

October 4, 2022

**VIA EMAIL:** [engagement@ieso.ca](mailto:engagement@ieso.ca)

Independent Electricity System Operator  
Attention: Stakeholder Engagement  
1600-120 Adelaide Street West  
Toronto, ON M5H 1T1

**RE: Atura Power's Written Comments  
Long-Term RFP and Same Technology Upgrades – September 15, 2022 Materials**

Atura Power (**Atura**) appreciates the opportunity to comment on the materials presented at both the Long-Term RFP (**LT RFP**) and at Same Technology Upgrades (**STU**) Solicitation sessions on September 15, 2022.

**Expedited Long-Term RFP and Contract**

Atura is encouraged that the IESO has taken stakeholder feedback into consideration and recognized the need for a separate energy storage contract; however, as stated in past submissions, Atura is of the view that a traditional Contract for Differences (**CfD**) for energy storage resources is still the most appropriate commercial construct. A traditional CfD will not only help to reduce ratepayer costs, but it also provides sufficient risk certainty to investors which will enable them to deploy large amounts of capital into these projects.

The proposed contract structure risks making the procurement a selection of which proponents have the highest market revenue forecast. This could result in an outcome where the procurement results in what appear to be relatively low-capacity prices; however, the proponents (or their financiers) could later develop different views that indicate a lower potential for market revenue that prevents the facilities from obtaining financing and proceeding to construction. If this occurred, the IESO runs the risk of the project(s) going into default and critical supply resources not being brought into service. A CfD structure would eliminate this risk by better dampening the effect of electricity market price volatility on supplier's financial return and provide more certainty to the IESO that proposed facilities will be constructed as quickly as possible.

Additionally, the grid is at a point of future uncertainty, making it difficult for proponents to forecast long-term revenues resulting from:

- Implementation of Market Renewal Project (**MRP**)/Locational Marginal Pricing (**LMP**);
- Introduction of energy storage as a new resource type and uncertainty on how this will affect prices (diminishing spread as more storage is added); and,
- Changes regarding future asset mix and carbon prices (transition to net zero)

Consequently, it may be unwise to shift market revenue risk to proponents in times with such a high level of uncertainty given the urgent need for new facilities for reliability.

In addition to the high level of future uncertainty, potential market revenues for energy storage facilities are difficult to forecast because of the need to consider the effect on off-peak and on-peak prices and the overall amount of energy storage on the system.

As previously recommended, we encourage the IESO to form a working group with energy storage proponents to develop commercial terms that are best suited for this resource type and its unique characteristics.

Please see the below comments on specific sections of the draft RFP and draft E-LT1 contract.

## RFP 2.1

When will the IESO release the definition of “Eligible Expansion”?

## RFP 3,6(c)(ii) – Submission by email

IESO has not specified the limitations on size of electronic delivery for proposals. If proposals are likely to exceed the size limit, then, rather than splitting emails, IESO should consider use of a Dropbox, or similar file hosting service, rather than submission through multiple emails to ensure proposal integrity.

## RFP 4.3(b) Rated Criteria (Duration of Service)

There does not seem to be any link currently between Duration of Service and Maximum Contract Capacity commitment in either the RFP or the Contract (for example the Capacity Check Test in the Contract is based on 4 hours). As noted below, Maximum Contract Capacity is a tie breaker in limited cases.

## RFP 4.4(d)(v) – Storage Target Capacity

The IESO should consider adding the ability to either increase the Storage Target Capacity to accommodate the last proposal or move to the next proposal on the list that does not cause the Storage Target Capacity to be exceeded.

As a drafting matter, this provision should also be subject to Section 4.5(iii)(A)(2) and 4.5(B)(2) as the same Storage Target Capacity issue will recur as Competing Proposals are dropped.

## RFP 4.5(iii)(A)(B) – Competing Proposals

The IESO's “Deliverability” test determines competition by reference to resources proposed in the same deliverability path. RFP Section 4.5(iii) should be updated to reflect the wording from the Deliverability protocols.

## RFP 4.5(iii)(A)(2)/4.5(iii)(B)(2) – Replacement Proposals

The IESO should clarify that if a Competing Proposal is rejected it may be replaced by “one or more” Proposals in accordance with RFP Section 4.4(d)(v). In other words, if a Competing Proposal is rejected, the IESO will go back to the Storage Preliminary list and add as many new Proposals as required until the Storage Target Capacity is again reached.

