

Feedback Form

Long Lead-Time RFP – March 26, 2026

Feedback Provided by:

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Date: 15 April 2026

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

- NO - There is confidential information, do not post
- YES - Comfortable to publish to the IESO web page

Following the March 26th Long Lead-Time RFP 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 Long Lead-Time RFP 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 April 15, 2026.

Section 1: Stakeholder Engagement Materials

Supply Chain Disclosure Plan & Related Incentives

Do you have any feedback on the proposed plan or additional incentives?

ORA has no substantive objection to supply chain disclosure as a procurement transparency measure. Please note, however, that “Canadian content” in this context refers exclusively to industrial supply chain origin, not to the environmental footprint, ecological impact, or sustainability credentials of the energy facility itself.^{1,2} ORA cautions the IESO against allowing supply chain disclosure mechanisms to be interpreted or communicated as proxies for environmental benefits. A facility may meet 100% Canadian content thresholds and still carry substantial unmitigated environmental risk.

Do you have any feedback on the proposed mechanism to address failure to meet committed percentage of Canadian content?

ORA defers to industrial stakeholders on the mechanics of liquidated damages for Canadian content shortfalls. We ask only that the IESO maintain a clear distinction between supply chain compliance metrics and broader environmental benefits and social performance requirements, which must be evaluated through separate and rigorous processes.

Access Rights: Requirements

Do you have any feedback on the proposed requirements?

ORA’s most significant concern in this section is the definition of the “project site” for access rights purposes. At the March 26 engagement session, the IESO confirmed that the current project site definition does not include the headpond/reservoir created by a proposed hydroelectric facility.

This is a fundamental failure of open and transparent dialogue before municipal and Indigenous consent is awarded. For any hydroelectric development, the full hydraulic footprint, including the headpond, inundation zone, drawdown range, and affected upstream and downstream wetland and river reaches, constitutes the project’s actual physical and ecological footprint. Limiting the project site definition to the dam structure and immediate generating works conceals the true scope of the project from the municipality, Indigenous communities, and the public before the Municipal Support Resolution or Evidence of Indigenous Support is received.

ORA’s position, consistent with our March 2026 submission, is that proponents must fully disclose the complete hydraulic footprint to the municipality and Indigenous communities. This information is required for:

- Meaningful environmental considerations and impact assessment
- Number and extent of all project sites required
- Free, prior, and informed consent processes with affected First Nations and Métis communities
- Accurate assessment of land tenure, Crown resource conflicts, and access rights
- Informed public participation

Deferring hydraulic footprint disclosure to a subsequent Environmental Assessment stage, after a contract is awarded, creates a perverse incentive structure in which proponents have strong financial incentives to minimize the disclosed footprint at the procurement stage and to contest EA findings afterward. The IESO must require shapefiles or equivalent spatial data covering the full hydraulic footprint as a mandatory application requirement.

ORA notes that the Access Rights Declaration form (AR100), as posted April 1, 2026, contains no field and no requirement for disclosure of the headpond or inundation zone. This omission is a procedural confirmation of the gap ORA has consistently identified.

The AR100 must be amended to require spatial disclosure of the full hydraulic footprint before any Municipal Support Resolution or Evidence of Indigenous Support is sought.

Prescribed Form: Evidence of Municipal Support (MS100, dated February 27, 2026). Instruction p of that form exempts a proponent from the Municipal Support Resolution requirement where the Project Site is located wholly on provincial Crown lands managed by MNR and outside of Municipal Lands.

However, the MNR Public Lands Site Report (PLSR, updated March 25, 2026), also an IESO requirement for LLT bidding, explicitly acknowledges in Section 4.3 that “*waterpower project operations may have inundation and water management implications that extend beyond the waterpower project site provided in the application shapefile.*”³ The proponent must obtain occupational authority from the Crown and permission from other affected landowners to flood land beyond the Project Site, but only when applying for MNR approvals post-award—after the contract has been executed and the municipality’s leverage is effectively extinguished.

This creates a direct governance gap. In Ontario, river channels typically run along Crown-owned riverbeds, but shorelines above the ordinary high-water mark are frequently owned by private landowners and/or fall within municipal jurisdiction. A proponent may define the Project Site as solely the Crown land component (riverbed or water body), qualify for the MSR exemption, and submit a bid without the municipality receiving any notice, yet the reservoir created may inundate adjacent municipal or private land. This is not hypothetical: the PLSR form itself, in Section 4.3, acknowledges that inundation “may” extend beyond the shapefile and that further permissions may be required from “other affected landowners.” The municipality has no knowledge and no role before the contract award.

The MSR requirement must apply to any LLT-e project whose modelled inundation zone or hydraulic footprint extends onto, abuts, or is adjacent to Municipal Lands, regardless of whether the generating infrastructure is sited wholly on Crown land. The full modelled inundation extent must be disclosed, and the relevant municipality must provide support before any bid is evaluated.

The IESO's 13 March 2026 Stakeholder Feedback and IESO Response, states that "*Successful Proponents will need to ensure they have considered all potential impacts of their project beyond the Project Site at the time of submitting their Proposal.*"⁴

ORA submits that "considered" is not "disclosed." Without mandatory form fields, shapefile submission requirements, and a binding obligation to share hydraulic footprint information with municipalities and Indigenous communities before seeking support, there is no mechanism to verify whether impacts were actually communicated. ORA calls on the IESO to convert this stated expectation into mandatory, verifiable disclosure obligations enforceable as application requirements.

