



IESO Procurement of Expedited Long-Term Electricity Reliability Services (“E-LT1 RFP”) draft Contract and RFP document

Summary of CanREA recommendations

Capacity targets	Minimum 80% (2800 MW) of Total Target Capacity across both the Expedited and LT1 RFPs be awarded to energy storage
Monthly payment and price spread adjustment	Confirm as soon as possible whether proponents will have the option to not use the IESO’s proposed MPSAF, and give fair consideration to alternative price spread adjustment designs that better reflect the operating characteristics of energy storage
Milestone Commercial Operation Date	Allow for an extension of the contract term by up to six months to ensure that a facility that has not achieved commercial operation by its Milestone date is still eligible for the full term length
Materials cost indexation	CanREA has proposed detailed recommendations for enhancing the proposed MCIA design by allowing for proponents to select a technology-specific materials cost index, and incorporating transportation and EPC cost indexation
Force Majeure	<ul style="list-style-type: none">• Remove “Commercially Reasonable Efforts” provision from Article 11.2 of the Contract• If an event of Force Majeure causes the Supplier to not achieve Commercial Operation by the MCOB, then the MCOB should be extended for a reasonable period and the contract term extended commensurately.• The definition of Force Majeure should expressly include any delays in obtaining interconnection approvals, supply chain delays, or delays by the LDC in performing any required network upgrades.
IESO market rules and statutes	Amend this section of the Contract to establish that in the event of an amendment to IESO Market Rules that materially impacts a supplier’s economics, either Party has a right to contract amendments to restore the supplier’s economics to the baseline prior to the rule change

Assignment and change of control	Amend to ensure proponents are entitled to standard rights to assignment or change of control, provided the IESO is notified
Regulatory Charge Credit and Global Adjustment for an Electricity Storage Facility	<ul style="list-style-type: none"> • Remove references to the “ICI” program or any successor or replacement program, to more clearly establish that an energy storage facility shall remain entitled to full reimbursement of all regulatory charges including global adjustment for the duration of the contract term • Clarify what is meant by the provision that reimbursement of these charges is subject to facilities maintaining round-trip efficiency of 80%, “where actual efficiency below such level will result in less than one hundred percent (100%) reimbursement of such charges”
Municipal support confirmation	Remove 2.14 Municipal Support Confirmation from the Contract document and 2.2 (m) from the RFP document, as <ul style="list-style-type: none"> a) These appear to be redundant given the requirements for COD set out in Section 2.5(a)(i)(F) of the Contract, and b) It would be egregious if failure to obtain a Municipal Support Resolution should exempt a Supplier from any costs or payments associated with a Supplier Event of Default
Grants and subsidies	Clarify as soon as possible how any such funding awarded to individual projects will be treated within the procurement.
Schedule	Any further delays to the Contract Award Date, without commensurate adjustment to the contract term length and COD, will jeopardize the success of the procurement.

Capacity targets

The draft RFP document states that the E-LT1 RFP is intended to competitively procure up to 1000 MW of year-round capacity services (the “Total Target Capacity”), on a Maximum Contracted Capacity basis. CanREA recommends that the IESO establish as an official target that a minimum 80% (2800 MW) of Total Target Capacity across both the Expedited and LT1 RFPs be awarded to energy storage resources, either in standalone or hybrid configurations.

While we understand that the IESO is seeking a diversity of technologies and applications in this procurement, CanREA would emphasize that there is inherent value for Ontario ratepayers in maximizing the participation of energy storage specifically. Energy storage will help to enable more effective integration of variable wind and solar generation, as well as optimizing the efficient delivery of the province’s baseload hydropower and nuclear resources. Energy storage will also greatly enhance overall system resiliency and flexibility, and its extremely low impact on local communities means that it can be quickly and safely deployed exactly where it can offer the greatest locational value.

That said, it is important to emphasize that the advantage of electricity storage in terms of maintaining the low emissions intensity of Ontario’s electricity supply depends on the continued availability of surplus non-emitting generation. The IESO projects that even with full re-contracting of existing generation assets, the province’s Surplus Baseload Generation supply will have decreased by 86% below current levels by the end of the decade.¹ In addition to the capacity need that this procurement seeks to address, we must not lose sight of the fact that Ontario urgently requires new non-emitting energy supply, including wind and solar PV, to meet the projected increase in electricity demand of approximately 15% above current levels by the end of this decade and nearly 40% above current levels by 2042². We look forward to further engagement with the IESO on the urgent need to procure new non-emitting electricity supply in Ontario following this forthcoming capacity procurement.

