Feedback Form

Long-Lead Time RFP – December 18, 2025

Feedback Provided by:

Name: Linda Heron

Title: Chair

Organization: Ontario Rivers Alliance

Email: [redacted]

Date: 15 January 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**
- **X** **YES - Comfortable to publish to the IESO web page**

Following the December 18th 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 LLT 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 January 15, 2026.**

Policy Considerations

Buy Local Policy Provisions

The IESO invites participants to share information to better understand:

> Which project components (including services) do proponents already expect to source within Ontario and/or Canada, and the associated percentage of project costs made up by these components (i.e. what were proponents already planning on doing in Ontario and/or Canada?)
>
> Which project components (including services) could be sourced within Ontario and/or Canada, to the extent proponents were not already planning on using Ontario and/or Canadian components, and the associated percentage of project costs made up by these components (i.e. what could proponents do in Ontario and/or Canada?)

Are there any other considerations the IESO should be aware of?

ORA is not a project proponent and cannot provide a proponent-level cost breakdown. However, we strongly caution against procurement rules that encourage domestic content at the expense of environmental protection and Indigenous rights. Many project components and services can be sourced within Ontario and Canada (engineering, civil works, electrical contracting, transmission interconnection design, geotechnical investigations, environmental consultants, permitting and legal services). These are likely to represent a meaningful portion of total project costs, particularly for infrastructure-heavy projects such as pumped hydro storage and hydroelectric facilities.

ORA Recommendation:

The IESO should require bidders to provide a standardized, verifiable "Canadian content" cost breakdown to *enhance transparency*, not as a substitute for environmental safeguards.

ORA also suggests that the IESO should assume that many proponents will claim significant Canadian content because civil works, site access, foundations, transmission interconnection works, and installation labour are generally local by necessity. However, specialized technology components (turbines, generators, compressors, some LDES equipment, controls, power conversion systems) may be imported.

ORA Recommendations:

1. "Buy Local" provisions must not act as a subsidy for environmentally damaging projects (e.g., small hydro expansion or pumped hydro requiring new impoundments). Buy Local should preferentially support low-impact solutions (storage, DSM, renewables) rather than driving high-impact water infrastructure proposals.
2. We caution that Buy Local procurement messaging can be used to exert political pressure to approve harmful projects under the banner of job creation. The IESO must not weaken environmental standards, consultation requirements, or scientific evaluation in order to secure "local economic benefit" narratives. Ontario's rivers, fisheries, and water quality are long-term public assets — once degraded, they impose long-term social and financial costs that dwarf the short-term benefits of job creation.

LLT Design Considerations

Municipal Support Confirmations

Do you have feedback regarding the IESO's proposal related to the timing of municipal support confirmations and the pre-engagement confirmation notice.

ORA feedback focuses primarily on the **Energy Stream (LLT(e))**, as this stream poses the greatest risk of enabling widespread small-hydro proposals above 1 MW on Ontario's smaller rivers and streams. ORA also provides comments relevant to the **Capacity Stream (LLT(c))**, particularly where contract design features may inadvertently embed long-term ecological liabilities or monetize environmental claims.

ORA cautions that the proposed timing for municipal support confirmations is operationally unrealistic and risks creating rushed, uninformed municipal decision-making. As of January, many LLT RFP documents remain in draft form. Further, the "restricted acts" period (as early as August 21), the October 26, 2026, municipal elections, and Council turnover mean many municipalities will lack stable governance capacity until December 2026 or January 2027. IESO's expectation for Q4 municipal support confirmations is therefore optimistic and may unintentionally incentivize superficial or rushed municipal endorsements rather than meaningful review.

ORA Recommendation:

The IESO require: (1) longer municipal timelines, (2) clear confirmation that supporting information provided to municipal councils is complete and final, and (3) confirmation that any municipal resolution was reached through a public process and not solely through proponent briefings.

Team Member Experience

Do you have feedback on the proposed Team Member Experience requirements?

ORA supports experience requirements that reduce delivery risk and prevent ill-prepared, speculative proponents from entering the procurement process. However, ORA supports requiring two Designated Team Members with demonstrated experience in planning, development, financing, construction and operations. However, we disagree on the number of qualifying projects.