Reserve Price

Do you have any feedback related to the attributes that are being considered as part of the calculation of the Reserve Price? Please note: Stakeholders are encouraged to provide any supporting documents or reports that they would like the IESO to consider.

Reserve price calculations must incorporate climate-adjusted, seasonal hydrological data rather than historic long-run average flows. ORA makes the following specific observations:

- Historical average flows systematically overstate long-run energy production under projected climate conditions. Canada’s Changing Climate Report (2019)⁵ and the Ontario Provincial Climate Change Impact Assessment (OCCIA, 2023)⁶ document foreseeable increases in drought frequency, duration, and severity across Ontario watersheds.
- Hydroelectric facilities in Ontario are characteristically energy-limited: their generating capacity is constrained not by installed turbine capacity but by available water flow. During drought periods, the IESO has documented that such facilities can operate at 15–30% of nameplate capacity for extended periods.^{7,8}
- A reserve price calibrated to average historic flows will systematically overpay for a resource whose long-run energy delivery, under a changing climate, is materially lower than the historic average suggests.
- The reserve price calculation must require proponents to submit seasonal production profiles (not annual averages) and must be validated against P50 and P10 flow scenarios using the most recent 20-year hydrological record, not multi-decadal averages that predate the observed intensification of climate impacts.

Are there any further items that you would like the IESO to consider?

The IESO must consider the full lifecycle cost of underperformance risk over a 40-year contract term.

A 40-year contract for a resource whose long-run performance is constrained by hydrological conditions, and whose performance is trending downward under climate projections, exposes Ontario ratepayers to decades of underperformance risk.

A 40-year contract locks ratepayers into long-term payment obligations **without any contractual re-opener, off-ramp, or performance protection if climate-driven changes to hydrology and freshwater availability render these facilities unable to reliably fulfill their contracts**. This omission is not benign—it is material.^{9, 10, 11, 12, 13} It socializes climate risk while privatizing revenue certainty: proponents are protected from hydrologic failure, while ratepayers are not; thereby transferring foreseeable climate-driven performance failure directly onto ratepayers, who have no ability to exit, renegotiate, or mitigate that risk.

ORA has previously recommended, in comments on the LT2 RFP, that repowered hydroelectric facilities should receive a contract term of no more than 5 years, rather than 20 years, specifically to reduce ratepayer risk.

For new hydroelectric projects proposed under the LLT-e, ORA recommends a maximum contract term of 20 years. A 40-year energy contract cannot be justified for a resource whose hydrological performance over that horizon is materially uncertain and whose long-run trajectory under OCCIA 2023 projections¹⁴ is declining.

If a new hydroelectric facility delivers significantly less energy than contracted due to flow reductions from drought, ratepayers bear either the cost of procuring replacement energy or the cost of contracted-for but undelivered energy. Neither outcome is in the ratepayers’ interests.

ORA notes that Xeneca Power Development, a proponent in this process, acknowledged in its own feedback that *“the ratepayer would unfortunately pick up the cost”* of certain risk scenarios.¹⁵ The IESO’s mandate is to act in the long-term interest of consumers; reserve price structures must reflect actual expected energy delivery, not optimistic historic averages.

ORA also draws the IESO’s attention to the Minimum Performance Factor in the draft LLT-e Contract (Section 3.1), which sets a floor of 80% of the Annual Average Imputed Production Factor. This standard is only as rigorous as the baseline against which it is measured.¹⁶ If the Imputed Production

Factor is derived from optimistic historic hydrology rather than climate-adjusted flows, a proponent could deliver well below the energy level that ratepayers contracted to receive and still satisfy the 80% threshold.

ORA recommends that the Minimum Performance Factor baseline be derived from climate-adjusted hydrological projections, not from pre-impact historic averages.¹⁷

ORA also notes that the IESO confirmed in its 13 March 2026 response that it has decided to implement a confidential reserve price for the LLT RFP. ORA accepts the rationale for pre-award confidentiality: disclosing a price ceiling before bids are submitted would allow proponents to anchor to that ceiling and bid up to it, inflating costs for ratepayers and undermining the competitive discipline the RFP is designed to create. However, permanent secrecy is a different matter. Once the procurement window has closed and awards have been made, there is no competitive rationale for continued non-disclosure.

A confidential reserve price for a 40-year energy contract, covering a resource with declining hydrological performance, creates a material and ongoing transparency gap. Without post-award disclosure, there is no mechanism for the public, or for ORA, to verify whether the reserve price methodology accounted for climate-adjusted energy delivery risk, declining long-run hydrology, or the Minimum Performance Factor baseline concerns we have raised.

ORA therefore calls for full post-award disclosure of the reserve price, the methodology used to establish it, and the basis for any project exclusions on reserve price grounds. The IESO's mandate to act in the long-term interest of consumers requires this level of accountability for a 40-year public energy contract.

Deliverability

Do you have any feedback on the Proposed pre-deliverability activities?

ORA supports rigorous pre-deliverability requirements but recommends that these be assessed against realistic operating conditions, not nameplate capacity or historic average flows. Pre-deliverability activities must include demonstration of reliable energy delivery across all seasons, including winter low-flow periods and summer drought conditions.

Do you have any feedback to share on the Deliverability Testing approach and related guidance outlined in the presentation?

