

# Feedback Form

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

### Feedback Provided by:

Name: Denise Heckbert

Title: Supervisor, Strategy & Market Policy, Power

Organization: Enbridge Inc.

Date: January 15, 2024

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>Enbridge generally supports IESO's proposed cadenced approach to procurements. We agree that having additional visibility into upcoming procurements can help with planning and engagement.</p> <p>We recommend that IESO provide as much detail about future procurements as possible, as far in advance as possible, e.g., type of product to be procured, size of procurement, anticipated geographical or technical limitations. In the absence of this information, the benefits of the cadenced approach would not be fully realized.</p> <p>We understand that there may be some nuanced changes to the future RFPs and that IESO's flexibility to make such changes is one of the benefits of this approach, but we recommend that IESO adhere as closely as possible to what it proposes, particularly with respect to procurement type (energy or capacity) and any geographical considerations. The view into the future is helpful for planning and development investment only where the information on upcoming procurements can be reasonably relied upon.</p>

Topic	Feedback
<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><u>Mid-Term RFPs</u>  We support IESO offering capacity and non-capacity-style contracts under the mid-term RFPs to enable a mix of mid-term suppliers. We suggest RFPs target specific products from generation sources like Energy or Capacity through separate procurement processes. This would allow developers to target projects that meet the IESO needs by clearly understanding what requirements are being met. We recommend that IESO provide detail on which RFPs will be offering which contracts, e.g., capacity vs energy, as soon as possible to enable planning.</p> <p><u>Long-Term 2 RFP</u>  We support IESO offering both capacity style and new revenue model style of contracts under this Long-Term 2 RFP insofar as the processes are bifurcated. For example, if IESO requires additional capacity following the LT1 RFP, we would support it having a separate RFP process with its own proposal evaluation process to procure additional capacity.</p> <p>We do not support IESO allowing LT2 proponents to bid different combinations of the new revenue model and capacity under a single combined LT2 RFP process. It would not be possible to fairly compare new revenue model proposals that include or do not include capacity elements and/or to compare those with capacity-only proposals.</p> <p>LT2 should focus solely on the new revenue model, and IESO could hold a separate capacity-only procurement alongside LT2 if necessary.</p>

Topic	Feedback
<p>Do you have any concerns regarding the proposed target setting approach for upcoming MT RFPs?</p>	<p>Enbridge agrees that it is reasonable to adjust the mid-term RFP targets based on the results of the long-term RFPs.</p> <p>However, it is not clear why IESO would exclude certain existing resources from participating in the mid-term RFP. Presumably, IESO will be able to determine, based on its own planning, the results of the long-term RFPs, and the annual capacity auction results, what installed capacity it requires under the mid-term RFP. This value should be the cap sought under the mid-term RFP, even if it exceeds the installed capacity of eligible resources.</p> <p>For example, assuming “eligible resources” is based on the existing resources coming off contract in a particular period of time, IESO should not assume that would represent the interested pool of participants. There may be other resources that would be willing to come off contract sooner in order to participate, resources could be uprated to participate, and/or there may be resources that have been participating in annual capacity auctions that may wish to participate. These other participants will help ensure the process is competitive and/or IESO could adopt other mechanisms to encourage competition.</p> <p>IESO should base the target on its needs and asset owners can respond based on what is best for their portfolio of assets.</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>We generally support the concept of bridging where an asset owner wins a long- or mid-term contract, for which the new contract will take effect a reasonable period of time (to be subject to consultation) after their existing contract expires. This could be easily done by extending the existing contract, or by starting the new contract sooner, to cover the period in question.</p>

## LT2 RFP Resource Eligibility and Timelines

Topic	Feedback
Do you have any general feedback on resource eligibility and timelines?	<p data-bbox="743 226 1495 302">Enbridge generally supports IESO’s proposal to allow new and repowered projects to participate in this RFP.</p> <p data-bbox="743 348 1495 617">We request more detail on what IESO considers “long-lead” facilities and how their flexibility in later milestone dates for COD would work under the procurement evaluation and contract. It may be best to bifurcate those resources into their own RFP or it may make sense to include them in the larger competition depending on that additional detail.</p> <p data-bbox="743 663 1511 1058">We further recommend that, while IESO should only purchase energy under this RFP (e.g., as opposed to energy and capacity), participants interested in bidding in a hybrid project (electricity and battery energy storage) should be able to do so. This would only represent a single contract with a single meter and connection to the grid, under the energy-only revenue model, but participants should have the flexibility to design their non-emitting new or repowered projects as best works for their operations and proposal.</p>
If the potential of repowering an existing facility applies to you, would you be interested in exploring this option further?	

