

Feedback Form

Long-Term 2 RFP – December 13, 2023

Feedback Provided by:

Name: Geoff Osborne

Title: Director, Business Development

Organization: Capstone Infrastructure

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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.

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>It is important for the IESO to closely consider the interaction between LT and MT RFP(s) given potential for mixed signals on near-term development efforts and aligned/differing asset eligibility. It is important to have all of the information about both processes upfront. As such, we believe the MT baseline targets, RFP and contract should be defined in parallel and not after LT2.</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>With MRP and impacts to LMPs, it is difficult to make a clear argument for a specific contract framework. However, generally and as alluded to in this submission, Capstone's preference is for the IESO to leverage Ontario precedent contracts and offer an energy (MWh) + capacity (MW) contract model, to value the net benefit to Ontario ratepayers from any resource.</p>
<p>Do you have any concerns regarding the proposed target setting approach for upcoming MT RFPs?</p>	<p>We believe this requires further consultation with industry to assess available resources into both procurements. We believe current procurements do not fully value the energy and capacity attributes of resources, which is further complicated with uncertainty surrounding MRP (i.e., LMPs).</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>This effort should be initiated by IESO together with existing generators with expiring contracts in an open collaborative forum using real-world scenarios and projects.</p> <p>Capstone recommends the IESO work closely with existing generators to fully understand long-lead equipment procurement considerations, major capital investment considerations, locational benefits, community support, etc. Generally speaking, short-term bridging contracts are not sufficient to enable meaningful investment nor do short-term contracts yield the greatest savings for ratepayers. That is particularly true if there is lack of certainty on the post-bridge RFP process(es) and or contract(s).</p>

LT2 RFP Resource Eligibility and Timelines

Topic	Feedback
<p>Do you have any general feedback on resource eligibility and timelines?</p>	<p>It is important for the IESO to provide proponents with the proposed rated criteria as soon as possible to comment on as it may already impact development efforts (i.e., location, resource type, etc.).</p> <p>Will developers be able to start efforts now and file CIA/SIAs? It would be helpful to have specific feedback. We understand the desire to not overwhelm the IESO/HONI with "at-risk" projects, but the benefits to ratepayers of starting these studies early (even prior to the deliverability test) could be hugely significant. This issue may be further exacerbated with multiple procurements happening in parallel – but lack of clarity on which process(es) a project might be eligible for. If a developer has an existing project they wish to invest in advancing, they should not be prevented from investing in development.</p>
<p>If the potential of repowering an existing facility applies to you, would you be interested in exploring this option further?</p>	<p>Yes. Enabling Repowering of an existing facility is very important to our organization – and we believe critical for Ontario ratepayers. Similarly, we believe expanding existing facilities with batteries (i.e., hybrids) should be explicitly and clearly eligible in the RFP. At present, it does not appear obvious that these resources are eligible – or commercially viable. Can the IESO explicitly confirm the eligibility of hybrid expansions in LT2 (both FTM and BTM hybrid models)?</p> <p>This effort should be immediately initiated by IESO together with existing generators with expiring contracts in an open collaborative forum using real-world scenarios and projects that are intended to be submitted to best define the rules.</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>Repowering should not require an increase in MW, but rather should align with tax code guidelines regarding the ITC including demonstrating that capital investments are being made for at least <u>one</u> of the following:</p> <ul style="list-style-type: none"> -Extending the useful life -Increasing capacity or capabilities

Topic	Feedback
What considerations should be taken into account for new-build DERs?	The eligibility of BTM and DER resources, including the aggregation of BTM and DER resources is an interesting opportunity. Our primary question would be whether a new battery at an existing renewable generator counts as new-build resource or a DER resource under the LT2 RFP/contract and under MRP rules via the proposed Hybrid Integration Project enhanced hybrid participation models.
Please express any interest and opportunities for uprates and/or expansions at any of your existing facilities.	Capstone wishes to express our interest in uprates and/or expansions within our operating portfolio, including both same-technology upgrades (i.e., adding wind to a wind site) and different-technology upgrades (i.e., adding batteries to a wind site). Adding batteries to existing renewables can increase energy production. For example, a battery could mitigate system curtailment or optimize "clipped" energy, thus increasing net energy production.

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?	"Deliverable means that there are no material transmission and/or distribution system constraints that would prevent a proposed project from effectively addressing the reliability needs." and "System Constraints: could include insufficient transmission system capacity, insufficient distribution system capacity, or short-circuit levels that exceed equipment capabilities." We believe it is important for the IESO to thoroughly stakeholder the deliverability test to ensure resources are not unfairly or unnecessarily prevented from participation in the LT2 and or being studied in the deliverability process. For example, if an energy AND capacity resource like a hybrid, is capable of opening up new areas of the transmission system that traditional energy only resources are unable to be deliverable in, opportunities like that should be strongly considered by IESO.