Deliverability testing methodology is a critical tool for validating whether a contracted facility can actually deliver what it has committed to the grid. ORA's concerns are as follows:

- Testing based on historic hydrology will systematically overstate actual deliverable output from new hydroelectric facilities under current and projected climate conditions.
- Testing must be conducted or validated against low-flow scenarios, including drought conditions consistent with OCCIA 2023 projections.¹⁸
- Minimum environmental flow requirements, which limit turbine operation during low-water periods to protect aquatic ecosystems, must be factored into deliverability assessments. Hydroelectric facilities in Ontario are regulated through Water Management Plans approved by the Ministry of Natural Resources; the constraints these plans impose on turbine operation during drought conditions must be fully reflected in deliverability assessments. A facility that is constrained by its operating approvals during drought cannot be credited with full deliverability at those times.

- ORA notes that the IESO has characterized northern hydroelectric as an “energy-limited” resource in multiple technical assessments, and instead, has gone so far as to recommend new transmission.^{19, 20} Deliverability testing methodology must be consistent with this characterization.

Regulation Services Readiness Requirements

Do you have any feedback on the Regulation Services Readiness Requirements?

ORA supports the principle that proponents must demonstrate regulation services capability before a contract is executed. We make the following specific recommendations:

- Timelines for demonstrating regulation services readiness must be clearly defined with finite deadlines, not open-ended extension provisions.
- The contract must assign full responsibility for achieving regulation services readiness to the proponent. Ratepayers must not bear any costs associated with a proponent’s failure to meet this requirement.
- Regulation services capability must be assessed against realistic operating conditions, including seasonal flow variability. A facility’s ability to regulate output is directly constrained by available water flow; this constraint must be acknowledged in the readiness requirements.

Withdrawal Capability Check Test

Do you have any feedback related to the Withdrawal Capability Check Test?

Withdrawal capability must be assessed against actual operating conditions, not theoretical nameplate capacity. ORA is concerned that a withdrawal capability check test based on full-flow conditions will not accurately reflect a facility’s ability to reduce output during low-flow periods, when withdrawal capability is most constrained.

The test must address:

- Minimum environmental flow requirements that limit minimum output levels and therefore constrain the range within which withdrawal can operate
- Low-flow drought scenarios in which generating head and available flow are both reduced
- Ice conditions affecting winter operations and the range of achievable output adjustments

A facility that cannot reliably reduce output during constrained operating periods poses grid management risks. The IESO must ensure that the check test reflects the actual operating envelope of the facility across all seasonal and hydrological conditions.

General Comments/Feedback

Do you have additional feedback to share with the IESO?

1. Governance Concern: Ministerial Direction vs. IESO's Own Technical Evidence:

ORA submits these comments with a heightened sense of urgency because we believe the LLT RFP process may be the last opportunity to place our concerns formally on record before a political decision is finalized.

The IESO's mandate is to plan and operate Ontario's electricity system in the long-term interest of consumers. The IESO has fulfilled that mandate by producing a series of rigorous technical assessments that consistently find northern hydroelectric to be an "energy-limited" resource.

The IESO's August 2025 Hybrid Resource Equivalency Assessment reached the following conclusions:

- Variable generation (Wind and Solar) plus battery energy storage (VG+BESS) can meet 99.5–99.98% of Ontario's load served out to 2050, well within accepted reliability standards.
- VG+BESS combined with gas-fired generation is the least-cost option for meeting Ontario's peak needs.²¹
- Hydroelectric generation was not identified as part of the optimal resource mix under any of the assessment's scenarios.

The IESO has made similar findings in earlier assessments.²² Yet the LLT-e procurement is proceeding under Ministerial direction, requiring the IESO to pursue northern hydroelectric capacity that its own analysis does not identify as optimal for Ontario consumers.

ORA is a not-for-profit organization operating on a tight budget. We do not have the resources to lobby Ministers. Our submissions are our primary tool for placing concerns on the formal record. We use this submission to state clearly that the LLT-e process, as currently directed, prioritizes a politically preferred resource over the evidence-based recommendations of IESO's own technical staff. This is a public trust concern of the first order.

ORA urges the IESO to apply its own technical evidence transparently in evaluating LLT-e applications, to document any departures from its own recommended resource mix, and to ensure that the full record of its technical assessments is available to the public alongside any contract announcements.

2. Hydroelectric Is an Energy-Limited Resource:

New hydroelectric facilities are increasingly energy-limited and hydrologically unreliable under current and projected climate conditions. Hydroelectric projects as small as 1 MW, which do not align with the stated long-lead objectives of the procurement or with typical development timelines for such facilities. This will be disastrous for riverine ecosystems and for ratepayers.

ORA's 2015 analysis of <10 MW Feed-in-Tariff contracts demonstrated that approximately 115 MW of installed capacity (approximately 57 MW of average output) would have affected 34 sites on 19 rivers. This underscores the disproportionate watershed footprint of small-scale hydro development on Ontario rivers. See ORA's chart below.²³



Table 1 – Waterpower Proposals under 10 MW with FIT Contracts:

Following is a list of small waterpower proposals that ORA has reviewed under the FIT Program. No complete list is available to the public, so it does not reflect all current proposals.

