Feedback Form

Long-Term 2 RFP – December 13, 2023

Feedback Provided by:

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Date: 01.15.24

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 <u>engagement web page</u>.

Please submit feedback to <u>mailto:engagement@ieso.ca</u> 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?	We commend the IESO for providing longer term procurement targets and making it clearer for future market needs and opportunities. This helps support stable investment decisions and responsible development choice.
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?	We support the IESO's use of both energy and capacity contracts. It remains unclear, however, how these different compensation tools will be cross-evaluated for price and system value.
Do you 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

Торіс	Feedback
Do you have any general feedback on resource eligibility and timelines?	Some existing renewable resources could provide more value to IESO through the addition of battery storage, as contemplated in the IESO's Hybrid Integration Project. Such storage would more fully utilize the existing assets' interconnection rights, effectively increasing their capacity value and shifting their energy to times of higher value. Such new storage could be sited in more favorable locations than the fully standalone storage in E-LT1 and LT1, without the need for deliverability assessment or any material new transmission or interconnection facilities – and could be developed and constructed on a relatively short timeframe, with CODs likely sooner than the LT1 projects.
	Such add-on storage could be contracted as capacity effectively on a standalone basis, though it would share interconnection rights with a co-located renewable resource. A form of agreement largely similar the LT1 capacity agreement seems viable. While the renewable resource's Connection Agreement and PPA would need to be amended to allow for an updated metering scheme, neither can be adversely affected, so that existing project financings are not compromised. The existing renewable resource would still be compensated when it generates (or is capable of generating), whether or not its energy effectively flows into the storage system, with the metering scheme accounting for such net energy flows. The storage would be unable to dispatch when the wind is also fully dispatched, but would otherwise make itself available during peak times, and can be incentivized to charge when the co-located renewable resource would be subject to curtailment (to the extent LMPs aren't already providing a clear price signal).
	IESO could create separate procurements for such add-on storage resources, rather than adding them into LT2/3/4, setting regional target amounts and placing an emphasis on locational value, to avoid complicating the energy resource procurements.

Торіс	Feedback
If the potential of repowering an existing facility applies to you, would you be interested in exploring this option further?	Yes, Pattern would be interested repowering existing facilities and believe this is an effective way to continue to provide reliable and affordable energy to Ontario customers.
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?	We are concerned with the increased output criteria for determining repower eligibility. Updated turbine technology and permitting requirements at the local level, likely would result in fewer turbines and scenarios where repowered facilities experience existing or lower capacity output. Minimum investment criteria is also unnecessary and instead the IESO could set a minimum output threshold and projects able to sign 20 year commitments would necessarily have to invest the required capital expenditures over the course of the contract term to qualify as a repower without the IESO having to be overly prescriptive.
What considerations should be taken into account for new-build DERs?	
Please express any interest and opportunities for uprates and/or expansions at any of your existing facilities.	

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?	
Do you have any general suggestions for how to approach deliverability evaluation in the LT2 RFP?	Proponents will require early, detailed system information on congestion, including total line capacities and zonal limits (due to curtailment or other factors). This information will be required prior to site selection, to enable investment in site development (lease agreements, met towers, etc), to ensure appropriate and timely consultation with municipalities and communities, and to avoid wasted efforts and expenditures.

LT2 RFP Design Considerations – General Feedback

Торіс	Feedback
Do you have any comments regarding the impacts that agricultural land-use limitations may have on project development?	Renewable energy development can be compatible with agricultural use and in many instances provides stable income for farmers to supplement sometimes inconsistent farm revenue.
Do you have any comments regarding what evaluation criteria can be utilized to evaluate project readiness, given tight timelines and reliability needs?	
Do you have input on the proposed mechanism for valuing Indigenous participation?	LT2 presents a great opportunity for Ontario to incorporate renewable energy development on Crown land into its Indigenous reconciliation strategies. Priority for the allocation of Crown lands should go to projects which involve a substantial degree of Indigenous Community participation in the project, which may include (but not be limited to) direct equity participation by indigenous communities whose traditional territories are affected by the proposed project. Clear and concise guidelines for the process of engagement and consultation of Indigenous Communities should be established, for all Crown land allocation processes
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?	

Topic	Feedback
What additional considerations should the IESO contemplate for enabling broader participation from long-lead time resources?	

