

# Feedback Form

## Long-Term 2 RFP – December 13, 2023

### Feedback Provided by:

Name: Ontario Rivers Alliance

Title: Click or tap here to enter text.

Organization: Click or tap here to enter text.

Email: Click or tap here to enter text.

Date: Click or tap here to enter text.

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

Following the LT2 RFP engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on specific items discussed during the webinar. The webinar presentation and recording can be accessed from the [engagement web page](#).

**Please submit feedback to <mailto:engagement@ieso.ca>** by January 15, 2024. If you wish to provide confidential feedback, please mark "Confidential". Feedback that is not marked "Confidential" will be posted on the engagement webpage.

## Resource Adequacy Framework and Cadenced Procurement Approach

Topic	Feedback
<p>Do you have any comments or concerns regarding the cadenced nature between upcoming LT and MT RFPs?</p>	<p>IESO's prediction regarding electric vehicles creating such a huge surge in electricity demand seems overly optimistic. Green hydrogen innovation and fuel cell vehicles powered by hydrogen are making huge technological inroads into the clean energy discussion. Hydrogen-fueled cars are already being developed by several manufacturers and will be much more suitable for long-distance travelling and colder temperatures in northern Ontario. By 2030 it and other technologies will have made huge advances.</p> <p>In ORA's opinion, the projections for electricity demand over the next decade or more are overblown in the assumption that electric vehicles will dominate the market. The technology is just not there for colder climates. It also does not take into account any future technological breakthroughs in other new forms of power generation.</p>
<p>Do you have any comments or concerns regarding the proposed offering of both capacity style and new revenue model style of contracts, based on resource eligibility requirements and system needs?</p>	<p>Uncertain.</p>
<p>Do you have any concerns regarding the proposed target setting approach for upcoming MT RFPs?</p>	<p>IESO is moving too fast with overblown projections in its target setting approach.</p>
<p>Do you have any comments regarding how best to employ bridging and extensions to contracts to facilitate the success of the Resource Adequacy Framework?</p>	<p>No.</p>

LT2 RFP Resource Eligibility and Timelines  
Do you have any general feedback on resource eligibility and timelines?

If the IESO includes hydroelectric as a non-emitting resource in the RFP it is disregarding its own rule and misleading the public.

It is deceptive to claim that hydroelectric is “non-emitting” in the LT2 RFP, and it could be considered fraudulent, especially if Clean Electricity Credits are sold based on that deception.

The hydropower industry, as well as all levels of government, have continued to ignore the extensive body of independent peer-reviewed research compiled over the last 3 decades, indicating that hydroelectric reservoirs contribute significant and ongoing GHG emissions that will have long-lasting implications on our ability to achieve our GHG emission reduction goals. Hydroelectric reservoirs contribute approximately 5 to 7% of global greenhouse gas emissions, yet, the industry and governments have the audacity to label it as “non-emitting” or “low-emitting” or “clean”. It is clearly an attempt to trick the public into believing they will be cutting GHG emissions, when in fact, it is the very opposite. It is willful blindness to ignore the huge body of evidence to the contrary. Their fallback excuse is always the Hydro Quebec studies that have continually downplayed the GHG emissions, methylmercury and water quality impacts from hydro reservoirs.

The Intergovernmental Panel on Climate Change in its 2019 Refinement of the 2006 Guidelines for National Greenhouse Gas Inventories, informs that carbon dioxide, methane and nitrous oxide emissions coming from flooded lands, including hydroelectric reservoirs, can be significant.

In addition, proponents often boast that hydroelectric facilities can remain in service for 100 years or more. That may be attractive to an investor and the IESO, but it means the facility will continue to emit significant amounts of carbon, methane and nitrous oxide for 100 years or more. As temperatures rise, so will GHG emissions and stream degradation.

For instance, OPG recently announced its plans to reconstruct the Kakabeka Falls Generating Station which is already 117 years old. So, it will soon contribute another century’s worth of carbon and methane when it is vital that we cut GHG emissions, and it is doubtful that OPG will

	<p>remove all the accumulated sediment that has built up behind the dam over the last 117 years.</p> <p>You can turn off a gas-fired facility when a cleaner form of electricity comes along; however, a hydroelectric reservoir will continue to emit methane until the dam is removed. You cannot just turn off emissions coming from its reservoir when biomass will continue to build up behind the dam.</p> <p>Upfront dam decommissioning funds for these facilities are not required by the province, and dam removal has proven to be cost-prohibitive as it can add up to \$millions.</p> <p>Consequently, hydroelectric reservoirs cannot be considered “non-emitting” or “low-emitting” or “clean”, and should not be allowed to sell Clean Electricity Credits unless the GHG emissions are monitored, measured, and the data reported publicly to demonstrate they are non-emitting.</p> <p>Most importantly, it is the responsibility of the government to take meaningful action to protect the future of its citizens, to be transparent and truthful, and to act in the best interests of the global community. (More detail in our full submission.)</p>
<p>If the potential of repowering an existing facility applies to you, would you be interested in exploring this option further?</p>	<p>Not applicable.</p>
<p>How should the optimal threshold for what constitutes a partial or fully repowered facility be determined and what considerations should be taken into account regarding the repowering of different resource types?</p>	<p>Unsure.</p>
<p>What considerations should be taken into account for new-build DERs?</p>	<p>Not applicable.</p>
<p>Please express any interest and opportunities for uprates and/or expansions at any of your existing facilities.</p>	<p>Not applicable</p>

## LT2 RFP Design Considerations – System Congestion and Deliverability Approach

Topic	Feedback
What early system congestion information do proponents need to guide them in choosing the location of their projects and when is this needed by within the procurement cycle?	Not applicable.