	RIVER	FIT PROJECT	Installed Capacity MW	Actual Power MW
1	Kapusking River	Outlet Kapuskasing lake	2.5	1.3
2	Kapusking River	Lapinagam Rapids	8.2	4.1
3	Kapusking River	Middle Twp.	5	2.5
4	Kapusking River	Near North Boundary	3.8	1.9
5	Larder River	Raven Falls	1.3	625 kW
6	Ivanhoe River	Third Falls	5.1	2.6
7	Ivanhoe River	The Chute	3.6	1.8
8	Frederick House River	Wanatango Falls	4.7	2.3
9	Serpent River	Four Slide Falls	7.3	3.7
10	Serpent River	McCarthy Chute	2	1
11	Serpent River	Pecors Power Small Hydro Project	2	1
12	Blanche River	Marter Twp.	2.1	1
13	Vermilion River	McPherson Falls	2	1
14	Vermilion River	Cascade Falls	2.1	1
15	Vermilion River	At Soo Crossing	4.3	2.1
16	Vermilion River	Wabagishik Rapids	3.4	1.7
17	Wanapitei River	Allen & Struthers	2.8	1.4
18	Wanapitei River	Secord Rapids	750 kW	475 kW
19	Little Thessalon River	Shaw Dam GS	200 kW	100 kW
20	Little Thessalon River	Little Rapids GS	200 kW	100 kW
21	Clyde River	Herron Mills Waterpower Project	156 kW	78 kW
22	Grand River	Elora Hydro Electric	1	500 kW
23	Mississippi River	Almonte GS	5	2.5
24	Mississippi River	Enerdu Hydroelectric Project	1	500 kW
25	Twelve Mile Creek	Shickluna Small Hydro Project	4	2
26	Gull River	Norland Power Hydropower Project	500 kW	250 kW
27	Drag River	Drag River GS	300 kW	150 kW
28	Kabinakagami River	Neeskah Project	6.5	3.3
29	Kabinakagami River	Peeshoo Project	6.5	3.3
30	Kabinakagami River	Wapoose Project	6.5	3.3
31	Kabinakagami River	Wahpeeston Project	6.5	3.3
32	Trout Lake River	Trout Lake River Hydro Project	4	2
33	Namakan River	High Falls Hydropower Development	4.5	2.3
34	Moon River	North Bala Small Hydro Project	4.5	2.3
		Total Hydroelectric Proposals - MW	115	57

Note: 34 waterpower facilities would compromise 19 Ontario rivers and their ecosystems to generate a net of approximately 57 MW of power under the Green Energy Act. Seasonal flows can limit actual power generated to an average of from 15 to 50% of Installed Capacity – we have generously estimated efficiency at 50% for the purposes of this table.

ORA further questions the inclusion of hydroelectric projects as small as 1 MW within a procurement explicitly framed as a *Long Lead-Time* RFP. There is no evident planning or construction rationale for treating a 1 MW hydro facility as a long-lead resource, nor for offering such projects long-term contractual protections designed for large, complex infrastructure with extended development timelines. Including very small hydro projects in this framework risks misaligning procurement tools with actual system needs, while extending disproportionate risk protection and ratepayer exposure to projects that do not require long-lead procurement to proceed.

The IESO's own planning documents have repeatedly acknowledged that northern hydropower is an intermittent, unreliable and energy-limited resource, with output constrained by hydrology rather than installed capacity. Despite this, the proposed LLT(e) settlement approach continues to treat reduced water availability as an external risk to be managed contractually, rather than as a known and foreseeable system limitation. This is a well-known risk that the IESO is shifting to ratepayers.

The fundamental problem with procuring hydroelectric power through a long-term energy contract is that the energy delivery of a run-of-river or storage-limited facility is constrained not by its generating equipment but by the water available to run it. This constraint is not a design flaw; it is an inherent characteristic of the resource.

The IESO has documented that hydroelectric facilities can operate at 15–30% of nameplate capacity during drought periods.²⁴ These are not rare events. They are the foreseeable operating conditions of a hydroelectric facility in a changing climate. OCCIA 2023 documents increasing frequency and severity of drought conditions across Ontario watersheds,²⁵ and the IESO's own Hybrid Resource Equivalency Assessment acknowledges this variability.²⁶

Procuring 40-year energy contracts from resources whose long-run energy delivery is materially uncertain, and whose performance is trending downward under climate projections, exposes Ontario ratepayers to decades of underperformance risk. This risk is not speculative; it is documented in the IESO's own technical record.

Proponents promote the long service life of hydroelectric infrastructure, claiming that some facilities operate for 100 years or more—as a benefit. The same longevity that proponents advertise also means that reservoir methane emissions will persist for the life of the facility. Unlike a gas-fired plant, which can be taken offline when cleaner generation becomes available, a hydroelectric reservoir continues to emit methane until the dam is removed. There are no up-front financial provisions for dam decommissioning in the LLT-e contract framework, meaning that ratepayers who fund the construction of these facilities may ultimately bear those costs as well.²⁷

3. Climate-Driven Hydrologic Risk Is Not a Force Majeure Event:

One of ORA's most consistent concerns throughout the LLT-RFP process is the inadequacy of force majeure provisions to address hydrologic variability attributable to climate change.