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?

IESO established the long-term procurement process to help capital intensive projects, like new builds, to recover the upfront cost of construction. We fully support IESO's inclusion of repowered projects in its proposed eligibility for participation in the long-term procurements as repowered projects have very similar capital requirements to new builds and need the longer-term contract period to recover the investment while keeping bid prices competitive for the benefit of ratepayers.

#### Fully/Partially Repowered

We recommend that there be no difference in IESO's consideration of repowered or partially repowered under this RFP. Repowering a project could involve completely removing wind turbines and certain access roads from a site and designing a new site with fewer, much larger wind turbines on the site. Or, it could include removing the blades and replacing them with new ones on the same towers at the same turbine site and access road. In both cases, the site has been repowered and the costs would be substantial enough to require a period of more than 5-7 years (the mid-term RFP term) to recover the costs.

In most other jurisdictions, determining whether project changes constitute upgrades is based on spending or replacing the highest cost project components. This is because cost-recovery is the driving reason behind tax incentives and/or longer-term contracts. We recommend that a threshold be established that does not drive unnecessary upgrades (and related costs for ratepayers) but that does ensure that existing assets that intend only to undertake minor repairs and that could recover those costs during the term of a mid-term RFP are appropriately incentivized to participate in those processes.

For example, if a wind project were to replace generators in all its turbines or a solar project were to replace the racking, those costs could not likely be recovered during the term of a mid-term RFP. This consultation spanned the holiday break, so we are in the process of evaluating a specific threshold that could work for this, based on project economics, and we recommend that IESO put this question to stakeholders in the next round of feedback so that all stakeholders can suggest a reasonable threshold.

Topic	Feedback
	<p data-bbox="743 205 976 239"><u>Installed Capacity</u></p> <p data-bbox="743 247 1511 596">We very strongly recommend against using installed capacity or bid MWhs measurements in any way when defining “repowered projects” under this RFP. Ontario’s grid has very limited capacity to deliver additional generation at many locations on the grid. It may be that a project located in Lambton County, for example, could be built to three times its current installed MW size but not deliver one more MWh than it is currently delivering due to grid constraints.</p> <p data-bbox="743 642 1511 1073">Similarly, each new wind turbine can produce more power than each older turbine due to the newer models’ increased size but they also require more land between them. So, fully repowered wind projects will be more efficient with respect to operating costs and land use, e.g., a 90 MW project may have required 60 turbines before (1.5 MW machines) and may only require 15 turbines now (6 MW machines). However, these new 6 MW machines need to be spread farther apart and, therefore, may only be able to produce the same amount of power on the fixed acreage available.</p> <p data-bbox="743 1119 1511 1350">IESO could inadvertently prevent some or all of Ontario’s existing resources’ from participating in this LT2 RFP if it imposes capacity increase requirements on repowered projects. We strongly recommend it remove this requirement – or any installed capacity-based requirement – from this RFP.</p>
<p data-bbox="181 1392 727 1465">What considerations should be taken into account for new-build DERs?</p>	
<p data-bbox="181 1507 727 1659">Please express any interest and opportunities for uprates and/or expansions at any of your existing facilities.</p>	

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

Topic	Feedback
<p>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?</p>	<p>Ontario is one of the most challenging regions in North America in which to source reliable transmission constraint information, which make focusing development efforts unusually risky. This risk could and should be minimized, which would result in additional projects submitted under this LT2 RFP and future procurements, if IESO were to provide some basic information that has previously been available in Ontario and/or that other jurisdictions make available. These include:</p> <ul style="list-style-type: none"> <li>- Basic “go” and “no-go” regions on IESO’s distribution system. For example, on a map, are there areas or lines that are consistently congested and where developers should be wary of building.</li> <li>- Time and frequency of congestion on a transmission line-by-line and station basis.</li> <li>- Nodal constraints or considerations.</li> <li>- Tat-and-dat tables</li> <li>- Map of known transmission (line and station) expansion and/or upgrade projects and anticipated in-service dates.</li> <li>- Hourly (at minimum) or in five-minute increments, details of the generation resource mix dispatched on the grid by LMP.</li> </ul> <p>This information should be available no later than March 2024 and should be updated annually at a minimum, ideally quarterly. IESO will be required to make this information available in order to comply with CER, Hydrogen tax rules, and to compete with other jurisdictions for load and generation, e.g., in support of hourly time-matching, so the investment of time and resources in releasing this data will be justified for ratepayers and market participants, and for IESO and the Province.</p>



