

# Feedback Form

## Long-Term 2 (LT2) RFP – April 4, 2024

### Feedback Provided by:

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To promote transparency, feedback submitted will be posted on the Long-Term RFP engagement page unless otherwise requested by the sender. If you wish to provide confidential feedback, please mark "Confidential".

Following the LT2 RFP April 4, 2024, engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed during the webinar. The webinar presentation and recording can be accessed from the [engagement web page](#).

**Please submit feedback to [engagement@ieso.ca](mailto:engagement@ieso.ca) by April 23, 2024.**

# Enhanced Power Purchase Agreement (E-PPA) Revenue Model: Proposed Modifications

Topic	Feedback
<p>Do you have any comments regarding use of monthly production factors for the calculation of deemed energy revenues?</p>	<p>Evolugen by Brookfield Renewable appreciates the opportunity to provide comments.</p> <p>We support the use of monthly production factors for the evaluation of proposals and the calculation of deemed energy revenues in conjunction with FWAP.</p>
<p>Do you have any comments regarding use of the Forecasted Weighted Average Price (FWAP)?</p>	<p>With regards to any application of the IESO’s forecast data, we note the universal agreement on the April 4 webinar that forecasting for intermittent resources is inherently difficult, and even the IESO’s forecast figures do not arrive at a high accuracy until one or two hours pre-dispatch. In this context, we recommend the IESO move to a rolling forecast setup, where the IESO’s forecast data are continuously updated and made available to market participants. In addition, any revenue model calculation (e.g., deeming mechanism and otherwise) would adopt the latest updated rolling forecast data to determine payment.</p>

Do you have any comments or suggestions on further mitigating perceived risks associated with VG participation in the DAM?

In the April 4 webinar, the IESO stated that there is no industry consensus on how to account for the DA-RT risk, but we do not believe this to be the case. In fact, proponents universally believe that the DA-RT risk—or any risks that are out of the proponents' control—should not be managed by the proponents. It is true that proponents might differ in how comfortable they are with a financially binding DAM, or have preferences to deem in either the DA or in the RT. However, the undisputed consensus is that an arbitrary exposure to the DA-RT risk, regardless of whether the deeming is anchored to the DA or to the RT, cannot be managed and financed. This risk factor would in turn discourage RFP participation.

We appreciate that the IESO must balance ratepayer interest and proponents' risk appetite, and some risks are by nature difficult to manage regardless of contract design. Nevertheless, we wish to remind the IESO that a design option proposed by its own MRP contracts team to account for the DA-RT risk has received universal industry support.

In short, the IESO's proposal to existing wind asset owners to transition their contracts to the MRP would: a) encourage DA participation, b) protect owners from forecast variations between DA and RT, and c) allow proponents the option to deviate from IESO forecasts. In this design, as long as proponents offer MW volumes in the DA that are consistent with the IESO's forecast, their revenue would be made-whole in case of DA-RT deviation. And when proponents choose not to follow the IESO's forecast and be exposed to the DA-RT risk instead, they would forego the made-whole protection. However, this voluntary risk-taking could—at the proponent's discretion—either result in higher revenue or lower revenue if they chose wrong.

This arrangement would: a) incentivize DA participation for market participants, b) grant risk-averse proponents revenue certainty, c) allow proponents the choice to voluntarily expose themselves to the DA-RT risk, and d) incentivize proponents to improve their project's ability to respond to price signal and benefit from DA-RT optimization (e.g., adding storage).

Again, we note that this proposal received universal approval from existing wind contract holders, many of

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	<p>which will participate in the RFPs to come. We recommend the IESO adopt this balanced and universally approved design for the LT2-RFP.</p> <p>Finally, we wish to note that while Evolgen by Brookfield Renewable is comfortable with the introduction of a financially binding DAM and all the intricacies it would accompany, we do not actually prefer to deem in the DAM.</p>

## LT2 RFP & Contract: Key Provisions

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<p>Do you have any comments regarding the use of minimum production factors during proposal evaluation?</p>	<p>We recommend that the minimum production factors need to be carefully consulted and differentiated by technology type. In particular, run-of-river hydro should not share the same minimum production factor as dispatchable hydro.</p>

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<p>Do you have any comments regarding the application of the non-performance charge?</p>	<p>We are not opposed to the application of non-performance charges. However, we note that the LT2-RFP awards long-term contracts that could experience many operational and market changes over the contract life. As such, we recommend a flexible and technology-specific approach that could account for future revisions.</p> <p>For example, we note that hydro facilities might require long-term maintenance (e.g., can last up to a year for major work) that would be poorly accounted for by the 3-year rolling average application of the 85% production factor. In the same vein, hydro facilities can experience consecutive low-water years just as well as high-water years, and the 3-year rolling average window might need to be expanded to account for such natural variations. More generally, the Force Majeure clause, uneconomical curtailments by the IESO, Hydro One's curtailments/outages, work required to add a storage asset, and other factors out of the proponents' control should be carefully considered.</p> <p>In addition, we wish to better understand, once the DA-RT deeming mechanism is finalized, how deeming would work in relation to non-performance charges and the 85% threshold.</p> <p>Finally, we recommend that the IESO implement the option to revise the production factor during the contract life in response to non-performance charges.</p>
<p>Do you have any comments regarding the treatment of outages under the LT2 Contract?</p>	<p>Please see our comments above.</p> <p>We are generally supportive of the treatment of outages and energy revenues deeming as proposed by the IESO on the April 4<sup>th</sup> webinar. To be clear, we understand that deeming will occur independent of outages and non-performance. If that is not the case, please provide case studies and live-examples to clarify the IESO's proposal.</p>

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Do you have any comments regarding the payback of Deemed Market Revenues greater than the Monthly Revenue Requirement?	We do not support the payback of Deemed Market Revenues greater than the Monthly Revenue Requirement. Without the proposed payback mechanism, proponents will incorporate these revenues in their proposal prices and be willing to bear the accompanying risk. As a result, proposal prices will be lower and prices paid by ratepayers be more competitive.