## RFP Appendix D – Letter of Credit

The Letter of Credit should not be freely transferrable by the IESO, it should only be transferrable by the IESO in conjunction with a permitted transfer of the E-LT1 contract. This should be stated in the form of LC and in the E-LT1 contract.

## E-LT1 General – Use of the term “generate”

As the E-LT1 contract will cover both generating facilities and energy storage facilities, the IESO should check the E-LT1 contract for use of lower-case terms such as “generating”. As the E-LT1 contract will cover both generating facilities and energy storage facilities, the IESO should check the E-LT1 contract for use of lower-case terms such as “generating”.

## E-LT1 – Definition of Storage Capacity

The multiplier used to determine the Storage Capacity should be based on the Facility Duration Capability as specified in Exhibit A.

## E-LT1 – Definition of State of Charge

The definition currently refers to “total energy storage capability”. Consistent with the “State-of-Charge Limited” definition, this reference should be to the Storage Capacity.

## E-LT1 – Definition of State of Charge Limited

As currently drafted the definition/mechanics around State of Charge Limited (**SOCL**) is not clear. It would be helpful if the IESO could provide an illustrative example.

Additionally, the term “expended energy” should be a defined term to eliminate any ambiguity or confusion. Furthermore, it would be beneficial to include a calculation/equation for the term “expended energy” as the current definition of SOCL refers to a calculation that is not provided for (“for purposes of the calculation of expended energy”).

## E-LT1 – Definition of Qualifying Hours

Revision of Qualifying Hours should be further limited by requiring at least 8 continuous hours between Qualifying Hours and requiring that peak hours for purposes of GA and Exhibit S always fall within Qualifying Hours. Should a GA peak occur outside of the Qualifying Hours and the storage facility was charging during that hour, the Supplier should be reimbursed for the GA costs for that hour.

## E-LT1 – Definition of Withdraw and Withdrawn

IESO should consider if these definitions can be combined given their use in the E-LT1 contract.

## E-LT1 1.2(b) – Unilateral right to change forms

Please delete Exhibits C (Form of Irrevocable Standby Letter of Credit), H (Form of Force Majeure Notice) and L (Form of Annual Operating Plan) from the list of exhibits that can be unilaterally amended by the IESO. While it makes sense for IESO to be able to change procedural forms on a portfolio basis, the IESO should not be entitled to unilaterally amend the form of letter of credit (as failure to deliver the prescribed form is a Supplier Event of Default), the form of Force Majeure notice (as the Supplier’s relief for Force Majeure is tied to the notification) and the form of Annual Operating Plan.

## E-LT1 1.6(b) – Changes to IESO Market Rules and Statutes

As formulated, this provision provides no real relief. The relief is limited to material costs to comply with the Must-Offer Obligation that would not be incurred if the Facility were operating in the IESO-Administered Markets. The premise of the E-LT1 contract is that the Supplier is paid for having capacity to bid into the IESO-Administered Markets during Qualifying Hours. The Must-Offer Obligation is simply an obligation to do so up to a certain threshold. The Supplier is otherwise no different from any other facility operating in the IESO-Administered Markets. Consequently, the scope of protection for changes in IESO Market Rules is very narrow.

Relief should instead be provided on the same basis as a Discriminatory Action under Section 13.1(c) and should restore the Supplier's economics as in past contracts. This is especially important in light of MRP as the scope of this project will result in fundamental changes to the IESO-Administered market, which will be impactful to projects. As such, at the very least, this section 1.6(b) should allow for greater relief (i.e. restoring Supplier's economics) as a result of MRP.

## E-LT1 2.1(b) – Facility Amendment

Given that energy storage is an evolving asset class, consider permitting Facility Amendments on notice to IESO so that facilities can be optimized over time (e.g. to manage degradation), with IESO consent only required where there is a material adverse effect on the ability to meet Must-Offer Obligations or a reduction to Contract Capacity.

## E-LT1 2.3(d) – Liquidated Damages Cap

Liquidated damages should cap out at the letter of credit amount and draws on the letter of credit should constitute IESO's sole and exclusive remedy for failure to pay liquidated damages.