ORA Recommendations:

1. ORA recommends that Designated Team Members have at least **two** qualifying projects that have reached commercial operation in the last 15 years in Canada or the United States.
2. ORA further recommends that under the energy stream, Qualifying Projects must meet the same minimum nameplate capacity threshold as the capacity stream: 10 MW. Allowing 1 MW projects creates a loophole that enables widespread small-hydro proliferation, which would impose outsized ecological harm across Ontario's smaller rivers and streams, the same as the capacity stream. 1 MW capacity hydroelectric projects will be the death knell for many of the small streams. **Read more in my General Comments below**.

3. Experience requirements should ensure that bidders demonstrate the capability to deliver complex projects **without relying on project-type loopholes**. Using very small projects as qualifying experience would reduce procurement integrity and increase the risk of ecological harm by opening eligibility to proponents whose experience is limited to small river systems.

Independent Engineer Report Requirement

Do you have feedback on the proposed Independent Engineer Report Requirement? Specifically, the IESO is seeking feedback regarding key information that should be included in the template that will be provided to streamline review for the Independent Engineer.

ORA supports the Independent Engineer Report requirement to ensure project feasibility and performance over the 40-year term.

The IESO must avoid creating stranded ecological liabilities where private proponents extract long-term revenue while leaving taxpayers with the cost and risk of future dam removal.

ORA supports the Independent Engineer Report requirement to ensure the proposed project meets the expected operational requirements over the 40-year contract term.

We also recommend up-front securities for future dam removal when these hydroelectric dams are no longer viable because of a lack of water.

ORA Recommendation:

The Independent Engineer template should explicitly require:

1. **Hydrology and climate stress testing** demonstrating operational feasibility under plausible future low-flow and drought conditions and extreme precipitation variability.
2. **Sedimentation and reservoir capacity risk analysis**, including effects on performance and emissions.
3. **Lifecycle GHG analysis**, including methane risk pathways (turbine intake/spill, drawdown/peaking impacts, upstream nutrient loading sources (wastewater effluent, agricultural run-off, stormwater) where applicable, since nutrient enrichment and organic carbon inputs can substantially increase methane production in impoundments.
4. **Fish passage objectives.**
5. **Cumulative effects assessment requirement,** including fragmentation effects, where multiple facilities may be proposed across a watershed.
6. **Decommissioning and end-of-life plan**, including physical removal feasibility and ecological restoration, and critically.
7. **Up-front financial securities** adequate for dam removal and restoration when projects become non-viable or are decommissioned.

Early Commercial Operation

Do you have any comments on the information presented related to early commercial operation and potential commercial operation date restrictions that may be introduced to reflect the timing of new transmission infrastructure?

As a reminder, the IESO is currently hosting early deliverability discussions with proponents to inform the approach taken for early commercial operation as well as deliverability assessments as part of the LLT RFP.

ORA supports early deliverability discussions; however, "early commercial operation" must not create incentives to bypass environmental safeguards, cumulative effects evaluation, or meaningful Indigenous consultation. Ontario's emerging climate realities—hydrologic volatility, thermal warming of water, extreme storms, mean infrastructure built quickly but poorly becomes a long-term liability.

ORA Recommendation:

The IESO explicitly require that any early COD pathway confirm: (1) required environmental authorizations are complete, (2) Indigenous consultation obligations have been meaningfully addressed, and (3) major transmission dependencies are credible and not speculative assumptions.

Post-Proposal Applicable Tariffs

Do you have any comments on the information presented on post-proposal applicable tariffs and the provision proposed by the IESO?

ORA Recommendation:

Full transparency and predictability of post-proposal tariffs to avoid procurement outcomes that later shift financial risk to ratepayers. For projects with major transmission or connection impacts, tariff structures must not conceal future public cost exposure. The IESO should ensure that long-term procurement decisions reflect total system cost impacts, including transmission enabling costs.

Mid-Term Extended Outages

As noted during the presentation, the IESO is open to providing more flexibility related to the usage of mid-term extended outages. However, further information is required.

The IESO is seeking the following specific information, which will help inform any updates to this design feature:

> How mid-term extended outages will be used over the term (i.e., what is the nature of the work being performed) and how this differs from other planned outages;
>
> The timing, frequency and duration of mid-term extended outages;
>
> Outage requirements over the term with project specific schedules

ORA supports disciplined outage governance to prevent procurement resources from becoming unreliable capacity. Mid-term extended outages should be limited and clearly defined to major refurbishment events that cannot be addressed through ordinary planned outages.

