



Chuck Farmer
Vice President, Planning, Conservation and Resource Adequacy
Independent Electricity System Operator
120 Adelaide Street West, Suite 1600
Toronto ON, M5H 1T1

September 30, 2022

RE: Feedback on Draft E-LT1 RFP and Contract

Dear Mr. Farmer,

This submission has been prepared by Enfinite in response to the Independent Electricity System Operator's (IESO's) request for feedback with respect to the draft Request for Proposal (RFP) and draft contract pursuant to the expedited process of the first Long-Term RFP (aka "E-LT1 RFP"), which was posted on the IESO's website on August 25, 2022.

Enfinite recognizes the importance of this RFP, and its success is of the utmost importance to Ontario. Being one of the leading energy storage operators in Canada, we have valuable experience in our unique climate. The LT1 and Expedited RFP present a significant opportunity to introduce energy storage at a large scale to the grid. It is paramount this is done correctly to ensure future success. We offer the following comments and recommendations for consideration.

Feedback on E-LT1 RFP

1) Schedule

The current timeline from release of the deliverability results to the submission deadline is too tight. The results of this test inform the fundamental site design and layout. Developers will be required to make assumptions and commit significant capital with no certainty. The results of the deliverability test have a material impact on design and capital considerations, so sharing the results with participants earlier in the process will result in more accurate proposal submissions.

2) Charging

From our review of the RFP, it is unclear how charging is being considered for energy storage resources. Is the intent for the resource to charge outside of the business day must offer window?

We raise this point as the charging capability energy storage offers should not be overlooked. For example, areas such as Windsor with high renewable generation would benefit from a dispatchable load during peak times.

3) Indigenous participation as Rated Criteria

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), 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.

Feedback on E-LT1 Contract

1) Material Cost Index

The currently proposed Stats Canada index proposes risk to energy storage providers. For the expedited process, Lithium-ion batteries are still the only viable option at scale. We understand the intent of trying to set one index to cover all the options, however, we recommend a separate index for the storage portion of the RFP.

2) Environmental Attributes

The phrasing within the contract should be redrafted for additional clarity. It is unclear what is meant by “except in respect of the Supplier’s performance requirements under this Agreement”.

3) State of Charge

It is unclear how State-of-Charge Limited Hours will be determined. For example, will the IESO accept self-declaration or interrogate the battery? An example scenario would be very helpful to walk through and determine the effects on operation.

4) Planned Outages

Enfinite is concerned on the restriction of Planned Outage Hours to 5% of the Qualifying Hours. Typical energy storage facilities require yearly maintenance. The entire facility does not need to go down for maintenance but will not meet the full nameplate capacity during this time. On large facilities (100+ MW) the maintenance cannot be completed in 5% of the qualifying hours.

Enfinite recommends adding the ability for storage facilities to reduce the monthly capacity (1) month of the year to coordinate the annual maintenance. The preferred months can be dictated by the IESO to minimize the reduction in available capacity.

5) Monthly Capacity Payment

Enfinite submits that the current qualifying hours on a business day structure will result in high fixed capacity payments compared to other jurisdictions. The IESO will need to factor this when analyzing the submitted values. Due to the reduced days for the capacity payment and low hourly pricing spread, the fixed capacity payment accounts for the majority of the revenue.

6) LSAF and HSAF

The current structure does not incentivize energy storage resources to offer energy into the market. These resources will only offer in to meet the must supply requirements of the contract. The biggest driver behind this is the low differential in hourly pricing. As mentioned above, this results in a higher-than-average capacity payment to meet the required returns for owner / operators.

Additionally, under the current framework we noted the following areas of improvement:

- The MPSAF adjustment is not proportional, 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 (i.e., very risky)
- A common LSAF and HSAF does not make sense for energy storage.
- 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.

7) 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.

8) Change In Market Rules

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.

Enfinite notes that 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 of 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. Enfinite believes that changes are required to ensure the contract is financeable.

Enfinite would like to thank the IESO for this opportunity to provide comments on the draft documents. Please don't hesitate to reach out to us if you would like to review or speak to any of our comments or recommendations included herein.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mike Schoenenberger', with a long horizontal flourish extending to the right.

Mike Schoenenberger, P.Eng
Director - Engineering
Enfinite