## MT2 RFP



Do you have any comments regarding the IESO's considerations on the MT2 RFP, including timing, eligibility, and the interplay between repowering and the MT2 and LT2 RFPs?

We support the IESO's new schedule. However, we note that the option for contracts to start should absolutely include all three years (i.e., 2027, 2028, and 2029) to capture as many expiring contracts as possible. We also note that the contract start date should not be fixed to "May 1," but left open-ended to, again, capture as many expiring contracts as possible. In addition, we reiterate our recommendation for the IESO to adopt "soft" RFP volume and pricing targets, as opposed to arbitrary hard caps that would limit participation. In sum, we recommend that the IESO implement these flexible mechanisms that would help to increase RFP supply. In addition, we support the IESO adding a capacity-stream to the MT2-RFP.

With regards to the RFP mechanism: please clarify if the MT2-RFP would require municipal council support of any kind or any rated-criteria in the selection process. To be clear, we do not believe that for existing assets seeking life-extension, municipal council support or rated criteria should be required as a condition to participate in any MT-RFPs. An existing project seeking to extend its useful life would create no material change to project footprint and its operational configuration. As such, an additional municipal council support would not only be redundant and burdensome, but it would also prevent these projects' timely participation in MT-RFPs to help securing Ontario's existing energy supply. The IESO did not require any municipal council support requirement in the MT1-RFP, nor does it require existing assets participating in its annual capacity auction to obtain any municipal council support. We ask that the IESO maintain consistent rule-making in its various procurements, and exclude municipal council support as a condition to participate in MT-RFPs.

Finally, we wish to remind the IESO that the "MT" RFPs are very welcome by industry because they fill an important gap between LT-RFPs (e.g., full repower for 20+ years) and the capacity auctions (i.e., 6-month commitments). Without additional "MT" RFPs, many asset holders coming off contract are unlikely to stay afloat while considering longer-term options. The capacity auctions can certainly be a viable venue for particular technology types to remain



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	<p>contracted indefinitely, but the difference between a 6-month capacity auction commitment and participation in a 20-year LT-RFP is too significant without the “MT” RFPs acting as a bridging mechanism. We urge the IESO to not stop at MT2-RFP and continue implementing the “MT” RFPs in its procurement practices.</p>

## Long Lead Time Resources

Topic	Feedback
<p>Do you have any comments regarding the IESO’s considerations on Long Lead Time Resources, including timing, eligibility, targets, and term?</p>	<p>We support the IESO’s continued efforts to develop the Long Lead Time RFP in a carved-out process from the LT2-RFP. To be clear, we recommend that long-delivery storage and long-lead time hydro be procured in separate streams with independent procurement targets and specifications.</p> <p>The IESO explicitly identified hydro as a technology option for this procurement stream. We note that dispatchable hydro facilities provide not only energy to the grid, but also capacity and ancillary services—all of which are valued and procured by the IESO today. In this scenario, we believe that a traditional “bundled” PPA model, which includes capacity, energy, and other non-system benefits (e.g., water management, as established in the Small Hydro Program), would be most appropriate. Price-adders can be implemented so that the revenue models of individual projects can reflect the specific benefits they offer.</p> <p>Please note that we support the OWA’s submission on all hydro-related comments.</p>

## General Comments/Feedback

We recommend that the IESO extend its LT2-RFP contract length to 25+ years, at least for wind-powered projects. On the April 4 Webinar, the IESO indicated that the 20-year duration was based on a market benchmark, as its jurisdictional review saw that both 15-year and 30-year contracts have been used in recent RFPs. As a wind contract holder, we note that there is an ongoing discussion regarding extending wind contracts—be it through competitive mechanisms or a directed program. Regardless of the final life-extension mechanism adopted for Ontario’s wind assets, it is now demonstrable that wind facilities can operate reliably for 25+ years—as long as the proper contract and revenue models are put in place. As such, granting a 30-year contract for wind resources today would reduce the need to begin life-extension negotiations prematurely in the future. In other words, a longer contract that aligns contract length with asset useful life would save both the IESO and proponents time and efforts in the future. In the same vein, we note that the possibility of having to re-obtain a municipal council support to proceed with the life-extension of an existing project poses a significant regulatory risk. In this context, proponents granted a 20-year contract would amortize and model the project based on the shorter 20-year contract life, because having to re-obtain a municipal council support at the end of contract life for life-extension would be a significant and uncontrollable risk. As a result, a project’s longer useful life (e.g., ~30-years for wind) would not be used to model the LT2-RFP’s offers and thus lower bid prices. We understand that the requirement to re-obtain a municipal council support and the criteria to obtain such supports might not be governed by the IESO. However, by aligning the LT2-RFP’s awarded contract life and the assets’ useful life, the IESO could easily allow proponents to model bid prices over a longer time period and lower bid prices. This modification is entirely within the IESO’s control, and 30-year wind contracts are being awarded in jurisdictions such as Quebec. In summary, granting a 30-year contract for wind would help proponents lower their bid prices and secure better financing, hence lowering the RFPs’ clearing price. We urge the IESO to reconsider this low hanging fruit that would: a) increase RFP participation and interest, b) not affect reliability, c) reduce future work, and d) lower LT2-RFP’s clearing price.

Finally, we wish to explore in future consultations how Market Power Mitigation would interact with deeming mechanisms.