Monthly payment and price spread adjustment

The draft RFP document states that Each Electricity Storage Facility will be eligible for a Market Price Spread Adjustment Factor (MPSAF) in the computation of the Monthly Payment for the Settlement Month, based on the value specified in the Proposal for the Low Spread Adjustment Factor (or LSAF) and the High Spread Adjustment Factor (or HSAF). The IESO’s proposed MPSAF would offer no discernible advantage to proponents over a capacity-only contract in terms of energy price risk in the Ontario market, and would therefore not improve competition in the RFP, or offer better ratepayer value. Our primary concerns with the MPSAF include:

- Design would be highly susceptible to “all or nothing” scenarios in which a \$0.01+/- difference in the energy price would or would not trigger the full top-up/claw-back amount.
- Proponents would be required to estimate and lock in nominal LSAF and HSAF factors based on their predictions of energy market price movements over a 20+ year period – the very risk the MPSAF is ostensibly intended to hedge against.

¹ IESO Annual Planning Outlook, December 2021

² Ibid

- Lack of inflation indexing
- No provision to adjust the collar when MRP is implemented
- Greatly reduces the incentive for energy storage to offer into the market as compared to a capacity-only contract by capping energy market revenues
- Adds significant complexity as compared to a capacity-only contract and would impose a high degree of administrative overhead as compared to a capacity-only contract

As the LT-RFP stakeholder engagement process has evolved, it has become increasingly unclear whether the IESO intends for the MPSAF to be a mandatory or optional adjustment to electricity storage proponents' bids³. CanREA would strongly recommend that the IESO confirm as soon as possible that proponents will have the option to choose whether to make use of the MPSAF or not.

As previously noted, CanREA's proposed spread adjustment design⁴ would require settlement calculation of similar complexity to the IESO's MPSAF, but unlike the IESO's proposed structure, it would substantially reduce proponents' energy price risk while at the same time maintaining a stronger incentive to respond to market price signals. Variations on this contract design have been successfully implemented in US markets, meaning that it is well understood by prospective lenders and could thus result in better financing terms, more robust competition, and reduced overall cost for ratepayers. Proponents who would be less willing to bid for a capacity-only contract would benefit from additional investment certainty, and from the ability to calculate a more accurate capacity offer because volatility price risk is hedged. This will help to increase competition by facilitating participation from those proponents who would be otherwise unwilling to carry the price volatility risk.

CanREA understands the IESO's position is that our recommended payment structure could be difficult to calculate each day with the IESO's present and/or anticipated settlement software. CanREA would submit that the financial investment that may be required to upgrade the settlement system to enable a price spread adjustment along the lines of our proposal would be outweighed by more competitive bid prices, lower-cost project financing and ultimately better value for Ontario ratepayers. Furthermore, with energy storage playing an increasing role in our decarbonized market in the future, this investment to set up the proper incentives today will increasingly benefit ratepayers and the system into the future.

³ See: “[NTD: A single SAF rather than a separate LSAF and HSAF under IESO consideration.], p. 11, Draft E-LT1 RFP Blackline version (September 23, 2022)

⁴ See “Proposal for alternative contract design for energy storage resources: IESO LT1 RFP and Additional Mechanisms Engagement” (August 4, 2022) – Available from: <https://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/long-term-rfp/ltrfp-20220804-canrea-2.ashx>

Milestone Date for Commercial Operation

The requirement that the contract term for a Facility that has not achieved Commercial Operation by the Milestone Date for Commercial Operation shall expire on April 30, 2047 is unreasonable and could adversely impact proponents' ability to finance projects. Given the requirement that the Supplier shall pay to the IESO a sum equal to the amount of (1) Liquidated Damages Rate multiplied by (2) the Monthly Contract Capacity (as would be determined from and after the COD) for each Business Day after the Milestone Date for Commercial Operation until Commercial Operation has been achieved, there is already a more than sufficient incentive for proponents to ensure that facilities reach their Milestone dates. The additional risk of a reduced contract term will serve only to increase proponents' project financing costs. CanREA recommends that the IESO allow for an extension of the contract term by up to six months to ensure that a facility that has not achieved commercial operation by its Milestone date is still eligible for the full term length.

Materials Cost Index Adjustment

CanREA would preface the following comments on materials cost indexation by noting that they pertain specifically to the Expedited RFP, and would recommend that the IESO consider revisiting the indexation approach for the LT1 RFP over the coming months. Market conditions and supply chain risks may have changed substantially by the LT1 proposal submission date, and the 2027 in-service date for LT1 could influence the technologies that may be eligible to participate as compared to the Expedited RFP.

