

Feedback Form

Long-Term 2 RFP – December 13, 2023

Feedback Provided by:

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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
Do you have any comments or concerns regarding the cadenced nature between upcoming LT and MT RFPs?	Potentia is very supportive of cadenced procurements. A line of sight on future procurements will increase investor confidence in the Ontario energy industry.
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>Wind and solar facilities can provide both capacity and energy. Therefore, both styles of contracts could be beneficial; however, it would be helpful to know how the IESO would evaluate projects that provide capacity vs. energy.</p> <p>Potentia has provided additional input on the proposed revenue model in the Revenue Model section below.</p>
Do you have any concerns regarding the proposed target setting approach for upcoming MT RFPs?	We do not have any concerns regarding the proposed target setting approach for upcoming MT RFPs.
Do you have any comments regarding how best to employ bridging and extensions to contracts to facilitate the success of the Resource Adequacy Framework?	

LT2 RFP Resource Eligibility and Timelines

Topic	Feedback
Do you have any general feedback on resource eligibility and timelines?	The IESO should ensure that wind and solar projects paired with energy storage (hybrid projects) are able to participate in LT2.
If the potential of repowering an existing facility applies to you, would you be interested in exploring this option further?	

Topic	Feedback
<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>Potentia supports the repowering of existing renewable energy facilities. Potentia supports CanREA’s comments that all existing facilities be eligible to participate in future procurements if they meet minimum operational requirements set by the IESO (in consultation with industry).</p>
<p>What considerations should be taken into account for new-build DERs?</p>	<p>DERs could be a part of Ontario’s resource mix going forward. We support frameworks and approaches that allow DERs to participate in the Market.</p>
<p>Please express any interest and opportunities for uprates and/or expansions at any of your existing facilities.</p>	<p>Potentia is interested in exploring future opportunities for uprates and expansions at existing facilities. Uprates or expansions of existing facilities can help the IESO meet resource adequacy targets utilizing assets that already have support from landowners and communities at affordable prices for ratepayers.</p>

LT2 RFP Design Considerations – System Congestion and Deliverability Approach

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?

Potentia is concerned that the proposed revenue model appears to shift the congestion (curtailment risk) to IPPs, and proponents need to be able to quantify that risk to mitigate it. It will be very difficult for the IESO to provide sufficient information to proponents on future curtailment through the life of the LT2 contract (~2030-2050).

To understand curtailment due to a lack of transmission capacity, proponents need to understand how the IESO is going to allocate that capacity. As Potentia understands the current process, the IESO allocates capacity on a zero congestion basis under normal operation. Any curtailment due to lack of transmission capacity would only happen in contingency scenarios. That's a risk that neither party can predict well, although the transmitters in the province best control it by maintaining their infrastructure – often based on IESO support around need. If the IESO is considering changing how transmission is allocated and creating a situation where in certain "normal" conditions there is insufficient transmission capacity, then proponents would need extensive information to understand the new framework for capacity allocation, anticipated resource mix in given transmission zones, etc...

To model curtailment due to economics where projects are dispatched due to overproduction/lack of demand, proponents need to understand the nature of the supply stack in the future node/zone of the project location, and how the IESO will dispatch projects when the marginal MW price is zero and there is still oversupply. Proponents will also need to understand what other projects will be in that area, whether non-zero-bid projects (e.g. thermal, batteries) will have out of market payments that may result in them bidding zero or negative pricing as well.

The proposed model seems to assume that proponents can maximize revenue from the energy market. Given that Ontario still has not fully implemented the Market Renewal Program, there isn't sufficient information available to predict with any certainty where market prices will be in 2030. Without being able to quantify risk, proponents will be unable to mitigate it and lenders will not finance it. Potentia has provided further comments on the revenue model in the Revenue Model section below.

Potentia recommends that the IESO provide information on how the IESO will allocate transmission capacity. They should also provide very specific details on the time and frequency of congestion on the grid. The IESO should also provide an outline of MWs available by zone along with any zonal curtailment caps or ranges that they are considering. It would also be helpful to know how the IESO will dispatch competing resources that both bid into the market at \$0.