Force majeure is designed to address events that are unforeseeable and beyond a party's control—extraordinary circumstances that could not have been anticipated at the time of contract. Drought affecting Ontario hydro resources does not meet this standard. The scientific and policy record is unambiguous:

- Canada's Changing Climate Report (2019) documents observed and projected increases in drought frequency and severity across Canada's river systems, and projects that streamflow will

decrease in summer in many regions due to reduced precipitation and higher evapotranspiration.²⁸

- OCCIA 2023 provides Ontario-specific projections of hydrological change, including increased summer low-flow conditions.²⁹
- The IESO has explicitly characterized northern hydroelectric as an “energy-limited resource,” with performance that varies materially with hydrology.^{30, 31}

If a proponent signs a 40-year energy contract for hydroelectric power and then invokes force majeure to excuse underperformance during a drought, a foreseeable operating condition documented in the scientific record, Ontario ratepayers will pay for energy that was never delivered. This is not a theoretical scenario. Across Canada, hydroelectric facilities are already experiencing extended periods of critically reduced generation attributable to drought:

- Manitoba Hydro posted a consolidated net loss of \$157 million for the fiscal year ended March 31, 2024, attributing the loss directly to drought-reduced hydro generation and the need to activate the Brandon natural gas generating station to compensate for reduced hydroelectric output.³² Manitoba Hydro posted a further \$63 million net loss in the following fiscal year, the third drought year in four consecutive years.³³
- Hydro-Québec’s reservoir levels fell far below average in 2023 during an unusually hot and dry year. In its 2023 annual report, Hydro-Québec attributed the shortfall to “scant snow cover” and “lower-than-usual spring runoff and modest summer and fall precipitation in northern Quebec.”⁶ Electricity exports fell from 35.6 TWh in 2022 to 23 TWh in 2023, and water shortages resulted in an \$866 million drop in revenue for the utility in 2024.³⁴

ORA also objects to the contract's framing of drought as "*periods of reduced water availability*." This language implies bounded, exceptional events, precisely the characterization that force majeure is designed to cover. The scientific record, Canada's Changing Climate Report (2019), OCCIA 2023, and documented multi-year losses at Manitoba Hydro and Hydro-Québec establish that reduced water availability is the foreseeable, worsening long-run operating condition of hydroelectric facilities in a changing climate, not an exceptional period.

ORA calls on the IESO to ensure force majeure provisions in LLT-e contracts explicitly exclude foreseeable hydrologic variability. Drought and low-flow conditions consistent with established climate projections for Ontario must not be treated as extraordinary events beyond a proponent’s ability to anticipate and manage.

ORA recommends that the LLT-e contract (Sections 11.2 and 11.3) be amended to add drought conditions within the range of projections in OCCIA 2023³⁵ and Canada’s Changing Climate Report³⁶ to the explicit exclusions from force majeure.

ORA recommends that the IESO remove the "*periods of reduced water availability*" language from the contract framework and replace it with language that accurately reflects the foreseeable, sustained, and climate-projected nature of hydrological change in Ontario watersheds. This would be in the public interest!

4. Proponent Submissions Confirm Ratepayer Risk:

ORA notes with concern the pattern of proponent feedback in this process, which has consistently sought to transfer risk: financial, environmental, and operational, from proponents to ratepayers. Specific examples include:

- Xeneca Power Development acknowledged in its own submissions that “*the ratepayer would unfortunately pick up the cost*”³⁷ in certain risk scenarios. This is a striking admission from a party seeking a 40-year publicly funded contract.
- The Ontario Waterpower Association “*strongly supports*” risk transfer mechanisms, including streamlined site definitions, expanded indexation, reserve price protection, and capped liability. None of these positions defends hydroelectric reliability or its cost effectiveness for ratepayers.³⁸

The IESO’s evaluation framework must weigh these admissions carefully. A resource whose own proponents acknowledge will impose costs on ratepayers, and whose industry association’s primary advocacy goal is to limit financial exposure, is not demonstrating the reliability and value proposition that a 40-year public energy contract demands. The IESO must uphold its commitment to the public interest as the primary obligation of its mandate.

ORA also draws the IESO’s attention to its March 13, 2026, **confirmation that separately metered expansions of existing hydroelectric facilities will qualify as New Build projects eligible for the LLT RFP**. This determination raises all of the same ratepayer risk concerns ORA has identified for entirely new facilities. A 40-year contract for an expanded facility whose hydrological performance is subject to the same climate-driven decline identified in OCCIA 2023 is not in ratepayers’ interests.

Moreover, expansions may create hydraulic impacts—additional headpond area, altered drawdown ranges, increased downstream flow variability—beyond those covered by a facility’s existing Water Management Plan, yet would be evaluated as standalone projects without mandatory cumulative hydrological or ecological assessment.

ORA recommends that the IESO apply identical contract term limits, hydrological risk disclosure requirements, and Minimum Performance Factor methodology to all expansion projects qualifying as New Build under the LLT RFP.