## E-LT1 2.3(e) – Milestone Commercial Operation Date Extension **(MCOD)**

If the Supplier fails to meet MCOD it should be able to extend the Term provided it pays liquidated damages due and owing.

## E-LT1 2.5(a)(i)(D) – Requirements for Commercial Operation

How will the 100% threshold for Facility availability be determined. Would this be subject to the same parameters as the Capacity Check Test?

## E-LT1 2.10 – Environmental Attributes

Please replace "except in respect of the Supplier's performance requirements" with "except for Future Capacity Related Products".

## E-LT1 2.13 – Material Cost Index Adjustment

To accommodate different technologies, the Supplier should be able to select from a basket of indices (i.e., Lithium-Carbonate) and specify the percentage of the Fixed Capacity Payment applicable for each index.

The index adjustment should be made at MCOD, not the 1<sup>st</sup> anniversary of the Contract Date as price adjustments from suppliers could continue through the construction phase.

## E-LT1 6.1(c) – Force Majeure and Letter of Credit

This provision is unclear whether it is saying that: (i) the period during which the letter of credit is required (i.e. until the end of the Term) won't be extended; or (ii) that the date for providing the letter of credit won't be extended. If the latter, then that is an issue. Letters of credit need to be physically delivered and physical delivery may be prevented by Force Majeure (as it was during the COVID-19 pandemic).

## E-LT1 6.2(b)(i)(iii) – Failure to Honour Letter of Credit

Part (iii) of the definition should be deleted. If the issuer of a letter of credit fails to honour the letter of credit, then IESO, as the beneficiary, would have a cause of action against the issuer. Requiring the Supplier to issue further credit to cover the issuers failure to honour its Letter of Credit simply makes the Supplier the guarantor of the issuer.

## E-LT1 6.2(b)(ii) – Draws on Letter of Credit

The Letter of Credit at Exhibit C should reflect the draw condition set out in Section 6.2(b)(ii).

## E-LT1 7.1(k) Representations of the Supplier (Facility Capability)

This representation should be modified to say the "Facility will, once Commercial Operation is achieved,". When the representation is given, the Facility will not yet exist.

## E-LT1 10.1(k) Events of Default by the Supplier (MAOQ Default)

Please clarify that the rolling 24-month period starts on the completion of the second Contract Year for purposes of determining the Monthly Average Offered Quantity (**MAOQ**) default.

## E-LT1 10.2(b) – Supplier Event of Default: Set off or draw on Completion and Performance Security

Clarify that if the IESO sets off or draws on the Letter of Credit for amounts owing, then the Supplier Event of Default will automatically be deemed cured.

## E-LT1 10.2(d) – Retention of Completion and Performance Security upon Termination

If the IESO retains the Completion and Performance Security upon termination that should be its sole and exclusive remedy. Alternatively, the IESO should only be entitled to draw on the Completion and Performance Security to the extent of termination damages due and owing by the Supplier.

## E-LT1 10.2(e)/10.4(b) – Termination Payments

Buyer should be liable for payments arising out of the termination itself. As formulated, the IESO has itself being responsible for in-contract damages but not termination damages. If the IESO is terminated for default, the IESO should be liable for termination damages.

## E-LT1 11.1(a)(i) – Force Majeure for Energy Storage

For energy storage facilities this should include "withdraw, store or deliver" and not just "deliver".

## E-LT1 11.1(a)(i) – Force Majeure – Extension of Term

If MCOE is extended by Force Majeure, the Term should also be extended.

## E-LT1 11.1(a)(i) – Force Majeure – Partial Performance

The partial performance language at the end of the second paragraph should be revised to offering a portion of the Contract Capacity rather than “deliver” as the Supplier is paid for capacity, not delivery, and the adjustment factor in Exhibit J treats Force Majeure as a limit on capacity.

## E-LT1 11.1(f) – Termination for Force Majeure

As Exhibit J treats Force Majeure as a limit on capacity, the termination right should only arise if the Supplier is unable to make available all, or substantially all, of the Contract Capacity for 36 months. It is possible that a Force Majeure event could have a longer lasting but limited impact on availability.