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<p>Do you have any general suggestions for how to approach deliverability evaluation in the LT2 RFP?</p>	<p>As the climate continues to warm, smaller hydroelectric facilities cannot be relied upon to deliver power on demand, and it will likely necessitate other forms of backup power.</p> <p>There have been numerous reports of extended droughts causing reduced hydroelectric generation, and municipalities and cities having to rely on natural gas, coal and diesel to fill the gap. There have also been a number of accounts of rivers and lakes going dry.</p> <p>It is crucial to consider that future environmental and socio-economic costs and uses of hydropower will rely on water availability and must be accurately understood to inform decision-makers in these uncertain times. The authors of a new study say that although observations in the St. Lawrence Basin had previously suggested snowpack trends were small, study results show that human-caused climate change was responsible for a 7% drop in March snowpack per decade over 40 years.</p> <p>Installed capacity means very little with run-of-river hydroelectric, because the daily, seasonal, and annual variations of run-of-river or 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 most heightened. During the low flow season of 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.</p> <p>IESO’s own documentation indicates that run-of-river efficiency is only 18 to 30% of Installed Capacity. Small hydropower likely isn’t much better, and as the climate warms further, efficiencies will be even worse. Once storage capacity is required, these facilities become methane factories until they are removed.</p>

## LT2 RFP Design Considerations – General Feedback

Topic	Feedback
Do you have any comments regarding the impacts that agricultural land-use limitations may have on project development?	All aspects of a proposed project must be weighed against the ecosystem services that will be gained or lost.
Do you have any comments regarding what evaluation criteria can be utilized to evaluate project readiness, given tight timelines and reliability needs?	No.
Do you have input on the proposed mechanism for valuing Indigenous participation?	<p>Indigenous communities must be properly consulted and fully informed of the benefits as well as the trade-offs of a project.</p> <p>If a reservoir is to be built the community needs to know that methylmercury contamination of fish could effect their main food source for decades. Also that the reservoir will generate carbon and methane for the full life-cycle of the dam.</p> <p>Indigenous participation and engagement must be robust, truthful and the project must receive full consent of the impacted communities.</p>

Are there any other rated criteria that should be considered?

Open, transparent and accountable communications.

The negative impacts of a proposed project should be a key factor to be considered in the trade-offs of a new hydroelectric project, such as cumulative effects, environmental sustainability, GHG emissions, water quality and ecological degradation, methylmercury accumulation in fish, and how that will impact on Indigenous communities that rely on fish as a main staple in their diet.

Hydroelectric facilities will last for 100 years or more, so it is essential that full life-cycle costs associated with any new projects are carefully assessed.

It is crucial to consider that future environmental and socio-economic costs and uses of hydropower will rely on water availability and must be accurately understood to inform decision-makers in these uncertain times. There have been numerous reports of extended droughts causing reduced hydroelectric generation, and municipalities and cities having to rely on natural gas, coal and diesel to fill the gap.

Decommissioning involves millions of dollars and is likely to be necessary sooner than expected. Rivers will be severely impacted as climate change progresses, and it is already happening in many regions of North America where rivers are drying up or not having enough flow to turn the turbines.

Significant ecological damage from waterpower has been ongoing for many decades in Ontario and other locations worldwide. In fact, in Ontario dams are considered to be a major factor in the extirpation of Ontario's Atlantic Salmon stock<sup>i</sup>, one of the most important causes of significant anthropogenic mortalities and decline of Ontario's American Eel, and a key threat to Ontario's declining Lake Sturgeon populations.

In addition, the hydropower industry has also been extremely negligent in protecting fish species, as there are a total of 224 hydroelectric facilities in Ontario, including 66 owned by Ontario Power Generation, and only 2 are fitted with operating fishways.

This provincial government has demonstrated its lack of care and consideration for the environment and stakeholders in the gutting of the Environmental



Topic	Feedback
	<p>Assessment Act; and the Ontario Waterpower Association has shown the same disregard by removing the assurance that the public and stakeholders will be consulted in all new and upgraded hydroelectric proposals in the Class EA for Waterpower.</p> <p><b>ORA recommends:</b></p> <ol style="list-style-type: none"> <li>1. No new hydroelectric development in Ontario.</li> <li>2. Hydroelectric facilities wear the appropriate label of a significant GHG emitter.</li> <li>3. Any new or upgraded hydroelectric facilities be required to provide Financial Assurance by securing sufficient funds up-front with the province to cover future dam decommissioning.</li> </ol>

## Long Lead Time Resources

Topic	Feedback
Does the proposed approach to enabling long-lead time resources enable meaningful participation or sufficient certainty?	Unsure.
What additional considerations should the IESO contemplate for enabling broader participation from long-lead time resources?	Open, transparent and accountable communications. Stakeholder and community consultation must be robust and meaningful.

## Revenue Model

Topic	Feedback
As a potential proponent, are you generally supportive of the proposed Enhanced PPA revenue model? Are there any other considerations that the IESO should look into further with regards to the revenue model?	Not applicable.

## General Comments/Feedback

See ORA's covering submission dated 15 January 2024.

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<sup>i</sup> Ontario Ministry of Natural Resources 2013. Restoration of Atlantic Salmon to Lake Ontario: past, present and future.