Topic	Feedback
Do you have any general suggestions for how to approach deliverability evaluation in the LT2 RFP?	<p>If the information above is made available, the deliverability evaluation should consist only of ensuring that none of the short-listed projects are located in the “no-go” geographical areas, or on “no-go” transmission lines as identified by IESO, ideally in March 2024.</p> <p>Insofar as the project is located outside these prohibited areas and/or is not relying on prohibited transmission lines, IESO does not need to evaluate whether or to what degree the project is deliverable. The participant will have reviewed the data above and priced its project, factoring in the information available. IESO does not need to repeat this process during evaluation.</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?	<p>Enbridge understands the importance of maintaining productive agricultural land in Ontario for food security and to maintain a healthy agricultural sector. When siting our projects we factor this into our design.</p> <p>For example, wind turbines only require about .23 acres per turbine, representing a minimal impact to existing agricultural operations. Most of our wind projects in Canada and the United States are colocated with farming activities, with the wind revenue supplementing the farmers’ income. Even on Class 1 agricultural land, design considerations like avoiding irrigation systems, locating on corners where possible, and others to be negotiated with the landowner, can limit impacts to the operating farm.</p> <p>Solar is a light-duty land use and the land these projects rest on can be returned to productive agricultural land at the end of the project life.</p> <p>Instead of absolute restrictions on broad classifications of land, which may prevent development of generation resources near transmission lines and/or load and could</p>

Topic	Feedback
	<p>restrict landowners’ ability to earn revenue on their own land, we recommend that IESO and/or the Ministry provide guidelines on development on agricultural land, detailed by technology type. During the permitting process, developers can then outline how they avoided the land, or why they couldn’t and what mitigating measures they’ve adopted, depending on generation technology. This would be consistent with the approach today for noise, light, and environmental impacts in place today.</p>
<p>Do you have any comments regarding what evaluation criteria can be utilized to evaluate project readiness, given tight timelines and reliability needs?</p>	<p><u>Financial capability</u>  We recommend that IESO require submission of details similar to what it required in the Long-term 1 RFQ process outlining financial capabilities and team experience, perhaps on a simplified basis.</p> <p>We do not agree that a “significant proposal security” would necessarily root out those without the financial wherewithal to participate and it would increase the financial risk for all bidders. (A security along the lines of the LT1 process would be acceptable.)</p> <p><u>Municipal support</u>  IESO is planning to collect bids under this RFP this year. Developers do not have the following information:</p> <ul style="list-style-type: none"> <li>- “go” and “no-go” regions</li> <li>- Congestion info</li> <li>- Revenue model</li> <li>- Preferred regions of development, if any</li> <li>- Whether development on crown land will be possible</li> <li>- Size of projects desired</li> </ul> <p>It does not appear likely that developers will have the information above until at least March 2024. We will then require time, even where projects have complete preliminary studies and resource measurement work and secured land, to consult on the project with specific installed capacity, technology, and general site design information.</p>

Enbridge recommends that developers and Municipalities and communities alike be provided the opportunity to hold the consultation processes required before Municipal Support is provided. We strongly recommend that Municipal Support be a rated criteria, as in ELT1 and LT1, as the timing between direction from IESO and bid date is the same as under those two processes.

IESO's proposal to include it as a mandatory criteria will artificially exclude projects, reducing competition under this RFP, and to no benefit given the five-year development window between contract award and mandatory COD. Participants are likely to have a reasonably good understanding of the likelihood of such Municipal Support at the time of bid as they will be risking the Proposal Security but there is no benefit to ratepayers or IESO in having all the Municipal Support complete by the end of 2024 when the project does need to enter operation until May 2030.

#### Indigenous Economic Participation

Enbridge recommends that Indigenous Economic Participation be included as an adder after contract award as opposed to a rated criteria point pre-contract award. As we have noted under previous consultations and as we understand multiple Indigenous communities put forward at IESO's Indigenous partners conference, there are nuances in tax incentives that are not and will not be defined until 2025 that make entering a binding agreement this year that will remain in place through 2050 very challenging.