For solar projects, this information is needed at least 12-months prior to bidding, while wind would require a longer timeline ~18-months given the additional complexity.

There also needs to be a mechanism to cap a proponent's exposure to congestion if the IESO's stated congestion level is exceeded or more projects come online after a project is operational. If a proponent has no control over the amount of congestion a project will face over the life of the contract, it will be difficult to mitigate and impossible to finance.

Potentia also supports CanREA's request for the public release of an Ontario map that includes red areas and/or green prioritized areas.

Do you have any general suggestions for how to approach deliverability evaluation in the LT2 RFP?

Deliverability really is attempting to assess two things:
1) Is the project able to be permitted and built within the required time frame, and does the proponent have the capability to execute on these tasks?

2) Is the electrical system able to accept the power from the project?

On 1, the IESO should continue to look at the experience of the Proponent, the work that has been done to date (e.g. community consultation, indigenous consultation), and require substantial security to ensure that Proponents accurately assess the delivery risk.

On 2, as discussed above when discussing congestion, the IESO needs to clarify the assumptions that will be made regarding transmission capacity during normal operation of the grid. Is the IESO assuming that a normally functioning grid will be able to accept 100% of the output of LT2 projects? Potentia suggests that this should be the assumption and that the IESO should commit to maintaining that ability. If it is not, then proponents are unable to accurately assess congestion/curtailment risk.

Potentia would like to restate that curtailment risk should be held by the IESO, or at the very least, shared between the IESO and proponents. The power system will change considerably over the next several years due to a number of factors including MRP implementation, the CER and increased electrification etc... How and when the grid changes will largely be determined by policy makers in government, not IPPs. With little ability to impact future changes to the market, it is difficult for proponents to mitigate curtailment risk.

LT2 RFP Design Considerations – General Feedback

Topic	Feedback
<p>Do you have any comments regarding the impacts that agricultural land-use limitations may have on project development?</p>	<p>The IESO has identified the need for 5000 MWs of new generation by the early 2030's. This will be difficult to achieve if further restrictions are placed on land use. There are already considerable restraints placed on project siting due to restrictions on prime agricultural land, environmental impacts, and noise. To add further restrictions would risk sterilizing the landscape for future projects. If the IESO must introduce further restrictions, it needs to be communicated to proponents as soon as possible so that more work can be done to find suitable project areas.</p> <p>Further, wind and solar have different footprints and should be considered separately. For example, agriculture practices can continue virtually unimpacted on land used for wind facilities, the two are not incompatible. Wind can also provide a steady revenue stream for agricultural producers to allow them to continue to farm the land.</p> <p>Battery energy storage systems and solar projects have more impact on agriculture than wind (although some agriculture can continue), but they have more moderate land requirements. BESS, when paired with a wind or solar farm as a hybrid facility can provide a cost-effective source of energy and capacity – often far away from rural or concentrated electricity infrastructure sites like transformer stations.</p>

Topic	Feedback
<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>The IESO should continue to look at proponent’s engagement with local communities and ensure that proponents have sized their projects in recognition of existing setback requirements and industry best practices.</p> <p>Additionally, the IESO should consider the following:</p> <ul style="list-style-type: none"> • Assuming a Q1 2025 bid submission, Q3 2025 award and 2030 COD, there is generally sufficient time to develop solar and wind resources. Instead of evaluating project readiness, Potentia suggests the IESO offers an incentive payment similar to LT1 for early COD. • While an incentive payment is our preference, if this isn’t acceptable, the IESO could consider the following: <ul style="list-style-type: none"> ○ Land: Signed land agreement/landowner attestation similar to LT1 ○ Interconnection: <ul style="list-style-type: none"> ▪ Connections that require transmission lines past 2km will require a longer interconnection process and may have a higher risk of opposition. ○ We do not think a Municipal Support Resolution should be a Mandatory Requirement but part of the rated criteria for the LT2 RFP.
<p>Do you have input on the proposed mechanism for valuing Indigenous participation?</p>	<p>Potentia strives to include Indigenous participation in all its projects. We recommend that Indigenous equity participation form part the rated criteria for LT2 rather than a mandatory requirement. The IESO should also consider other forms of economic participation as part of the rated criteria as well.</p>

