

Feedback Form

Long-Term RFP – June 9, 2022

Feedback Provided by:

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Following the June 9th public webinar on the Long-Term RFP, the Independent Electricity System Operator (IESO) is seeking feedback from participants on the additional procurement mechanisms, as well as on proposed revenue streams.

The referenced presentation can be found on the [Long-Term RFP webpage](#).

Please provide feedback by June 20, 2022 to engagement@ieso.ca.

Please use subject header: **Long-Term RFP**. To promote transparency, this feedback will be posted on the [Long-Term RFP webpage](#) unless otherwise requested by the sender.

The IESO will work to consider and incorporate comments as appropriate and post responses on the webpage.

Thank you for your contribution.

Additional Mechanisms: Overview and Linkages

Topic	Feedback
<p>Please provide any feedback on the IESO’s overview of the Additional Mechanisms (Expedited Process, Same-Technology Expansions, FCA) and the linkages between acquisition mechanism (e.g., Expedited Process and LT1 RFP, or LT1 RFP and LT2 RFP)</p>	<p>Capstone appreciates that that the IESO forecasts the province will have significant unmet capacity and energy needs in the next decade, and that the IESO is signaling its intent to run future procurements to meet those needs (e.g. LT2 RFP).</p> <p>However, the latest proposal for the evaluation mechanism (ranking of a capacity payment in \$/kw-month) and contract structure (capacity payment plus claw-back/top-up based on average market prices) for the Expedited Process and LT1 RFP heavily favour fossil generation.</p> <p>By ignoring the variable operating costs in evaluating bids (for fossil plants, primarily fossil fuels and associated carbon costs), the IESO will have already chosen the winning technology class – as fossil plants are less expensive on a \$/kW basis, but likely not on a \$/kWh basis.</p> <p>Notwithstanding the need for capacity, the IESO must consider the variable operating costs that will flow through to ratepayers when that capacity is called upon to run, or it risks making procurement decisions that significantly negatively impact ratepayers.</p> <p>Finally, by providing top-ups and claw-backs based on electricity prices (which incent fossil plants) and not based on daily volatility (the spread of which incents non-fossil storage), the IESO would seemingly protect the fossil plants from the falling energy prices that would likely result from building out a non-fossil generating fleet, obscuring the market signal for them, while not providing any similar protective mechanism for other technologies.</p> <p>By structuring the Expedited and LT1 RFP’s in favour of fossil projects, while also creating a ‘set-aside’ stream in the Same-Technology Expansions (which appears to be targeted towards gas plants), the IESO risks sending the signal that developers should be focused only on</p>

developing fossil projects for the LT2 RFP and subsequent calls.

The IESO should immediately correct the evaluation mechanism via adding rated criteria for non-emitting resources (recognizing the public good of avoided emissions) or consider alternative means to 'level the playing field' between emitting and non-emitting resources (e.g., for the economic evaluation criteria use \$/kWh given the projected capacity factor, price of gas, and legislated escalating carbon price). Such steps will support the IESO's stated "technology agnostic" goal, while recognizing the public good of procuring capacity from non-emitting resources (and conversely the externalities associated with new or expansion fossil resources).

LT1 RFP and Expedited Process: Mandatory Requirements and Rated Criteria

Topic	Feedback
Please provide any feedback on the Mandatory Requirements and Rated Criteria proposed for the LT1 RFP and Expedited Process.	<p>The system need to be addressed by the Expedited Process is for projects to come online in 2025. In Capstone's view, the IESO should consider the schedule and overall project delivery risks associated with new builds or fossil fuel expansions which would be in opposition to decarbonization goals set out by the Governments of Ontario and Canada. New fossil fuel projects would likely face prolonged permitting challenges with potential project failure (as per several recently cancelled proposed natural gas power plants in Canada and the USA).</p> <p>In order to mitigate the risk of project failure and capacity shortfalls in 2025, the IESO should consider restricting emitting resources from the Expedited Process entirely, or adding rated criteria to incent non-emitting technologies which would not be subject to strong political or regulatory headwinds.</p> <p>In the absence of any stream within the Expedited, LT1 RFP, Same Technology Expansions or FCA designated for non-emitting resources, setting up the process to favour emitting resources (as noted above), adds</p>

significant process risk to the overall goal of timely capacity delivery.