Outage flexibility must not become a loophole to mask chronic hydrology-related underperformance, especially as drought risk increases.

ORA Recommendations:

1. Hard caps on frequency and duration,
2. Advance notification requirements,
3. Independent verification for eligibility,
4. Reporting and transparency requirements so outages are not used as a loophole for chronic performance issues or hydrology-related unavailability, and
5. It is absolutely essential that someone at the IESO reads Ontario's Climate Change Risk Assessment from front to back.[6]

Must Offer Requirements (Capacity)

Do you have feedback related to Must Offer Requirements?

ORA supports robust must-offer requirements for capacity resources. However, the IESO must recognize that hydroelectric resources are energy-limited and climate-exposed.

ORA Recommendation:

The procurement must not rely on hydro being continuously available in ways that are inconsistent with hydrological reality, particularly as drought risk increases.

Draft RFP and Contract

Do you have additional feedback to share on the draft LLT RFP and Contract?

ORA Recommendations:

1. **Final RFP and contract:** explicitly avoid embedding policy assumptions that characterize hydropower as "clean/non-emitting" or eligible for environmental attributes. The IESO should explicitly exclude any mechanisms that monetize contested environmental claims.
2. **Contract includes:** enforceable safeguards against long-term ecological liabilities, including adequate decommissioning securities for any water-infrastructure projects, and strong requirements for climate stress testing,[6] sedimentation risk analysis, and lifecycle emissions transparency.
3. **Decommissioning security schedule:** security amounts must be indexed to inflation and reviewed every 5 years to ensure adequacy for dam removal and river restoration.

4. **No environmental attributes for hydropower:** the contract must prohibit the sale, transfer, or monetization of "environmental attributes" for any hydroelectric generation or storage relying on river impoundment/alteration.

ORA General Comments:

Small Hydropower is the Death Knell for Small Rivers:

Small hydro is often promoted as "clean", "non-emitting", and "low impact", implying it causes little environmental harm and does not emit greenhouse gases. In practice, that claim is indefensible. Even so-called run-of-river projects still fragment river systems, create an impounded reach, and trap sediments and organic matter, producing and releasing greenhouse gases—particularly methane—from the impounded reach, and at downstream discharge points (turbine, intake, spillway, and downstream of the dam).

This is not theoretical: peer-reviewed research has documented methane release "hot spots" associated with small dams in a temperate European river system, where sedimentation behind six small dams significantly increased freshwater methane flux and methane bubbling ("ebullition"). [1]

This mechanism is straightforward and directly relevant to Ontario because it is driven by conditions commonly created by small hydro and run-of-river impoundments: shallow water that warms easily, sediment and organic matter accumulation, and nutrient enrichment.

Importantly, methane generation occurs largely at the sediment–water interface, meaning **shallower impoundments can emit more methane per unit area** than deeper reservoirs. Where rivers receive elevated nutrient inputs and organic loading—including from wastewater effluent and agricultural runoff—impoundments become biogeochemical "reactors" that intensify anaerobic decomposition and methane formation. In other words, methane risk is not only a "reservoir size" issue but is also strongly driven by site conditions, sedimentation, operating strategies, temperature, and upstream nutrient loading.[2]

With smaller dams and run-of-river impoundments, sedimentation and eutrophication risks become more severe. Reservoirs silting up or becoming nutrient-overloaded are common problems with major reservoirs, but they are at least as serious where shallow water bodies are created, because shallow impoundments become eutrophic more easily and accelerate methane-producing decomposition processes. Shallow nutrient-rich reservoirs can behave like **paddy fields**, where organic decomposition and biomass generation are known to contribute substantially to methane emissions.[3]

It is also critical to recognize that converting a free-flowing river reach into an impounded hydropower site can transform a system that functions as a carbon sink into a net greenhouse gas source, while simultaneously degrading habitat, water quality, and aquatic biodiversity. Ontario's remaining undeveloped rivers are often those most vulnerable to cumulative degradation from multiple small hydro installations. Ignoring the outsized ecological footprint of small hydro risks widespread, permanent harm to the sustainability and biodiversity of Ontario's small rivers and streams.[4]

The daily, seasonal, and annual variations of small hydro operations are intermittent and unreliable. This is because generation peaks during the high flows of spring, when power is in low demand, and produces at its lowest during the hot summer months, when consumption and demand are at their peak. During the low-flow season in summer or during drought conditions, many true run-of-river and

even some peaking (storage) facilities, especially on smaller rivers, cannot operate efficiently and must be shut down.