5. Environmental and Ecological Concerns:

ORA identifies the following environmental concerns that must be part of the IESO’s evaluation framework for LLT-e applications, even if they are not resolved through the procurement process itself:

- **Fish passage:** Of the 224 hydroelectric facilities currently operating in Ontario, only two are known to provide operating fish passage. This is a profound and largely unaddressed ecological deficit.³⁹ New facilities must not replicate this record; meaningful fish passage requirements must be conditions of any LLT-e contract.
- **Greenhouse gas emissions:** Hydroelectric reservoirs, particularly in boreal regions, are a recognized source of methane and carbon dioxide emissions as submerged organic material decomposes under low-oxygen conditions. The IPCC has documented that boreal reservoir methane emissions can, in some cases, be comparable to those of a gas-fired generating facility on a lifecycle basis.⁴⁰ The IESO must acknowledge that hydropower is not clean or non-emitting with its lifecycle GHG emissions, including reservoir methane and CO₂ under boreal and temperate conditions. The time is very close when hydropower proponents will be required to publicly report their daily GHG emissions, including methane.
- **Indigenous rights:** New hydroelectric development on rivers that have not previously been assessed under modern Impact Assessment and treaty rights frameworks must involve free, prior, and informed consent processes with all affected First Nations and Métis communities.
- The Evidence of Indigenous Support form (IS100), as posted April 1, 2026, requires Indigenous consultation only where the project site is located on Indigenous Lands. This is insufficient. Where

the headpond, inundation zone, or downstream affected reaches extend into Indigenous traditional territory without being formally designated Indigenous Lands, no consent is required under the current form structure. The geographic trigger for Indigenous consultation must be the full hydraulic footprint of the project — not only the formally designated project site.

ORA also notes that the IESO confirmed in its 13 March 2026 response that proposals for cascading or interrelated hydroelectric projects on the same river system will each be evaluated independently under the LLT-e RFP, and will each proceed through environmental review under the Class Environmental Assessment for Waterpower Projects (Class EA) (OWA, February 2024, Tenth Edition).

ORA has reviewed the Ontario Waterpower Association's Class EA and submits that it has been substantially weakened from its earlier editions and is now fully inadequate to address the serious environmental impacts of new hydroelectric development. The Potential Effects Identification Matrix (Table 4), which governs project-specific environmental review, lists more than thirty criteria covering fish habitat, species at risk, water flows, and Indigenous community considerations, but watershed-level cumulative effects are entirely absent as a required criterion.

The Class EA's own acknowledgment that concurrent assessment of multiple facilities on the same river system may sometimes be warranted (Section 4.1.1) is discretionary and entirely proponent-led; there is no trigger, no threshold, and no agency empowered to require it. The result is that under the LLT-e, multiple cascading projects on the same river system can each pass through their own Class EA without any regulatory body ever assessing the combined effect on watershed hydrology, riverine ecology, or Indigenous and treaty rights.

The Class EA's inadequacy is compounded by the absence of any independent oversight over project classification. Under the OWA's Class EA, the proponent unilaterally determines whether a project is low-risk or high-risk. A low-risk determination triggers only a simplified screening pathway, with a minimum 30-day notice window, after which the project can proceed without public consultation and can be exempted from full Environmental Assessment Act requirements.

There is no independent agency review of the proponent's risk classification and no mechanism for public challenge before the screening is complete. Notably, existing control structures, including dams, can be converted to hydroelectric generating facilities and classified as low-risk, proceeding through this abbreviated pathway with no public engagement whatsoever. The proponent's self-classification as low risk cannot substitute for independent environmental review.

ORA submits that no new hydroelectric project proposed under the LLT-e RFP should be classified as low-risk for the purposes of the Class EA screening process. New hydroelectric development, whether on previously undeveloped rivers, on rivers subject to cascading development, or involving the conversion of existing control structures, is not low risk by any reasonable environmental or hydrological measure. These are facilities that will permanently alter watershed hydrology, aquatic habitat, and the exercise of Aboriginal and treaty rights over a 40-year contract term and beyond.

In ORA's view, the proponent-led, screening-based Class EA pathway is categorically inappropriate for new hydroelectric development on river systems facing documented hydrological stress under climate change, and particularly so for cascading projects on smaller rivers where the margin of ecological resilience is lowest.

ORA recognizes that the IESO does not administer the Class EA process and cannot prescribe its requirements. However, ratepayers are being asked to fund 40-year contracts for facilities whose environmental review process is proponent-led, lacks a mandatory cumulative effects assessment, may involve no public consultation, and will degrade Ontario rivers for the next 100 years or more. The cost

will not only be borne by ratepayers but also by our most precious resource that we all rely on, Ontario rivers.

ORA calls on the Ontario Government to require mandatory cumulative effects assessment for all new hydroelectric facilities; to remove the proponent's unilateral authority to self-classify projects as low risk; and to restore mandatory public engagement as a mandatory component of every Class EA process.

6. The 1 TWh Target and Capacity Factor Transparency:

The LLT-e RFP targets approximately 1 TWh of annual energy. ORA has previously asked the IESO to be transparent about the assumptions underlying this target, specifically:

- What capacity factor assumptions are being used to translate a 1 TWh energy target into contracted generating capacity?
- Are these capacity factors derived from historic average flows or from climate-adjusted projections?
- What is the anticipated performance gap if contracted facilities deliver at the low end of their documented hydrological range?

Without this transparency, it is impossible for stakeholders to evaluate whether the procurement is appropriately sized or whether it will deliver the anticipated energy benefits.

7. Fiscal Transparency: Hidden Subsidies to Hydroelectric Proponents:

The Ontario Government's Gross Revenue Charge (GRC) framework for hydroelectric generating stations (updated March 23, 2026, during the active LLT-e procurement window) calculates "gross revenue" at a fixed notional price of \$40,000 per GWh (\$40/MWh), regardless of actual contract revenue. Property tax rates are tiered by generation volume: stations producing up to 50 GWh per year—which encompasses virtually every project in the LLT-e's 1–10 MW target range at typical capacity factors—pay property tax at only 2.5%. A flat water rental charge of 9.5% applies to all stations regardless of volume used. Total GRC for a typical LLT-e small hydro project is therefore 12% of notional gross revenue assessed at \$40/MWh. If an LLT-e contract is priced at \$150/MWh—a conservative estimate for new hydroelectric construction, the GRC is effectively levied on approximately 27% of actual contract revenue; the remaining 73% is shielded from the GRC framework entirely.

