

IESO Draft RFP NRStor Comments

1. Confidence in Process Relating to Energy Storage & Time Frames

- Overall, our impression is that the IESO has not fully thought through the attributes of energy storage projects and how contracting can be done to incent effective projects and maximize value for ratepayers.
- To this effect, we note that many of the comments previously made by ourselves and the energy storage industry have not been addressed in the latest document updates.
- While we understand the desire to move quickly, we suggest that the IESO may need more time
 than currently allocated to finalize the contract structure for energy storage projects and may
 need to delay the contract finalization past Nov 1, 2022 in order to properly digest and
 adequately respond to all feedback received. In parallel, the E-LT1 RFP bid date may need to be
 extended.

2. Contract Capacity

- We would like to reiterate that it is an inherent technology characteristic for many energy storage facilities to degrade over time. While it is possible to augment facilities to maintain capacity at a fixed level for 20 years or greater, we believe that requiring project proponents to do so will unnecessarily add costs and negatively impact ratepayers due to the current market environment with high commodity pricing, inflation and foreign exchange risks.
- Exhibit B should include a table for Minimum Annual Contract Capacity to be specified.
- Suppliers will need to build in large contingencies to manage exposure to changing costs over the whole term of the contract if capacity is not allowed to decrease, introducing unnecessary additional costs to ratepayers.
- Suppliers should have the ability to specify the minimum annual contract capacity each year during the term of the contract, with the actual annual contract capacity to be set by the Capacity Check Test each year, and which may exceed the Minimum Annual Contract Capacity.
- If there is appropriate resolution of annual and monthly contract capacity, section 7.1 (I) should be deleted.
- IESO will have full visibility of the Minimum Annual Contract Capacities, only paying for the capacity received, and will have the ability to align future capacity auctions and processes to bring on additional capacity needed.

3. Concerns with Firm Gas Supply

• We remain concerned that gas generation facilities will not be required to demonstrate their ability to meet the duration specified year-round. The requirements for firm gas storage, firm intra-day gas balancing, firm short notice gas transportation and distribution services should be specified in order to pre-qualify the MWs from a gas fired resource. A gas fired resource relying on interruptible gas services and without sufficient quantities of gas storage will not be able to deliver reliable capacity to the IESO, especially in the winter months. Brownouts are an active point of discussion and exposure for power markets that have not specified firm gas arrangements, such that on peak days gas plants are curtailed from having fuel supply and enter forced outages on these most important capacity days. Small capacity related penalties for malperformance do not sufficiently incent gas plant operators to procure expensive firm gas services for their facilities. Gas plants should be required to carry firm gas



storage/transport/distribution services with intra-day short notice access in order to meet their offered MW of capacity and Duration (e.g. a 600MW gas plant could need gas supply of 5,000 GJ/hour to output their offered contract capacity, therefore if offering a 12 hour duration for maximum points, it should be carrying gas storage with 5000 GJ/hour of deliverability and at least 5000 GJ x 12 hours = 60,000 GJ of gas commodity storage space, along with transportation and distribution services rated at 5000 GJ/hour to flow the gas commodity from storage to the plant to burn when called to operate).

4. Clean Energy Regulation Risk to Ratepayer Value

- We are concerned that contracting large volumes of new gas capacity that will not be compliant
 with federal regulations over the life of the assets presents a large risk to ratepayer value. How
 is this risk factored into IESO's evaluation process?
- We believe rated criteria points should be provided for projects with no emissions.
- In cases where a non-emitting energy storage project alternative is ready to serve the grid, and is "Deliverable but Competing" with a non-storage asset, the priority is currently being given to the non-storage asset. We believe this should be changed and the priority given to the non-emitting storage asset.

5. Materials Cost Index Adjustment

- Proponents should be able to specify whether and what commodity exposure they may have, as well as the proportion of their capacity payment related to the exposure. Rather than requiring every proponent use the same formula, we suggest that each proponent should be able to submit their own unique commodity adjustment formula that aligns with their particular technology supplier adjustment mechanisms. This will allow for back-to-back commodity exposure arrangement between suppliers and the IESO, both up and down. Formulas that do not align back-to-back mechanisms will introduce new, unnecessary risks to proponents.
- Foreign exchange exposure should be indexed between the bid date and contract signing.

6. Spread Adjustment Factor:

- The IESO's continued use of a hedge structure with thresholds that trigger an all-or-nothing payment (or claw back) remains problematic. (I.e. if the AMPS is \$0.1/MWh or \$100/MWh above the top end of the collar, the claw back is the same.) A difference of a couple cents will have little impact on a project's market revenues but may have a significant impact on its contract revenues at price spreads around the thresholds. In this way, the IESO's proposal adds contract risk, while failing to adequately mitigate market risk.
- There is no provision to adjust collar when MRP is implemented. The effect of LMP with a \$10/MWh and \$50/MWh collar could be completely different than that of HOEP, jeopardizing Supplier revenues.
- Can the IESO please provide its rationale for limiting the FSAF to 0.2? We suggest increasing the limit.

7. Supplier Diversity:

IESO has limited proponents in the storage category to an aggregate of 600MW across up to 10
project bids for the purposes of achieving supplier diversity. How was the 600MW limit



determined? We believe the limit of 10 project bids is sufficient for ensuring supplier diversity, and there should be no cap on the aggregate MWs bid.

8. Expedited Engagement Time Frame:

The time frames for the expedited RFP currently require project details to be posted on a public website 15 days prior to the community engagement meeting. However, due to the Deliverability Test process, project details cannot be confirmed until test results are received on November 30, 2022. The 15 day window is too long given that bids are due on December 20, 2022; the 15 day requirement should be reduced for the expedited process.