Topic	Feedback
Are there any other rated criteria that should be considered?	<p>Developing in Ontario requires a specific skill set given the complexity of the energy market and regulatory environment. The IESO should value the Proponent's team members' experience working in Ontario.</p> <p>There should also be additional rated criteria for facilities located in constrained transmission or distribution areas reflecting the benefit of reducing future congestion or reliability challenges.</p>

Long Lead Time Resources

Topic	Feedback
Does the proposed approach to enabling long-lead time resources enable meaningful participation or sufficient certainty?	The IESO presentation on Dec. 13 th indicated that long lead time resources may be considered as part of LT2. Will long duration storage projects be considered "long-lead time resources?"
What additional considerations should the IESO contemplate for enabling broader participation from long-lead time resources?	Potentia is supportive of a separate RFP process and MW target for 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?	While Potentia applauds the IESO's intentions and generally supports the evolution of market mechanisms to support a well-functioning grid, Potentia is not supportive of the proposed revenue model. Ontario's system has too many out-of-market settlements and too much upcoming change to allow an appropriate risk assessment of this type of contract. Other markets with similar structures have years of historical market data based on well-defined market practices and other revenue streams. Ontario does not currently have that level of historical data, nor does it have other revenue streams. For this reason, we recommend that the IESO adopt an indexed fixed price

PPA model that includes curtailment caps or other similar contracting models.

It appears that the proposed Enhanced PPA model allocates congestion risk to proponents without sufficient information to model and quantify that risk. It seems that the intent of the proposed revenue model is for projects to obtain most of its revenue from the energy market, but the Ontario market is in a state of flux with the Market Renewal Program not yet completed. Additionally, proponents are being asked to bid a price that would factor in curtailment, but it is impossible to predict what curtailment will be over the life of the contract.

A lack of revenue certainty and reliance on market outcomes to determine the revenue under the contract will be a serious impediment to obtaining project financing. Without financeable projects, the IESO will not meet the targets for LT2.

Deemed Revenues & Day Ahead Market Pricing are also a concern as it isn't clear if the IESO will be deeming revenues on a weighted average LMP basis or a simple average LMP basis. This could unfairly penalize resources that produce more in the off peak because realized market revenues will be lower than what the IESO has deemed.

The model also incents resources that can "beat" their day ahead deemed revenues in the real-time market. This seems to suggest that the IESO is incenting hybrid wind and solar facilities over standalone wind and solar as only hybrid facilities will be able to optimize generation in real time.

If the IESO is to move ahead with an Enhanced PPA model, it should include more revenue certainty, whether that be in the form of a higher Grid Reliability Payment or through a curtailment cap.

General Comments/Feedback

Municipal Support

Potentia values the important role that municipalities play in providing social license for projects in their communities; however, the LT1 process showed that communities do not feel adequately prepared to evaluate provincial energy policy. Approximately, 8000 MWs of battery projects were rejected by local governments. The IESO and Government need to work with local municipalities to ensure communities understand the value and importance of new generation projects.

Further, a Municipal Support Resolution should not be a mandatory requirement as part of the LT2 RFP; instead, a Municipal Support Resolution should form part of the rated criteria. Municipalities should not be given veto power over a project.

Potentia also suggests that there be more clarity from the IESO and the Province around how “changes in heart” will be managed. Projects with support resolutions at bid may – in the future and despite proponents’ best efforts – have such resolutions rescinded or new resolutions in opposition brought forward as councils and communities change. While the IESO and the Province may want informed consent from local communities, the exact parameters around such consent are critical to allowing proponents to manage risk.