This subsidy flows to the proponent, at the expense of two parties: Ontario ratepayers who bear the full contract price through their electricity bills; and Ontario taxpayers, who must compensate for the provincial revenue shortfall created by the notional pricing formula through other taxes or reduced public services. This structural advantage is not reflected in the RFP documentation or any IESO cost assessment for LLT-e procurement.

ORA submits that any ratepayer cost assessment for LLT-e procurement must account for all fiscal advantages accruing to hydroelectric proponents, including the GRC notional pricing differential. In addition, the Province should review whether the GRC notional price remains an appropriate proxy for actual contract revenues given the significant gap between \$40/MWh and current procurement prices.

8. ORA's Recommendations:

Ontario Rivers Alliance strongly recommends the IESO:

1. Apply its own technical evidence, including the August 2025 Hybrid Resource Equivalency Assessment, transparently in the evaluation and documentation of the LLT-e process, and document publicly any departures from the resource mix identified as optimal by the IESO's own technical assessments.
2. Require full hydraulic footprint disclosure (headpond, inundation zone, drawdown range, and affected upstream and downstream reaches) as a mandatory application requirement, including shapefiles or equivalent spatial data.
3. Amend the Access Rights Declaration (AR100) and Evidence of Indigenous Support (IS100) forms to require disclosure of the full hydraulic footprint before any Municipal Support Resolution or Evidence of Indigenous Support is sought.
4. Use climate-adjusted seasonal hydrological data, not historic averages, in all reserve price, capacity factor, and deliverability calculations.
5. Set the Minimum Performance Factor baseline (LLT-e Contract, Section 3.1) using climate-adjusted hydrological projections — P50 and P10 flow scenarios from the most recent 20-year record — not historic pre-impact averages.
6. Amend force majeure provisions (LLT-e Contract, Sections 11.2 and 11.3) to explicitly exclude foreseeable hydrologic variability documented in OCCIA 2023 and Canada's Changing Climate Report.
7. Require lifecycle GHG assessments, including methane and CO₂ from reservoir emissions based on site-specific boreal conditions, as a mandatory application component.
8. Require meaningful fish passage provisions as a condition of any LLT-e contract.
9. Ensure that free, prior, and informed consent processes with affected Indigenous communities are completed before contracts are awarded, and that the geographic trigger for consent is based on the project's full hydraulic footprint.
10. Limit new hydroelectric contract terms to a maximum of 20 years. ORA has previously recommended 5-year terms for repowered facilities in LT2 RFP comments, citing the same ratepayer risk concerns. A 40-year contract for a resource with a declining hydrological performance trajectory cannot be justified in the ratepayers' interests.
11. Ensure that environmental attributes generated by LLT-e facilities flow to Ontario ratepayers starting in the first year of operation. Proponents must not be permitted to monetize environmental attributes separately while ratepayers bear the full cost and risk of the underlying energy contract.
12. Maintain reserve price confidentiality during the active procurement window to preserve competitive integrity, but require full post-award public disclosure of the reserve price, the methodology used to establish it (including confirmation that climate-adjusted seasonal hydrological data and P50/P10 flow scenarios, not historic averages, were used), and the basis for any project exclusions made on reserve price grounds.
13. Apply the same contract term limits (maximum 20 years), hydrological risk disclosure requirements, hydraulic footprint disclosure obligations, and Minimum Performance Factor baseline methodology to all separately metered expansions of existing hydroelectric facilities qualifying as New Build under the LLT RFP.
14. Require disclosure and quantification of all fiscal advantages accruing to hydroelectric proponents under the LLT-e — including the Gross Revenue Charge notional pricing differential (\$40/MWh notional vs. actual contract price), the water rental charge structure, and any other provincial tax or Crown charge treatment specific to hydroelectric operations — as part of the IESO's ratepayer cost assessment framework for LLT-e procurement.
15. Require that the Municipal Support Resolution requirement apply to any LLT-e project whose modelled hydraulic footprint, inundation zone, or reservoir extent abuts or will physically affect

Municipal Lands, regardless of whether the formal Project Site is defined as wholly Crown land. The PLSR shapefile requirement must be amended to reflect the full modelled inundation extent — not only the project footprint on public lands — and this information must be disclosed to the relevant municipality before any bid is evaluated or contract awarded.

16. Request that MNR confirm and publicly document the Crown land tenure terms available to LLT-e waterpower proponents under the Renewable Energy on Crown Land (RECL) policy and require that those terms be no more favourable than those available to wind and solar developers. Any Crown land lease for an LLT-e waterpower project should be capped at an initial term of 25 years with a 15-year renewal option exercisable only by mutual consent of both parties, consistent with the terms applicable to wind energy under the same policy.

Ontario Rivers Alliance is available to discuss any of these concerns further and welcomes the opportunity to provide additional supporting materials.

Section 2: RFPs, Contracts and Prescribed Forms

Do you have additional feedback to share with the IESO in relation to the updated RFPs, Contracts and Prescribed Forms posted to the website on April 1, 2026?