The draft RFP document proposes a one-time adjustment to the FCP set out in the E-LT1 Contract to account for changes to the market major product group price for primary ferrous metal and primary nonferrous metal products set out in the IPPI, between the Proposal Submission Deadline and the first (1st) anniversary of the Contract Date. As neither the "primary ferrous metal products" (P61) nor the "primary nonferrous metal products" (P62) IPPI includes any reference to lithium or any lithium compounds⁵, these would not be useful indexes from which to derive materials cost adjustment, given the types of energy storage projects likely to be put forward in this procurement. CanREA would recommend that the IESO consider the following approach to materials cost indexation for electricity storage project proponents specifically:

- Proponents would be offered a "menu" of major global battery metal indexes pre-approved by the IESO from which they would select a preferred index for a desired proportion of materials costs (e.g. Shanghai Metal Market China lithium carbonate 99.5% DEL)
- Proponents would also be offered a menu of major global transportation cost indexes pre-approved by the IESO from which they would select a preferred index for a proportion of materials costs (e.g. Freightos Baltic Index)

⁵ Variant of NAPCS Canada 2017 Version 2.0 - Industrial Product Price Index (IPPI) – "All examples - 3251161 - Other unwrought non-ferrous metals and non-ferrous metal alloys, n.e.c." – Available from: <https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getAllExample&TVD=1254983&CVD=1255027&CPV=3251161&CST=01012017&CLV=5&MLV=5&V=330420&VST=01012017>

- The remaining proportion of capital cost would be EPC cost that proponents would index to the Bank of Canada CPI

Materials Cost Index Adjustment =

(Change in preferred battery metal cost index) x (Battery metal % of total CAPEX)

+

(Change in preferred materials transportation costs index) x (Transportation % of total CAPEX)

+

(CPI) x (EPC % of total CAPEX)

- For each of the foregoing, the adjustment would be calculated based on the change between the month of the contract submission and the average of three consecutive calendar months ending with the calendar month during which 1st anniversary of contract date occurs. This is the time period for materials cost adjustment set out in the IESO's draft RFP document (see 2.2. Overview of the E-LT1 Contract, (f) Materials Cost Index Adjustment), and this time period should also be explicitly defined in the E-LT1 Contract document for further clarity.
- Proponents should have the option to index up to 100% of total CAPEX using this methodology, and also be able to opt out of materials cost indexation in their bids if they so choose.
- We further propose that the indexation approach include a predetermined "collar" such that IESO's materials cost escalation risk is capped at a fixed level (with Suppliers retaining the right to proceed with the project if they so choose), and conversely the Supplier would retain the right to terminate the contract with the return of the Completion and Performance Security should materials costs fall below a given threshold. This is important as BESS material costs are indexed with formulas that are typically only valid within a given range, outside of which prices will be requoted, and if, for example, a given battery metal price index to fall significantly, the total material cost likely would not fall proportionately.

Force Majeure

The conditions regarding invocation of Force Majeure are in CanREA's view overly stringent and will adversely affect participation in the RFP process. In particular, the condition that a Party shall not be entitled to invoke Force Majeure if they are deemed to have failed to use Commercially Reasonable Efforts to prevent or remedy the event (IESO E-LT1 Contract, Article 11.2) places an unfair and disproportionate obligation on the supplier to demonstrate the validity of the claim. The condition that "An event of Force Majeure shall not, in any circumstances, extend the Term" (11.2 (a)) is unreasonable and needlessly punitive. If an event of Force Majeure causes the Supplier to not achieve Commercial Operation by the MCOB, then the MCOB should be extended for a reasonable period of delay directly resulting from such Force Majeure event, and the contract term extended commensurately. The definition of Force Majeure should expressly include any delays in obtaining interconnection approvals, supply chain delays, or delays by the LDC in performing any required network upgrades.

IESO Market Rules and Statutes

The explicit lack of protections from market rule changes that could adversely impact supplier economics (IESO E-LT1 Contract, 1.6) is in CanREA's view unacceptable. We would strongly recommend that this section be amended to establish that in the event of an amendment to IESO Market Rules that materially impacts a supplier's economics, either Party has a right to contract amendments to restore the supplier's economics to the baseline prior to the rule change. Unmanageable risk of market rule changes will increase proponents' capacity payment requirements and adversely impact their ability to finance projects, ultimately leading to reduced participation in the RFP and higher costs for ratepayers.