9. Capacity Check Test

- The Capacity Check Test described in Section 15.6 should be limited at 12 hours not 8 hours given that rated criteria points are being provided for projects with a duration of greater than 12 hours.
- The averaging of Capacity Check Test results unnecessarily penalizes facilities for a longer time frame than necessary, with reduced payments continuing after the facility has demonstrated its ability to provide full capacity again. Facilities should have an opportunity to re-test the facility to demonstrate that the full capacity has become available, and regain the full Fixed Capacity Payment. The reduction in capacity payments should only apply to the time period following a low capacity test, until the facility demonstrates full capacity again, rather than using an average.

10. Indigenous Partnership & Participation

- In discussion with Indigenous partners, we note:
 - Timing transparency is a concern. RFP submission date may need to be shifted for at least another month, as rushing does not work in the favor of Indigenous communities or other parties. If such a shift is not possible, then we believe it is fair and transparent for the IESO to confirm, when the final RFP is issued on November 1, that the December 20th submission date is locked and will not be extended. This timing transparency is helpful to all proponents and Indigenous communities in order to avoid a frustrating situation of devoting significant resources to meeting the December 20th timeline and then being advised a few days before that this date has shifted.
 - O Given the short timeline, Indigenous communities need clarity on the depth of commitment that will be required by the December 20th submission date. We suggest that a binding term sheet, that is supported by a Band Council Resolution, should be adequate evidence of Indigenous support at this RFP submission stage. Following notification of the successful proponent, the Indigenous community can then work with the proponent to develop definitive legal agreements.
 - Requiring 50% Indigenous economic interest to secure the same 3 points awarded for a passive municipal support resolution is not acceptable. Getting to the 50% Indigenous economic interest level requires communities to commit to investment and is a much more complex process than passing a Municipal support resolution. In addition, Band Council guarantees may be required this is a lengthy process. Another reason that awarding 3 points, only in the case of 50% economic interest is concerning is that some Indigenous communities may not be interested in an equity ownership, but rather



- prefer other avenues for economic benefits such as royalties, employment, etc. This type and level of participation should not be dismissed.
- All projects with any level (equity or royalty) of Indigenous participation should receive 3 points. Additional 3 points for Indigenous economic interest should be awarded using a sliding scale ("% Sliding Scale") similar to that noted in section 4.3(c.) of the RFP being: 1 point= 10%-25%; 2 points= >25% to 50%; and 3 points > 50%. Regardless of the % Sliding Scale, we believe that any Indigenous Community committing over \$25M in equity into a project, should automatically be awarded 3 points.
- o It is helpful to have a financial incentive, such as a contract price adder ("Price Adder") to help incentivise private sector proponents to work with the Indigenous community to secure the needed funding to ensure the Indigenous equity economic interests contemplated in the RFP are in fact, realized. The adder should be scaled relative to Indigenous participation levels.

11. Insurance

• Section 2.8 a) requires insurance covering the full replacement value of the facility. We believe this is unnecessarily extensive and would pass on unnecessary costs to ratepayers. We suggest changing the wording to cover the probable maximum loss of the facility.

12. Market Rule Changes

- IESO market rule protection is much narrower in the E-LT1 RFP relative to previous IESO contracts. IESO has not provided explanation for this change in approach, which creates significant added risk for suppliers.
- IESO is contemplating a range of potential market rule changes (including but not limited to the Market Renewal Program), that will have substantial, and currently unknown impacts on E-LT1 projects. The current terms offer no protection in the event that future changes impact supplier economics. This is a departure from previous IESO contracts and is one of the most significant challenges of the current contractual design. We believe that changes are required to ensure the contract is financeable.

13. Force Majeure

- IESO has not provided explanation with respect to its requirements of force majeure, which has changed relative to other IESO contracts. Notably, IESO has included the requirement to demonstrate commercially reasonable efforts. We are concerned that this new requirement could add administrative burden and additional uncertainty/risks for contracted storage.
- The definition of force majeure should also expressly state supply chain bottlenecks may be eligible events of force majeure.
- Further, as currently described, force majeure relief does not extend the Term. We believe this penalizes a Supplier for an event of force majeure, which by definition is beyond their control.

14. Planned Outages

 We are concerned that limiting Planned Outage Hours to 5% of the Qualifying Hours is unrealistic and exposes Suppliers to penalties. We recommend that contract payments be



reduced during maintenance outages.

15. Off-ramps

The IESO is proposing a contract with few contractual offramps for suppliers. This is concerning
given the rushed timelines set by the IESO, layered on top of extremely challenging
development conditions. The IESO should introduce additional offramps for suppliers (Outlier
network upgrade costs, supply chain disruptions, etc.) provided Suppliers can demonstrate
reasonable commercial efforts were taken to mitigate these circumstances.

16. Bid Security

- We believe the bid security is very large particularly for large projects, which represents an
 unreasonable amount to secure at the bid stage. At the bid cap of 600MW, the current bid
 security would be \$36M, which will likely exceed the practical level of approval thresholds for
 typical bid preparation teams. At the same time, we believe that bid security is important to
 ensure that projects are successful and backed by serious candidates.
- We recommend capping the bid security at \$5M per project, with a step-up to \$60,000/MW in Completion and Performance Security at contract execution.
- We also recommend that the window to execute the contract is expanded to 60-90 days to allow for necessary times for internal approvals of proponents to post the security and to kick off construction of the project.