Revenue Model

Торіс	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?	Pattern Energy is concerned with the implementation of the Enhanced PPA concept for the LT2 RFP, particularly for renewable, non-dispatchable resources (i.e. wind/solar). The proposed mechanism does not properly account for the dynamics of these resources and improperly allocates risk from the offtaker to project. This will make it difficult for Suppliers to confidently price bids on the accelerated timeline proposed for LT2. In addition, this structure adds significant additional complexity for non-dispatchable resources with low potential benefit to the IESO for LT2. Patterns concerns are as follows:
	 Annual Production Factor - both the Monthly Revenue Requirement and Deemed Energy Revenues leverage a static annual production factor. Non-dispatchable, renewable resources' generation profiles differ significantly over the year, and as such the production factor should change for each settlement period. A mechanism should also be established to lower the production factors over time due to expected and forecasted technology degradation, such as for solar facilities. Simple Average Nodal Price – the Deemed Energy Revenue calculation uses a simple average of the DA-LMP. This does not consider the significant differences in revenue that renewable generators with the same production factor can have due to differences in technology and location. Using a simple average will cause the Deemed Energy Revenues to be uncorrelated to actual revenues the project receives from the Energy Market. Pattern suggests weighting the DA-LMP with a generation forecast (i.e. 8760 or 12x24) to properly capture shape value of non-dispatchable resources.

Day Ahead Settlement – Non-dispatchable generators will be exposed, potentially negatively, to the differences between the DA and RT price. Given the DA market is not yet implemented, bidders cannot evaluate this potential economic impact and would be exposed to significant regulatory risk. Curtailment Exposure - the Enhanced PPA framework transfers economic curtailment risk almost entirely to the project. This is a particular issue for non-dispatchable resources that cannot shift output around negative prices. More detail is needed from the IESO to fully understand how curtailment risk is shared, and what mechanisms, if any, exist for non-dispatchable resources to protect baseline revenues against economic curtailment events out of their control. Instead of passing curtailment exposure to the project, Pattern believes that the IESO's economic impact from this curtailment should be evaluated by the IESO on a

curtailment should be evaluated by the IESO on project-by-project basis during the RFP process and factor into its selection process.

General Comments/Feedback

Land / Siting Issues

Access to Crown Land

Patten Energy feels that a renewed process for the utilization of Crown lands for renewable development is warranted in connection with LT2 procurement processes. We recognize and appreciate the work the IESO and Ministries are doing on this. To this end, we recommend the following issues should be given consideration:

Developer requirements to secure Crown land allocation. In prior years Ontario has used a first-in-time system for allocation of Crown lands. This approach can result in less qualified developers (who may not even meet qualification requirements) gaining access to land that either becomes commodified or cannot be utilized in the procurement. To avoid this, it is suggested that Ontario adopt a more robust, qualitative approach to Crown land award which incorporates a review of (a) a developer's proven experience in building and operating projects; (b) a demonstrated plan for interconnection; (c) a basic understanding of wind/solar/generation resource and site development potential, as well as a basic environmental risk assessment; (d) a demonstrated record of local stakeholder engagement

with respect to a proposed project on Crown land. It is suggested that proponents be entitled to submit proposals for Crown land on an unsolicited, non-competitive basis, and if positively assessed on a qualitative basis, the proponent would receive Applicant of Record status which would afford a period of exclusive development rights on the application Crown land, to support the award of more advanced Crown land tenure as development progresses.

- Indigenous Consultation & Participation. LT2 presents a great opportunity for Ontario to incorporate renewable energy development on Crown land into its Indigenous reconciliation strategies. Priority for the allocation of Crown lands should go to projects which involve a substantial degree of Indigenous Community participation in the project, which may include (but not be limited to) direct equity participation by indigenous communities whose traditional territories are affected by the proposed project. Clear and concise guidelines for the process of engagement and consultation of Indigenous Communities should be established, for all Crown land allocation processes.
- Requirements for bid submission. Ontario should establish that a party must demonstrate:

 (i) Applicant of Record or similar status on a particular portion of Crown lands, and (ii) Support letters from a majority of neighbouring identified Indigenous communities (as well as any Municipal support/consultation materials, as required), in order to advance a bid on a particular piece of Crown land.

Municipal Support Resolution

Pattern Energy has concerns with the notion that complete and final Municipal Support resolutions should be obtained <u>prior to</u> bid submission. Changes to the design of a facility will often occur during later stage development, which could impact the validity of a support resolution. Further, requiring the proponent to obtain approval of a project prior to bid submission creates the risk of a rushed or compressed consultation process. Pattern suggests that rather than a full and final support resolution, proponents should be required to submit identified evidence of their consultation and engagement with community and municipal stakeholders, including minutes of a public meeting of elected council officials in which project details were presented and municipal comments were received. It is suggested that if Municipal Support Resolutions are required as part of LT2, they be required to support Notice to Proceed, prior to construction commencing. This ensures that Municipalities still have a voice on whether a project proceeds, but this approval is received as part of a holistic package of municipal approvals including building & zoning approvals, once a project has been fully designed and a more comprehensive consultation process has been conducted.

As an alternative, IESO should establish contractual flexibility to all project site changes from the originally proposed pre-bid without jeopardizing a project's MSR.

The IESO and Ontario government should expand their engagement with municipalities on the need for new renewable generation.