Assignment and Change of Control

The Assignment (16.5) and Change of Control (16.6) provisions are unreasonably restrictive, and in CanREA's view provide no meaningful protection or guarantees to the IESO over and above the existing conditions regarding (e.g.) non-performance. Once a supplier has reached COD, the owner ought to be entitled to standard rights to assignment or change of control, provided the IESO is notified.

Regulatory Charge Credit and Global Adjustment for an Electricity Storage Facility

To further clarify that electricity storage facilities shall be reimbursed for 100% of applicable regulatory charges including Global Adjustment ("GA") for the duration of the contract term, CanREA would recommend that the following be removed from the RFP document:

(iii) The reimbursement will be equal to the amount of GA incurred by the Supplier, until the Facility is eligible to begin participation in the Industrial Conservation Initiative ("ICI") program or any successor or replacement program designed to reduce or eliminate the Facility's Global Adjustment cost obligation.

Further, the proposed condition that reimbursement of these charges is subject to the facilities maintaining round-trip efficiency of 80% "where actual efficiency below such level will result in less than one hundred percent (100%) reimbursement of such charges" urgently requires clarification.

Municipal Support Confirmation

Section 2.5(a)(i)(F) of the draft Contract document stipulates that in order for a site to be deemed to have achieved commercial operation, the Buyer must have received confirmation directly from an independent engineer that:

"the Facility or the Supplier (as applicable) has all permits and approvals issued by Governmental Authorities which are required to construct, operate and maintain the Facility in accordance with Laws and Regulations, including the Registration Approval Notification (RAN) issued by the System Operator."

In effect, this clearly establishes all relevant local government approvals as a mandatory requirement for a project to have achieved COD. In light of 2.5(a)(i)(F) of the Contract, it would therefore seem to be redundant and confusing to require that a Supplier obtain a Municipal Support Resolution either in advance of or within 425 days of the proposal submission deadline, and CanREA would recommend that this provision be removed from the RFP and Contract documents accordingly. Furthermore, it would be egregious if failure to obtain a Municipal Support Resolution should exempt a Supplier from any costs or payments associated with a Supplier Event of Default, as is currently set out in 2.14 (b) of the draft Contract and 2.1 (m)(2) of the RFP document.

To the extent that it may be to the benefit of projects that are more advanced in terms of obtaining municipal or Indigenous community support, the proposed allocation of rated criteria points (4.3 Stage 3 – Rated Criteria, d) Local Governing Body Support Resolution) is in CanREA's view appropriate.

Grants and subsidies

In the interests of ensuring fair competition, all proponents must clearly understand at the outset how the IESO will manage the potential for any external grants or subsidies that may be awarded to projects competing in this procurement. This external funding could notably include support from the Government of Canada through the Smart Renewables and Electrification Pathways (SREPs) program. The IESO must clarify as soon as possible whether it is intended for any such funding awarded to individual projects will remain with them, or be collected by the IESO and returned to ratepayers, or be shared, and if so in what proportions. The 2021 renewable energy procurement undertaken by the Government of Quebec and Hydro-Québec provides an example of a fair and transparent approach to managing external subsidy funding in a competitive procurement process.⁶

Schedule

Regarding the proposed December 1, 2022 deadline for the IESO to issue Addenda to the E-LT1 RFP and ELT1 Contract, if any, CanREA would note that the IESO has already moved the Expedited Process Contract Award date from December 31, 2022 to February 28, 2023, which will materially impact proponents' ability to meet the target COD. Any further delays to the Contract Award Date, without commensurate adjustment to the contract term length and COD, will jeopardize the success of the procurement.

Environmental Attributes

This section (2.10) of the draft contract requires further clarification, particularly as to what is meant by "Supplier's performance requirements under this Agreement" as it pertains to Environmental Attributes. CanREA would strongly recommend that in the case of any renewable electricity generation facilities that may operate in hybrid configurations alongside electricity storage, the IESO should confirm in the contract language that the owners of these facilities would retain the right to any Environmental Attributes those facilities may generate.

⁶ Document d'appel d'offres A/O 2021 - Électricité produite à partir de sources renouvelables (14 juillet 2022) – Available from: <https://www.hydroquebec.com/data/appel-offres/documents/dao-2021-01-480mw-20220714-consol-1.pdf?v=20220714>

Contact:

Nicholas Gall
Ontario Director,
Canadian Renewable Energy Association (CanREA)