The **IESO** conducted an analysis to determine the best means of electricity connection to remote First Nation communities and to enable the forecasted growth of the Ring of Fire mining operations in northern Ontario. The analysis concluded that building a true run-of-river facility is often not cost-effective on smaller rivers due to high construction costs and the small amount of power generated by low and unreliable flows.

For instance, the Ontario Power Authority found **efficiency to be as low as 15 to 30%** of Installed Capacity. "*Northern hydroelectric generation is an energy-limited resource known to have significantly reduced output and availability during drought conditions of the river system supplying these generating units. In fact, the recommendation in their report was not to build any new hydroelectric facilities, but rather to construct* new transmission lines.[5]

In Ontario, many of the remaining undeveloped rivers are precisely those most vulnerable to unreliable power generation and cumulative degradation from small-scale hydroelectric installations.

Finally, Ontario's **Provincial Climate Change Impact Assessment (2023)** concludes that climate change will increasingly disrupt water availability, water quality, and infrastructure performance, with **extreme precipitation identified as the greatest driver of risk to electrical infrastructure.**[6] It's time for someone at IESO to read this document as these findings directly undermine assumptions that hydropower represents a stable, long-term climate solution for northern watersheds.

"Environmental Attributes":

ORA cautions that continuing to procure hydropower projects while presenting hydropower as "non-emitting", such as in **Energy for Generations and IESO's own documentation**, despite repeated submissions of credible scientific evidence regarding reservoir methane emissions, peaking impacts, lack of fish passage, and river ecosystem degradation—creates foreseeable and preventable climate and biodiversity harm and increases long-term governance, reputational, and liability exposure.

The creation of contractual mechanisms to monetize "environmental attributes" further elevates risk by embedding and financially rewarding claims that are scientifically disputed and increasingly recognized as greenwashing. Environmental attributes should not be granted to resources that impose net climate forcing and long-term harm to aquatic ecosystems. The IESO should not design procurement rules that institutionalize misleading environmental claims or create future financial incentives to protect false narratives.

Linda Heron, Chair
Ontario Rivers Alliance.

---

[1] Maeck, A., DelSontro, T., McGinnis, D.F, Fischer, H., Flury, S., Schmidt, M., Fietzek, P. and Lorke, A., 2013. Sediment Trapping by Dams Creates Methane Emission Hot Spots, Environmental Science and Technology, 8130-8137, Online: http://www.dx.doi.org/10.1021/es4003907

[2] *Junjie Wang, Lauriane Vilmin, José M. Mogollón, Arthur H. W. Beusen, Wim J. van Hoek, Xiaochen Liu, Philip A. Pika, Jack J. Middelburg, and Alexander F. Bouwman, Inland Waters Increasingly Produce and Emit Nitrous*

Online: https://pubs.acs.org/doi/pdf/10.1021/acs.est.3c04230?ref=article_openPDF

[3] *Abbasi, T. and Abbasi, S.A. 2011b. Small hydro could add up to big damage. SciDev.Net 20/06/11. Online: http://www.scidev.net/global/water/opinion/small-hydro-could-add-up-to-big-damage-1.html*

[4] *St. Louis, V.L., Kelly, C.A., Duchemin, E., Rudd, J.W.M., Rosenberg, D.M. 2000. Reservoir Surfaces as sources of greenhouse gases to the atmosphere: a global estimate. BioScience 50(9): 766-775. Online: https://academic.oup.com/bioscience/article/50/9/766/269391*

[5] *North of Dryden Integrated Regional Resource Plan – January 27, 2015, by OPA/IESO. P-56 & 124. Online: http://www.noma.on.ca/upload/documents/north-of-dryden-report-2015-01-27.pdf*

[6] *Ontario Provincial Climate Change Impact Assessment, Technical Report, January 2023. Online: https://www.ontario.ca/files/2023-11/mecp-ontario-provincial-climate-change-impact-assessment-en-2023-11-21.pdf*