Feedback Form

Long-Term RFP – July 21, 2022

Feedback Provided by:

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Following the July 21st public webinar on the Long-Term RFP, the Independent Electricity System Operator (IESO) is seeking feedback from participants on: Municipal Council Support Resolution, Contract Design, Revised Timelines, and the Deliverability Test Guidance Document.

The referenced presentation can be found on the Long-Term RFP webpage.

Please provide feedback by August 4, 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.

Municipal Council Support Resolution

Topic	Feedback
Please provide any feedback on the IESO's proposal to change the Municipal Council Support Resolution from a mandatory requirement to a rated criteria.	Plus Power supports the proposal to change this item to a rated criteria to allow the Municipalities to have enough time to review the proposed projects. Additionally, Plus Power considers duplicative the request to have planning/permit approvals and Municipal Council Resolutions. If both are required, we strongly suggest that the due date to present these documents is not earlier than the signature of the off-take contract between the project and the IESO.

Proposed Contract Design

Please provide any feedback on the potential use of indexing in the contracts and what indices (if any) may be best suited for these procurements.

On the procurement of projects with Battery Energy Storage Systems (BESS), we strongly suggest the ability to index proposals to the Lithium-ion Battery Raw Material Price index. It is very important for the projects to tie the proposals to the price of the raw materials needed for the lithium-ion batteries, which have shown great volatility in the last 12 months.

Regarding multipliers that would be applied to the bidder's capacity payment that would be pegged to energy price volatility, Plus Power proposes a structure that is similar conceptually to the recently proposed Smart Peak program in NYISO. The bidder's capacity price would be pegged to a specific volatility level, more specifically the 4hr Day-Ahead Peak-Trough spread (could be adjusted for different battery durations), which represents the average of the four highest-priced hours in the Day Ahead market minus the average of the four lowest-priced hours. This could be settled on either a monthly or annual basis. Effectively, it would net out changes in energy revenue through an adjusted capacity payment, resulting in a payment from IESO to the storage asset in the event of weaker than expected volatility, and a payment from the storage asset to the IESO in the event of stronger than expected volatility.

If we assume that C (capacity payment in $/kW-mth) + E (energy payment in $/kW-mth) = T (Total Annual Revenue, ex-ancillaries), with T constant throughout the contract period, and C + Cx + Ex = T representing revenues during a future year, we can calculate Cx as some multiplier (y) times the original capacity payment using the following formula:

$$y = (PT_0 - PT_x)(73/60000)(MW\ capacity,\ 4hr),$$

with PT_0 representing the 4hr DA peak-trough spread and PT_x representing that spread in a particular future year.

Using a hypothetical numerical example: Assume that the bidder offered a 20yr capacity contract at $16/kW-mth, based on a $40 annualized 4hr P-T spread (PT_0). This means the bidder would expect total energy plus capacity revenue to average ~$20.87/kW-mth over the 20yr term. If in Year X, the monthly average of this spread came in at $60, bidder would owe the IESO a payment equivalent to $2.43/kW-mth, paid either monthly or annually, which would net out the extra

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	energy revenue above the bidder's forecast. If in Year Y, the monthly average of this spread came in at $32 instead, IESO would owe the bidder a settlement payment equivalent to $0.97/kW-mth, netting out the loss of energy revenue vs forecast. This methodology would give bidder additional revenue certainty, allowing for more favorable financing terms, while keeping overall contract size comparatively low, versus a bundled energy + capacity structure. In the event of significant increases in volatility, windfall profits on the energy side would effectively subsidize IESO's capacity payment to the bidder. In return, bidder would receive downside protection in the event of large declines in volatility."

LT1 RFP and Expedited Process: Revised Timelines

Topic	Feedback
Please provide feedback on the proposed revised timelines and whether these seem appropriate.	

Deliverability Test Guidance Document

Topic	Feedback

Please provide any feedback on the Deliverability Test Guidance Document and associated form.	Plus Power has the following questions/comments: 1. During the proposal evaluation stage, projects that are "Deliverable but Competing" will be sequentially tested for deliverability just based on their evaluation price. Can ISO provide any clarification on how they plan to allocate deliverable status for projects with the same price when there is limited deliverable MW? 2. IESO mentions that the deliverability test for LT1 RFP projects will include all projects that were submitted under Expedited and Same Technology Expansion process, this could result in erroneous status of "Not Deliverable" for many projects that would be otherwise deliverable. Plus Power requests IESO to re-evaluate the said deliverability test for LT1 RFP projects and include the 'Not deliverable' projects from deliverability test to the evaluation phase to confirm their non-deliverability or limit the amount of MW (based on the procurement target for the expedited/same tech expansion process) that are considered deliverable in the LT1 Deliverability test. 3. Is there an option for the projects that entered the expedited process and were deemed 'Not Deliverable' to re-enter in the LT1 process with proposed path to deliverability? Can IESO evaluate the solution provided by a project that could deem it 'Deliverable'? 4. When performing the Deliverability test, does IESO check deliverability only to local zones? 5. The 'Output of Existing Generation for two Peak Demand levels' seems to be too conservative. If all existing generations are dispatched at 100% then no new projects or very few projects will be deliverable. IESO should look at dispatching their current generation to meet their base reliability and then add the new projects to meet the Peak Demand levels. In theory, the new generation should be displacing the current generation fleet and IESO, by assuming that the current generation will still be dispatched at 100%, would severely reduce the ability for IESO to secure new capacity. IESO should also look into historical dispatch trends of wind and solar before dispatching both of them at the same time and at their max capacity.

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	6. The 'Deliverability Test' for standalone storage seems to be similar to that of other types of resources, which isn't correct. Standalone Storage projects can provide a lot more system reliability when compared to other intermittent resources. Plus Power would request IESO to identify system locations where standalone storage systems could perform better than other resources due to its dual operating modes (charging and discharging). In such locations and areas the standalone storage systems should not be combined with other resources connecting in the area but should be tested differently so as to improve system reliability and available capacity.

General Comments/Feedback