Topic	Feedback
<p>Do you have any general suggestions for how to approach deliverability evaluation in the LT2 RFP?</p>	<p>We recommend a two-phase deliverability test where proponents have the ability to challenge results, if the IESO's results do not coincide with Hydro One's for example or existing CIA/SIAs. The notion that this will not be a "pass/fail" test is something we generally support. Generally, IESO should be enabling resources that can provide energy <u>and</u> capacity despite the stated focus on energy from LT2, as capacity needs may continue to evolve in Ontario. For example, projects that future-proof now for capacity needs would be best-designed to maximize ratepayer value long-term.</p> <p><u>BTM/Integrated Hybrid</u> – Can the IESO please confirm how the LT2 deliverability test will study a “repowered” wind site, which will also be expanded with a “<u>integrated</u>” or BTM battery hybrid to maximize energy production and optimization? Is that all a repower? A repower and a new-build/DER?</p> <p><u>FTM/Co-Located Hybrids</u> – Can the IESO please confirm how the LT2 deliverability test will study a “repowered” wind site, which will also be expanded with a “<u>co-located</u>” or FTM battery hybrid to maximize energy production and optimization? Is that all a repower? A repower and a new-build/DER?</p>

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>We support the exploration and implementation of Agrivoltaics as a potential rated criteria.</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>A focus on price and certainty of COD, alongside existing proponent qualifications - especially if an existing resource (i.e., repower or expansion) is proposed. If term options are available (i.e., 10-15-20+ yrs) proponents should not be scored negatively for selecting a longer-term contract option.</p>

Topic	Feedback
Do you have input on the proposed mechanism for valuing Indigenous participation?	Capstone is in favour of enabling Indigenous and community participation in all projects. However, we believe the IESO should reflect on the LT1 process, particularly the "local attestation" requirement that was included. Capstone supports the intent of this (ultimately enabling both Indigenous partners and Local Indigenous partners), however, we believe that the process could be improved to deliver better results.
Are there any other rated criteria that should be considered?	Ability to deliver capacity products and ancillary services.

Long Lead Time Resources

Topic	Feedback
Does the proposed approach to enabling long-lead time resources enable meaningful participation or sufficient certainty?	Capstone recommends the IESO work closely with existing generators to fully understand long-lead equipment procurement considerations, major capital investment considerations, locational benefits, community support, etc.
What additional considerations should the IESO contemplate for enabling broader participation from long-lead time resources?	There appears to be a 1yr requirement for MET data? Can lidar or other collection sources work for this purpose as an alternative?

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?	<p>No. We are strongly against it. We recommend removing this model altogether as voiced by other industry groups.</p> <p>Under the current model, we believe:</p> <ul style="list-style-type: none"> -Wind and solar facilities will reliably earn less than the 'deemed energy revenue' given that the deemed energy revenue is calculated using monthly average pricing. Over the course of a month, hours with high wind and solar production will tend to have lower prices, so wind/solar captured market pricing will be lower than the average monthly price (wind/solar discount to monthly average price)

Given no pricing history of DA-LMPs, it is very challenging to predict what LMPs will be – and even harder to forecast what the impact of adding wind and solar to a node would do. Ultimately it is very challenging to estimate what the wind/solar discount to monthly average price will be – especially at a specific node which could have dramatic variation from system average pricing.

We recommend a straightforward contract that has both an energy (i.e., MWh) and capacity (i.e., MW) component. One could leverage existing elements from LRP for greenfield vs. existing contract for Repowers.

It is important to address curtailment upfront with industry and how the contract will handle curtailment events.

General Comments/Feedback

Work with Existing Generators to Define Repowers – Capstone recommends the IESO work closely with existing generators to effectively define Repowers, fully understand long-lead equipment procurement considerations, major capital investment considerations, locational benefits, community support, etc.

Corporate PPAs – How will LT2 be drafted in conjunction with ongoing consultation efforts regarding Ontario Regulation 429/04 Amendments Related to the Treatment of Corporate Power Purchase Agreements? For example, as is common in many other markets, would a 100MW renewable generator be eligible to sell a portion of its capacity (i.e., 50% or 50MW) under an LT2 contract and a portion of its capacity under a CPPA (i.e., 50% or 50MW)?

Hybrid Eligibility – Capstone believes it is in ratepayers' interest for the IESO to enable hybrid expansion in the LT2 procurement, given the substantial savings (existing interconnection) and ability to be in service quickly (interconnection exists alongside community support). Capstone previously provided comments on both ELT1 and LT1 highlighting the ineligibility of hybrid expansions using existing interconnections in the deliverability test(s) and under the rules of the RFP(s).

LT2 hybrid project eligibility example for existing 100MW wind farm. Proponent wishes to repower and add a battery hybrid expansion using the existing interconnection without modification. Is this specifically eligible in the deliverability test? Is it eligible under the RFP? Is it commercially viable/considered under the proposed contract? Can the IESO please share a detailed example of all hybrid participation models available based on Hybrid Integration Project and MRP for proponents to review and comment on.

Deliverability of Repowering & Hybrids (Integrated) – Can the IESO please confirm how the LT2 deliverability test will study a “repowered” wind site, which will also be expanded with a

“integrated” or BTM battery hybrid to maximize energy production and optimization? Is that all a repower? A repower and a new-build/DER?

Deliverability of Repowering & Hybrids (Co-Located) – Can the IESO please confirm how the LT2 deliverability test will study a “repowered” wind site, which will also be expanded with a “co-located” or FTM battery hybrid to maximize energy production and optimization? Is that all a repower? A repower and a new-build/DER?