LT1 RFP and Expedited Process: Proposed Contract Design

Topic	Feedback
<p>Please provide feedback on the proposed contract design for the LT1 RFP and Expedited Process. The IESO welcomes feedback on the proposed approach for qualifying capacity as well as the proposed Capacity Payment Adjustment Mechanism.</p>	<p><u>1. Hybrid Projects</u></p> <p>The IESO should confirm as soon as possible that hybrid projects are able to participate in the Expedited Process.</p> <p>The characteristics of hybrid projects (existing interconnect, land control, municipal relationships, Indigenous partners) make them excellent candidates to achieve the tight timelines set out by the IESO for the Expedited Process in particular.</p> <p>In order to do so, the IESO should promptly finalize the rules for co-located hybrids, and allow hybrid projects to elect to become integrated upon expiry of PPA's and completion of the rules for integrated projects.</p> <p><u>2. SIA/CIA Guidance</u></p> <p>The IESO is seeking advanced projects, has requested developers not file SIA/CIA applications until after contract award, but has indicated that projects with SIA/CIA applications in the queue may receive preferential treatment. The IESO should consider that developers will file SIA/CIA applications despite the request not to, if projects would receive preferential treatment – so the IESO would do well to amend that guidance. Furthermore, given the tight timelines for this procurement and the lack of development activity in the province until recently, the SIA should provide contractual schedule relief, should the Deliverability test result in a Deliverable or Deliverable but Competing result, but the interconnect work to be completed by the Transmitter or Distributor cannot be completed in accordance with the project schedule, or is economically materially different than expected, resulting in unforeseen delays or uneconomic projects.</p>

3. Indigenous Participation

The IESO recognizes the public good of incentivizing Indigenous participation in energy projects. However, citing condensed timing of the Expedited procurement process, has proposed to exclude Indigenous participation.

Recognizing that the IESO is seeking advanced projects led by experienced developers, the IESO should also consider that many such qualified proponents have already initiated such discussions with potential Indigenous partners.

As such, the IESO should include Rated Criteria for Indigenous Participation in the Expedited Procurement.

4. Capacity Payment Adjustment Mechanism

The Capacity Payment Adjustment Mechanism as proposed, ineffectively mixes energy (in kWh) with capacity (kW). Such a mechanism does not reflect the operating characteristics of storage or peaking-type facilities.

Two relevant examples are from Battery Storage or Natural Gas peakers:

- **Battery Storage:** A battery system can make net revenue from market operations based on charging at low prices and discharging at high prices. As such, it is pricing volatility that impacts a battery, not the average cost of power (e.g., at a steady \$100/MWh price of energy over a 3-month basis, a battery would actually lose money – i.e., charging over 5 hours and then discharging over 4 hours at the same rate).
- **Gas Peaker:** A gas turbine will only run when the cost of electricity exceeds the cost of gas. As such, it is this 'spark spread' that matters, not the top-line price of energy.

Overall, the currently proposed mechanism adds unnecessary complexity risks skewing the RFP results towards sub-optimal and decisions and has the potential to be more harmful than beneficial to ratepayers.

Recommendation: Remove the Capacity Payment Adjustment Mechanism entirely. Let Qualified Proponents take their own views on market opportunities and evolution. Alternatively, Capstone supports the CFD proposal the IESO previously considered.

5. Project Size & Delivery Risk
With the IESO seeking 500-1,000 MW in the Expedited Procurement, the proposed 600 MW maximum project size potentially results in only 1-2 projects awarded.

As such, the IESO should consider reducing the Maximum Project size from 600 MW to 200 MW, as this would:

- Reduce exposure to failure of any one project by diversifying supply (not all eggs in one basket)
- Improve system resilience – locating capacity projects at different injection points across a region reduces exposure to event-driven loss of capacity (at the generation site or interconnection line (e.g., extreme weather events, critical equipment failures))
- Not result in an anticipated material contract price increase – above a certain project size (typically 100 MW), economies of scale in power storage are limited, and larger projects only offer slight improvement in economics (however, based on current IESO proposal, a \$0.001 per kW-month lower bid from a 600 MW would be deemed more attractive vs a diversified portfolio of 6 x 100 MW projects).

LT1 RFP and Expedited Process: Proposed Term Lengths

Topic	Feedback
Please provide any feedback on the term length considerations proposed in addition to the incentive mechanism for the Expedited Process.	Capstone appreciates the IESO extending the term length to 20-22 years.

