IESO Draft RFP NRStor Comments

1. **Confidence in Process**
   - How can we ensure that the final Contract posted in the RFP will be in a form that proponents are willing to execute and finance? Will there be another comment period provided on the Contract form after this round of comments are received and changes are reflected in a revised Contract?

2. **Duration as a Rated Criteria**
   - The rated criteria scoring system is skewed towards gas fired generation projects for "duration" points. The IESO administered market had a myriad of system peak needs to manage, some 1-2 hour peaks, some 3-4 hour peaks, some 4-8 hours peaks, and some peaks longer than 8 hours. How can IESO effectively select the best value projects that meet the needs of market without overbuilding on long duration projects?
   - We suggest that the large weighting attributed to duration in the rated criteria be reduced to 3 points rather than 6 points.
   - IESO should clarify the evidence required to demonstrate achievement of rated criteria points for duration of service, and that IESO continue to monitor for compliance should resources be selected. 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 comparable on a reliability basis with energy storage projects without these upstream gas supply and reliability risks.
   - Given rated criteria points are provided for duration, we believe rated criteria points should be provided for other performance factors that provide value to the IESO. For example, rated criteria points for ramp rates greater than 200MW/min, and for projects with no emissions.

3. **Materials Cost 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. We suggest there be two adjustments to the FCP: one at contract signing, and one after materials costs are locked in post contract signing and prior to COD. Proponents should be able to specify at what point materials costs are secured for their project.
   - A clear and transparent process for setting the baseline foreign exchange and materials indices figures should be developed using reputable, publicly available exchanges and indices that reflect actual project costs.
   - We suggest that the IESO collect information on specific commodities and foreign exchange sensitivities from proponents along with suggested indices. We recommend that the IESO pre-approves several indices that can be selected by proponents. The IESO would also indicate the baseline measurement date such that all bids would reflect the same base case.
   - At Contract signing, the FCP should be adjusted for foreign exchange:

     $$FCP_{CS} = (Fx_M / Fx_B) \times FXF \times FCP_B$$

     FCP_{CS} : Fixed Capacity Payment at contract signing
     Fx_M : Market USD/CAD exchange rate at the time of contract signing

Fx_B : Baseline USD/CAD exchange rate at bid date
FXF : Foreign exchange factor representing the proportion of the project cost exposed to foreign exchange, specified by each proponent
FCP_B : Fixed Capacity Payment at bid date

- When materials are purchased and commodity prices are locked in (post-contract signing and prior to COD), the FCP should be adjusted for materials cost index:

$$FCP_{AD} = [\ MCI_M / MCI_B \times CIF\ ] \times FCP_{CS}$$

FCP_{AD} : Adjusted Fixed Capacity Payment
MCI_M : Market Materials Cost Index at the time of materials purchasing. Index is specified by the supplier (i.e. lithium carbonate price for lithium ion battery projects) and should be converted to CAD
MCI_B : Baseline Materials Cost Index at bid date. Index is specified by the supplier and should be converted to CAD
CIF : Commodity Index Factor representing the proportion of the project cost exposed to commodity price changes, specified by each proponent
FCP_{CS} : Fixed Capacity Payment at contract signing

4. Inflation on Fixed Capacity Payment:

- In Exhibit J, the baseline CPI_B should begin at the bid date.

5. 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.
- The limits on the collar do not appear to be indexed to inflation, which is a problem in a high inflation environment over a period of 20+ years in the contract
- 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 HSAF and LSAF to 0.2? We suggest increasing the limit.

6. Contract Capacity

- Exhibit B should include a table for Minimum Annual Contract Capacity to be specified. Many energy storage technologies degrade over time, and it will add unnecessary cost for projects to overbuild and augment to maintain the capacity to the end of the term. This is due to the inability to achieve cost certainty on augmentation costs over the term of the contract. Suppliers will need to build in large contingencies to manage this exposure 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 (l) should be deleted.

7. Capacity Check Test

- The Capacity Check Test described in Section 15.6 should not be tied to 4 hour duration for all projects and should reference the specific duration of each facility, described in Exhibit A.
- 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.
- The Capacity Check Test Protocol is an extremely important consideration for energy storage facilities, as projects may have varying technical considerations. Suppliers need to see and have an opportunity to comment on Exhibit P-2 prior to the bid stage.

8. Indigenous Participation

- In discussion with Indigenous partners, we note that there is an imbalance in requiring 50% Indigenous equity participation in order to get to the same level of points as a municipal support resolution. Getting to 50% equity participation requires communities to commit to investment and is a much more complex process than passing a support resolution.
- Every community may not be interested in an equity ownership position in a project, and may prefer other avenues for economic benefit such as benefit agreements, job opportunities, etc.
- Where desired, points for Indigenous equity participation levels should also reflect the project size. For example, 10% ownership of a very large project may be the appropriate investment threshold for a particular community, and may provide larger community economic benefits than 50% ownership of a very small project.
- We suggest that the small weighting attributed to Indigenous participation in the rated criteria be increased to 6 points rather than 3 points. In addition, we suggest the IESO give consideration to the varying types of participation Indigenous communities may seek.
- We suggest exploring a “price adder” approach to incent Indigenous participation in projects. Given the tight timelines and the desire to ensure options for ongoing engagement in projects, we believe that a price adder for Indigenous participation (perhaps based on a sliding scale of equity participation and project size), would create flexibility to add partners to the project prior to commercial operations or during the contract term. We also believe that this would create a more financeable contract, as remedies for change in participation levels is the loss of the price adder, rather than potential default.
- The requirements for maintaining Indigenous participation for 5 years, but with the ability for Indigenous participants to reduce their participation at any point in time requires more consideration. We believe the current process risks bidders treating Indigenous participation as a box-checking exercise for the bid, without the intention of following through on partnerships

and maintaining a high level of Indigenous participation, since it can be easily reduced if the community is not able to secure the capital for equity ownership.

9. **Insurance**
   - We suggest that insurance should cover the probable maximum loss of the facility rather than the full replacement value of the facility, as currently required in section 2.8 a). It is unnecessarily expensive to get insurance for the full replacement value and this would pass on unnecessary costs to ratepayers.

10. **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.

11. **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 and connection delays 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.

12. **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.

13. **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.

14. **Exhibit J**
    - There is a typo - ANPC should read ANC in Exhibit J to match with Exhibit F.

15. 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 500MW, the current bid security would be $30M, 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.