## E-LT1 11.2(f) – Force Majeure Exclusion – Failure to Comply with notice provisions

Failure to comply with notice provisions should not limit an entitlement save to the extent of any prejudice that arises as a result of the delay.

## E-LT1 11.2(g) – Force Majeure Exclusion – COVID-19 Pandemic and Russo-Ukrainian War

As of the Contract Date, all Suppliers reasonably ought to know that if a new strain of COVID-19 emerges or the Russo-Ukrainian war continues or escalates that there could be significant impacts on global markets and supply chains – these should not be excluded from Force Majeure. Supplier has no ability to mitigate or manage this risk, nor is it in rate payer's interest to price this risk in a long-term contract.

## E-LT1 11.3 – Expansion of Force Majeure Definition

Force Majeure relief for a Supplier is based on the premise that it is poor value to price in risks that are beyond the Supplier's reasonable control. This is reflected in the introductory language to the “Force Majeure” definition in Section 11.3, which is then followed by a list of expressly included events. This list of included events should be expanded to reflect market practice as it has developed for new build EPC and equipment supply contracts in the Canadian power sector, including relief for a new strain or variation of COVID-19; pandemics or quarantines and any related governmental actions; the Russo-Ukrainian war continues or escalates; port closures, congestions or delays; global supply chain disruptions, including due to labour, materials and transportation shortages and delays; and change in law.

## E-LT1 11.3(d) – Drafting

The second parenthesis should be at the end of the clause – a party doesn't get relief for its own labour disputes unless they are the result of a general strike, etc.

## E-LT1 11.3(i)(ii) – Drafting

To reflect the energy storage modality, “producing Electricity” should be “withdrawing, storing or delivering Electricity”

## E-LT1 13.1(c)- Discriminatory Action

Change 5 Business Days prior to the Contract Date to 5 Business Days prior to the Proposal Submission Deadline. Suppliers will be posting significant letters of credit with their bids. If there is a Discriminatory Action taken between the Proposal Submission Deadline and the Contract



Date, there is no way for the Supplier to address it other than to lose its letter of credit. That is unreasonable.

#### E-LT1 13.2 – Consequences of Discriminatory Action

This section should be revised consistent with Section 13.1(c) to cover increased costs that the Supplier would reasonably be expected to incur in respect of the development, construction, operation and maintenance of the Facility, including related to satisfying the Must-Offer Obligation, to substantially restore the Supplier's economics.

#### E-LT1 14.3 – Indemnity

Indemnity should be limited the relationship between the Buyer and Supplier and not extend to third parties. IESO's recourse should be limited to the Letter of Credit.

#### E-LT1 15.6(a)(iii) – Scheduling of Capacity Check Test

The Capacity Check Test should occur for a duration of time that matches the energy storage resource's Facility Duration Capability in Exhibit A.

The Capacity Check Test is stated to be subject to coordination and scheduling under the IESO Market Rules. As IESO initiated the Capacity Check Test, IESO should ensure that the Supplier is scheduled for continuous hours during the Capacity Check Test Window that match the Facility Duration Capability.

As a drafting matter, ensuring the Supplier match the energy storage resource's Facility Duration Capability should also apply to the following provisions: definition of Storage Capacity, 15.6(c), 15.6(d), 15.6(e), 15.6(g)

#### E-LT1 15.6(b) – Capacity Check Test – Interruption due to Force Majeure

It is not clear why an interruption due to Force Majeure is treated differently than the ambient temperature condition restraint as the impact should be the same. As the Capacity Check Test involves the delivery of Electricity to the Delivery Point, the Supplier can't simply recommence delivery once the Force Majeure event is resolved.

#### E-LT1 15.6(d) and (e)iii – Requirements to pass the Capacity Check Test

The Capacity Check Test should occur for a duration of time that matches the Facility Duration Capability in Exhibit A.

#### E-LT1 16.5(e)(A) - Assignment (Reversion to IESO)

It is not clear why this provision is needed, however the assignment of the Agreement back to the IESO under this provision should be the same as the assignment out, i.e. provided the IESO has the same Credit Rating as the assignor at the time of assignment.