Deliverability Assessment

Topic	Feedback
<p>Please provide feedback on the IESO's proposed process for deliverability testing and timelines.</p>	<p>Fully consider the flexibility of storage resources in the Deliverability Assessment</p> <ul style="list-style-type: none"> • Issue: <ul style="list-style-type: none"> • The IESO discussed differences between System Impact Assessment (SIA) and Deliverability Assessment as it relates to dispatchability of a generation/capacity resource – mainly that the SIA assumes generation is dispatchable, but Deliverability Assessment must assume generation is on during peak demand times for the resource to provide capacity. • The IESO also discussed that the load of a capacity resource will be factored into the Deliverability Assessment, however fewer details were provided on the assumptions of the load assessment. • Storage resources can draw a significant load when charging which may have material system impacts, however storage resources also have the ability to flexibly control their load and power factor (in real time if necessary) to minimize system impact. • Recommendation: <p>When considering the load of a storage facility during the Deliverability Assessment, consider the load as fully dispatchable and include ability to provide VAR support to mitigate system voltage issues.</p>

Additional Acquisition Mechanisms: Same Technology Expansions

Topic	Feedback
<p>Are the descriptions of the different kinds of upgrades/expansions clear and reflective of the options?</p>	<p>No comment</p>

<p>What are the interdependencies between the existing contract, any upgrades and on-site expansions that need to be considered?</p>	<p>No comment</p>
<p>Are any interdependencies missing/not fully captured?</p>	<p>No comment</p>
<p>What are the considerations for participating in the Expedited Process or LT1 RFP?</p>	<p>The IESO should recognize the benefits in contracting for non-emitting vs. fossil fired technologies, and consider evaluating the non-emitting bids from the Expedited Procurement prior to committing to fossil-fueled Same Technology Expansions.</p> <p>In addition, consider the same rated criteria for same technology expansions as with the Expedited Procurement, so that the IESO can compare 'apples-to-apples' on the value from new projects under the expedited procurement (including location and proposed additional criteria for Indigenous economic participation and non-emitting resources).</p> <p>For example, if the IESO obtains 2000 MW of credible new-build non-emitting capacity, it has the option to compare this with the proposed 500-1000 MW of capacity from Same Technology Expansions (which are subject to similar permitting, interconnection, and supply chain risks as greenfield projects).</p> <p>In this way, the IESO can evaluate if its goals can be achieved with non-emitting resources at comparable (or improved) long-term economics compared to gas plant expansions.</p>
<p>What other key considerations/risks need to be included to help ensure this initiative is successful?</p>	<p>No comment</p>

Additional Acquisition Mechanisms: Forward Capacity Auction

Topic	Feedback
<p>Is expanding eligibility to variable generation, self-scheduling and co-located hybrid facilities in the FCA and ACA a priority for stakeholders?</p> <p>(Refer to slide 99)</p>	<p>[No comment on this section]</p>
<p>Any feedback and suggestions on how the performance assessment framework may need to be modified to reflect the design differences?</p> <p>(Refer to slide 106)</p>	
<p>Any feedback on potential features that could be considered for the design of the FCA?</p> <p>(Refer to slide 108)</p>	
<p>Is expanding eligibility to variable generation, self-scheduling and co-located hybrid facilities in the FCA and ACA a priority for stakeholders?</p>	
<p>Any feedback and suggestions on how the performance assessment framework may need to be modified to reflect FCA design differences?</p>	
<p>What other design features should be considered to increase the attractiveness of a Forward Capacity Auction as part of IESO's suite of acquisition mechanisms?</p> <p>(Refer to slide 110)</p>	

General Comments/Feedback

As set out by the IESO in the June 9 webinar, Applicants can submit a combination of up to 3 project sizes and connection points for each project for the Deliverability Test (slide 61), both of which can

change at the time of RFP submission. The site location however cannot change (slide 64), which seems a bit arbitrary at this stage when two other more important and key project attributes (notably size and connection point) are not fixed. The results of the Deliverability Test, including size and connection point, will directly impact the optimal site location to enhance project competitiveness.

We request that IESO allow developers to optimize their projects for RFP submission after the deliverability results are provided, which would require that the site location also be subject to change from RFQ to RFP, together with the size and connection point. We note that this is also a more efficient manner for the IESO to manage the volume of Prescribed Form: Project Descriptions submissions at RFQ and testing in the Deliverability Assessment stage.