have been and will continue to be "repowered" over time (e.g. OPG's "hydroelectric refurbishment plan", previous HCI contract provisions etc.). IESO policy and procurement should incent range of continued investments in the existing hydroelectric fleet, including upgrades, expansions, refurbishments and redevelopments.

- For each repowering option, what is the development time (i.e. how long would it take to conduct the work and have the facility back in service?) and the life span of the resulting facility (i.e. once the work has been completed, how long would the facility be able to reliably operate)? What would be the associated increase in capacity/production capability (if any)?

  Redevelopment timelines will vary site specifically and depend on the regulatory approvals requirements. The lifespan of the redeveloped facility can be expected to be equivalent to a newly development facility (there are ~40 hydroelectric facilities in the province which have been in production for more than a century). Redeveloped facilities can be expected to increase capacity and/or energy efficiency.

- What length of contract would be required?

  A minimum of forty (40) years for a redeveloped facility (i.e. the same term as a new facility).

- What are the associated costs and complexities/challenges?

  Costs and complexities will be site specific and depend on the extent of the redevelopment required.

- For each technology, what are the regulatory barriers they might face? What extent of repowering would trigger the need to get new permits/approvals (such as the REA)?

  Redeveloped hydroelectric facilities may be subject to the OWA Class Environmental Assessment depending on the potential for an increase in installed capacity. The vast majority of hydroelectric facility redevelopments will require approvals under Section 16 of the Lakes

and Rivers Improvement Act (MNR) and may necessitate approvals pursuant to the federal Fisheries Act (DFO). Site-specific considerations will determine other legislative requirements (e.g. Species Conservation Act).

Eligibility & Contract Design

- Should there be a minimum equipment replacement percentage requirement for repowered facilities (or some other similar criteria)?

  It is recommended that the conceptual framework applied to hydroelectric facilities through O. Reg 124/02 be applied to all technologies (i.e. "substantially replaced powerhouse and associated physical infrastructure")

- Should there be a minimum facility age to be eligible for "full" repowering (new 20-year term)? How can the IESO best incentivize getting maximum value for ratepayers out of existing facilities?

  The decision on when to invest in redeveloping rather than sustaining an existing assets should rest with the owners.

- Are there any unique contractual provisions that may be required for repowered facilities relative to the current LT2 contracts?

  Yes, redeveloped/repowered hydroelectric facilities should be provided with forty (40) year contracts, consistent with new developments.

- Should performance security or milestones differ for repowered facilities? If so, how?

  Depending on the milestones chosen, there may be some differences for repowered facilities linked to legislative and regulatory approvals requirements (e.g. may not require an environmental assessment, will not require MNR "Crown Land Site Report, etc.)

- Are there technologies that could conduct phased repowering by repowering a portion of their facility while the rest of the facility continued to operate?

  Some hydroelectric projects may be able to phase a redevelopment over time where there are multiple resources (turbine/generator units) at a single facility.

Competition & Fairness

- Should repowered facilities seeking 20-year contracts compete directly with new builds under the LT2 RFP? Why or why not?

  Repowered hydroelectric facilities should be enabled in LLT and LT2, with forty (40) year contracts.

Alternatives to Repowering

- How likely is it that suppliers will seek to decommission facilities rather than repower for each respective technology?

  The vast majority of existing hydroelectric facilities provide significant socioeconomic benefits beyond the production of electricity, including flood control, irrigation, tourism and facilitating local employment and economic development. Decommissioning considerations would necessarily include these broader benefits.

- What does decommissioning look like for your technology?

  In many cases, decommissioning may entail uploading the facility and its water management responsibilities to the province, given that the vast majority of the assets are under leasehold tenure with the province (MNR).

LT2 Window 2 Timing Considerations

- What is the minimum viable period between revised deliverability guidance and LT2 Window 2 proposal submission?
- Is there a general concern with the timing of municipal elections with respect to the Window 2 Proposal Submission Deadline?

General Comments/Feedback

The OWA once again encourages the IESO to be responsive to the Minister of Energy's direction of May 2024 by *"allowing existing hydroelectric facilities who want to expand or upgrade to participate in the LT2 RFP".*