In addition, the same timing constraints listed above exist for Indigenous Economic partnerships, e.g., there may not be very defined project sizes, locations, or revenue models to share at this time, to enable Indigenous Partners to fully evaluate and consider proposals from the large number of participants reaching out to them.

If the rated criteria points were instead applied as price adders, participants could sign LOIs with potential partners and could bid their price assuming the deal would subsequently be closed. In this way, Indigenous Partners could hold detailed discussions with winning proponents,

Topic	Feedback
	based on concrete financial details and economic partnerships would have the flexibility to structure their partnership as best suited their needs.
Do you have input on the proposed mechanism for valuing Indigenous participation?	
Are there any other rated criteria that should be considered?	

## Long Lead Time Resources

Topic	Feedback
Does the proposed approach to enabling long-lead time resources enable meaningful participation or sufficient certainty?	
What additional considerations should the IESO contemplate for enabling broader participation from long-lead time resources?	

## 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?	Enbridge agrees with Power Advisory's concerns (in its January 15 <sup>th</sup> 2024 comments) regarding the potential mismatch between using an annual figure for deemed production and the monthly settlement mechanism, and regarding the significant curtailment risk IESO has left unaddressed in the proposed revenue model. We agree that it is very difficult to estimate potential curtailment in the next few years, especially considering the large number of procurements planned, the lack of existing transmission detail, and the pending MRP implementation. It is impossible to estimate for the period of 2030-2050.

This is made especially difficult given the bilateral contracts IESO has indicated that it plans to continue signing throughout the province. Bilateral contracts can often represent large projects that can have a significant impact on the local grid, and these are in IESO's control.

As policy, grid management, transmission expansions and upgrades, and bilateral contracts that could impact curtailment are in IESO's control, it is reasonable that curtailment risk would also be primarily IESO's responsibility. It will also help send signals to IESO of where to avoid procuring generation in future procurements and/or where to build new transmission if IESO is responsible for curtailment impacts.

As a result, Enbridge recommends that IESO add a curtailment cap to the proposed revenue model. For example, the first 200 hours of curtailment are the operator's responsibility and would not be compensated, but any curtailment beyond that would be paid as if dispatched.

---

## General Comments/Feedback

Enbridge appreciates IESO's preparation of a clear, cadenced procurement roadmap for the next five years. This is a significant improvement in aiding planning and investment in the province and could be even more effective if additional detail about technology, geography, and revenue model are made available as soon as possible for each procurement.

We also appreciate IESO's questions regarding information needed to develop projects likely to support the energy needs in a meaningful way. The sooner this detailed information can be made available to developers, the better proposals IESO will receive under this LT2 RFP and future procurements.

We fully support the inclusion of repowered projects as eligible to participate alongside new builds under this LT2 RFP, and under future long-term procurements, and the option of existing and non-repowered facilities to participate under energy-only mid-term procurements. This is exactly the type of flexibility developers need to make plans for their existing assets, while also balancing the flexibility IESO needs to manage the grid in a somewhat uncertain future. We reiterate that the more info IESO can provide on which mid-term procurements will be focused on energy-only, the better, as we are already making maintenance investment decisions that will determine the ability of existing assets to participate in future mid-term RFPs.

Finally, we understand that IESO is looking to establish a balance between proponents taking on risk related to the market, energy prices and curtailment, and IESO helping to mitigate that risk in its

proposed revenue model. The key challenge is that curtailment risk is almost entirely in IESO's control via the projects it selects in future procurements, the transmission upgrade/expansion work it recommends, and the bilateral contracts it signs. Proponents have no ability to predict or manage this risk, so IESO must provide some means of mitigating the curtailment risk in its revenue model or else prices bid will be unnecessarily high, which will negatively impact ratepayers. There are models IESO has used, procurements in Saskatchewan and Quebec have included such provisions, and even open markets like Alberta have capped curtailment. For example, asset operators may bear uncompensated responsibility for the first X-number of hours and IESO would compensate those operators for curtailment beyond that cap. We recommend a model like this be established under this procurement.

We look forward to further participating in IESO's consultations on the LT2 RFP and future long- and mid-term procurements in the coming weeks.