ORA provides the following specific feedback on the RFP, contract, and prescribed form documents posted April 1, 2026. These comments reflect ORA's review of those materials and are organized by document and section reference to facilitate cross-referencing by IESO staff.

Document	Section Reference	ORA Recommendation
LLT-e Contract	Force Majeure (Sections 11.2 and 11.3)	Force majeure must not cover foreseeable hydrologic variability. Drought and low-flow conditions consistent with OCCIA 2023 ² projections are anticipated operating conditions, not extraordinary events. ORA recommends explicit language excluding from force majeure: (a) drought conditions within the range of projections in Canada's Changing Climate Report and OCCIA 2023; (b) low-flow periods that reduce generation below contracted energy delivery; (c) extended periods of reduced flow caused by climate change in precipitation or snowpack.
LLT-e Contract	Environmental Attributes (Section 2.10)	Environmental attributes generated by LLT-e facilities — renewable energy credits, GHG offsets, or equivalent instruments — must flow to Ontario ratepayers from the first year of operation. The current contract structure assigns all environmental attributes to the proponent for the first 20 years, despite ratepayers bearing the full cost and risk of the underlying contract. ORA further notes that hydroelectric facilities carry significant contested environmental liabilities, including reservoir methane emissions ⁸ and fish passage deficits; the premise that these facilities generate positive environmental attributes that merit separate monetization has not been established.
LLT-e Contract	Contract Term (Duration)	ORA recommends a maximum contract term of 20 years for new hydroelectric facilities. A 40-year term cannot be justified for a resource with materially uncertain and declining long-run hydrological performance. ORA has previously recommended 5-year terms for repowered facilities in LT2 RFP comments, citing the same

		ratepayer risk concerns. Locking ratepayers into a 40-year energy commitment for a resource the IESO’s own analysis does not identify as cost-optimal is inconsistent with the IESO’s mandate to act in the long-term interest of consumers.
LLT-e Contract	Minimum Performance Factor (Section 3.1)	The 80% Minimum Performance Factor floor is only as rigorous as the baseline against which it is measured. The Imputed Production Factor used as the baseline must be derived from climate-adjusted seasonal hydrology using P50 and P10 flow scenarios from the most recent 20-year record, not from pre-impact historic averages. A baseline derived from optimistic historic flows would allow a proponent to deliver well below contracted energy while still satisfying the 80% threshold, at ratepayers’ expense.
LLT-e RFP	Application requirements — project site definition	The project site definition must include the full hydraulic footprint: headpond, inundation zone, maximum and minimum drawdown range, and affected upstream and downstream river reaches. Shapefiles or equivalent spatial data must be submitted with the application. This information is required for meaningful environmental review, Indigenous consultation, and land tenure assessment. Deferring footprint disclosure to EA creates perverse incentives and undermines informed consent processes.
LLT-e RFP	Energy production estimates	Proponents must submit monthly or seasonal energy production profiles, not annual averages. Annual averages obscure seasonal constraints (winter low flows, summer drought) that are critical to grid planning. Production profiles must be based on climate-adjusted hydrology using P50 and P10 flow scenarios drawn from the most recent 20-year record, not longer-period historical averages that predate the intensification of climate impacts.
LLT-e RFP	Application requirements — GHG assessment	Proponents must submit a lifecycle GHG assessment including reservoir emission estimates (methane and CO ₂) based on site-specific boreal conditions. The IPCC has documented that boreal reservoir methane emissions can, in some cases, approach those of gas-fired generation on a lifecycle basis. Without this information, the characterization of LLT-e hydroelectric facilities as “clean” or “renewable” cannot be verified.
LLT-e RFP	Eligibility threshold	ORA has previously noted that a 1 MW minimum threshold may admit a large number of small projects whose cumulative environmental impact has not been assessed. The threshold must be accompanied by a requirement that proponents identify any proposed project’s relationship to other projects on the same watershed or river system, to enable assessment of cumulative effects.
AR100 (Access Rights Declaration)	Headpond and inundation zone disclosure	The AR100 form contains no field and no requirement for disclosure of the headpond or inundation zone. This form must be amended to require spatial disclosure of the full hydraulic footprint, including shapefiles or equivalent data, as a mandatory application component. Without this requirement, the access rights assessment is limited to the dam structure and immediate works, concealing the true footprint from the municipality, Indigenous communities, and the public.

IS100 (Evidence of Indigenous Support)	Indigenous consultation trigger	The IS100 form triggers Indigenous consultation requirements only when the project site is located on Indigenous Lands. This is insufficient. The geographic trigger for Indigenous consultation must be the full hydraulic footprint of the project: headpond, inundation zone, drawdown range, and affected reaches, not only the formally designated project site. Where the hydraulic footprint extends into Indigenous traditional territory, free, prior, and informed consent processes must be completed before a contract is awarded.
LLT-e Reserve Price	Reserve price methodology (confidential)	The IESO has confirmed the reserve price will be confidential. ORA calls for the reserve price methodology to be publicly documented, including confirmation that climate-adjusted seasonal hydrology and P50/P10 flow scenarios, not historic averages, were used, even if the price itself remains confidential. Without methodological transparency, there is no way for the public to verify that hydrological risk and declining long-run energy delivery were adequately priced into a 40-year public energy contract.

The ORA thanks the IESO for the opportunity to comment on the Long Lead-Time RFP process. We remain committed to constructive engagement and are available to discuss any of the concerns raised in this submission.

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