#### E-LT1 16.7(a) – Change of Control for Specified Period

Restrictions on change in Control should be limited to circumstances where the Qualified Applicable no longer Controls the Supplier but not reach upstream from the Qualified Applicant. If the IESO maintains the Letter of Credit requirement through the Term, then the Supplier should be free to sell any time after COD.

## E-LT1 16.9 – Originally Executed Copies

Consider whether originally executed copies are really necessary, just more paperwork.

## E-LT1 Exhibit M – Market Price Spread Adjustment Factor (MPSAF)

The IESO's spread adjustment is not really a spread adjustment as much as an outlier adjustment. That said, the IESO should consider a couple intermediate thresholds between the \$10/MWh and \$50/MWh (i.e. \$17.50/MWh and \$37.50/MWh), which would make the adjustment less binary and consequently, the proponent would bid in four adjustment percentages to coincide with each threshold (i.e. -10%; -5%; +10%; +20%).

## E-LT1 Exhibit Q – Milestone Dates

The Milestone Commercial Operation Date (**MCOD**) should be May 1, 2025 (not 2026)

## E-LT1 Exhibit S – Regulatory Charge Credit

In the event that the ICI program is changed in a way that increases the Global Adjustment (**GA**) cost incurred by the Supplier, there should be a mechanism that reimburses the Supplier for GA charges that are in excess of what would have been incurred by the supplier under the ICI program as it existed as of the Proposal Submission Deadline.

Can the IESO clarify what happens if round trip efficiency threshold is not met?

## Same Technology Upgrades Solicitation

Please see the below comments on specific sections of the draft Call for Submission document.

### Section 3(a)(i) – Permitted Upgrades

This section states that the permitted upgrade is to be incremental to both existing Contract Capacity and existing uncontracted capacity. Can the IESO clarify how the incremental value is to be calculated.

### Section 4(a)(i) – Submissions (Uprate Capacity)

This section indicates that each submission should provide for an increase to the IESO-registered MCR. The Online IESO system, for Combined Cycle Generating Turbine (**CCGT**) facilities, requests five MCR values (at -10°C; 0°C; +10°C; +20°C; and +35°C (for facilities south of Barrie)). Will the IESO provide guidance as to which ambient temperature it will require proponents to increase their MCR for the permitted upgrade or is it up to the proponent to inform the IESO which ambient temperature was used to establish the uprate?

Furthermore, is the expectation that the MW increase to the MCR and the contract capacity (in section 3(a)(i)) is to be the same value? MCR data should be based on actual physical plant capability, whereas contract capacity does not necessarily reflect the physical capabilities of the facility. Therefore, the increase to the MCR value could be different than the increase to the contract capacity.

### Section 4(a)(v) – Submissions (GD&M Costs)



Atura recommends that for the uprate capacity, the IESO consider a different receipt point (other than Dawn) as in discussions with gas pipeline companies such as TCPL and Enbridge, it has been noted that there is no available capacity out of Parkway, without the requirement for a new build and this would require customers to enter into 15-year contracts. Consequently, alternate receipt points should be considered.

#### Section 6(iv) - Evaluation

The IESO is offering guidance with respect to the size of the uprate capacity to be offered for facilities with an annual average contract capacity of 400 MW to be 40 MW. Although Atura understands the IESO's rationale for this guidance, Atura suggests that uprate capacity offered for facilities of this size be ~25 MW, which is more achievable for the CCGT fleet due to the fact that the uprates, for the most part, are limited to gas turbine (**GT**) upgrades (total plant upgrade depends on how many gas turbines exist at each plant). Consequently, a plant with three GTs (3x1) would be able to attain a higher uprate capacity than a plant with only two GTs (2x1). Accordingly, for a 2x1 CCGT plant, a 40 MW increase is equivalent to a 20 MW increase per GT, which is currently not available from certain OEMs. As the majority of the CCGT plants in Ontario are 2x1, Atura suggests (that for this resource type) the IESO's guidance should be more reflective of the Ontario CCGT fleet capabilities and not disadvantaging those facilities that are a 2x1 configuration.

#### Section 8(vii) – Contracting Process

Can the IESO confirm that the duration of relief from the Availability calculation will be determined by the Supplier as per section 4(a)(iv) based on the scope of work and not subject to a “one size fits all” duration to be set for all facilities?

Sincerely,



Margaret Koontz  
Manager, Market Affairs