Feedback Form

Long-Term RFP – June 29, 2023

Feedback Provided by:

Name: Justin Rangooni

Title: Executive Director

Organization: Energy Storage Canada (ESC)

Email:

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Following the June 29th public webinar on the Long-Term RFP (LT1 RFP), the Independent Electricity System Operator (IESO) is seeking feedback from participants on design of the LT1 RFP and LT1 Contract.

The referenced presentation can be found on the Long-Term RFP webpage.

Please provide feedback by July 13, 2023 to engagement@ieso.ca.

Please use subject header: *Long-Term RFP*. To promote transparency, this feedback will be posted on the <u>Long-Term RFP webpage</u> unless otherwise requested by the sender.

The IESO will work to consider and incorporate comments as appropriate and post responses on the webpage.

Thank you for your contribution.



Revised COD of May 1, 2028

| Торіс | Feedback |
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| Are Proponents supportive of the revised COD date and the introduction of Capacity payment multipliers for early operation? | ESC supports both the revised COD date and the introduction of Capacity payment multipliers for early operation |

Revised procurement targets

| Торіс | Feedback |
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| Are Proponents supportive of the revised LT1 procurement targets on slide 15, which has increased the overall procurement target from 2,200MW to 2,505MW? This enables unused MWs in the Non-Storage Category from the E-LT1 RFP to the Non- Storage Category in the LT1 RFP. The IESO continues to reserve the right to accept the marginal bid above the Storage Category procurement target. | ESC believes that the IESO should stay with the initial 2,200 MW procurement target. As mentioned previously, there are concerns with procuring too much in a short-time period that can have negative consequences on post-contract processes (e.g., environmental assessments, connection impact assessments, permitting and approvals) as well as community engagement and acceptance. Further, procuring resources within a short window risks the IESO committing to the peak cost cycles for certain resources. Finally, planning studies by the IESO have correctly indicated the value of diversified duration of energy storage resources. Additional procurement capacity should focus on longer duration energy storage instead of gas-fired generation resources. ESC recommends that the additional capacity be shifted to other procurements to minimize the potential for negative consequences and to optimize the attributes that are required by the system in the future. ESC is recommending a procurement roadmap (see general comments below) that starts to integrate the many different areas and types where energy storage resources can offer value to a decarbonized Ontario electricity system including regional power system needs, transmission system optimization, and enhanced capabilities of expanded or re-powered existing facilities. |

Changes to Rated Criteria

| Торіс | Feedback |
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| Are Proponents supportive of the revised Rated Criteria approach as laid out on slides 20 and 21? This includes the removal of the duration of service as a Rated Criteria and setting minimum duration requirements as a Mandatory Criteria for Storage Category and Non-Storage Category resources. | ESC is supportive of the Rated Criteria changes. ESC believes that the IESO should consider an Indigenous Community price adder as part of the LT1 Contract as this option offers a more manageable path for many Indigenous Communities to commit equity into the project. |
| Remaining Rated Criteria include: Local Governing Body Support, and Indigenous Participation. | Finally, ESC requests the IESO consider points for equity participation from Indigenous communities where the project is located on traditional territory to support local ownership of energy storage projects. |

Inclusion of the MCIA in the LT1 RFP

| Торіс | Feedback |
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| Are Proponents supportive of continuing to include MCIA options in the LT1 RFP? | ESC appreciates the introduction of the Materials Cost Index Adjustment (MCIA) in the E-LT RFP and supports its continued use. In addition to the off- ramp comments submitted, ESC believes that the IESO should consider off-ramps in the LT1 Contract if the MCIA results in significant changes in contract prices. This is a mutually beneficial inclusion for Suppliers and the IESO. If MCIA increases significantly, the IESO would have an off-ramp to exit the contract and avoid committing to significant capacity costs for Ontario customers. On the other hand, if MCIA costs fall dramatically the Supplier can have the option to exit the contract and avoid the potential of being committed to developing a financial negative project. The upper and lower thresholds could be pre-determined in the LT1 Contract. Further, the IESO could include the MCIA threshold selection as a Stage 3 evaluation process, where proponents that select a lower threshold for existing being rewarded price evaluation points. |

Changes to Proponent Group Award Limit

| Торіс | Feedback |
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| Are Proponents supportive of increasing the Group Award Limit for Storage Category resources from 600 MW to 900 MW? | No comment |
| Additionally, the IESO invites Proponents to provide Group Award Limit feedback with regards to the Non-Storage Category. | |

Other or General Comments/Feedback:

ESC has the following general comments and feedback for the IESO

1. Exclude ITC from Section 2.16 Additional Sources of Government Support

The Investment Tax Credit (ITC) offered by the Federal Government has the opportunity to greatly reduce costs for customers. The ITC is new and the application by entities will be explored in great detail with their equity funders and lenders. To maximize the potential cost savings, the IESO should exclude the ITC from Section 2.16 Additional Sources of Government Support so as to maximize customer savings. If the ITC is included in Section 2.16, many proponents may not see a benefit in pursing the ITC at the detriment of Ontario customers.

2. Market Rule Change protection in LT1 Contract Section 1.6 (c)

ESC does not believe the current IESO Market Rule change protection outlined in Section 1.6 of the draft LT1 Contract is adequate for the length of the contract and investment required. The current contractual provision only safeguards Suppliers from incurring additional costs related to Must-Offer Obligation compliance resulting from an IESO Market Rule amendment. While we appreciate the inclusion of subsection 1.6(c), which addresses Storage Market Rule Disincentives, ESC strongly believes that any adjustment to the Fixed Capacity Payment should not be subject to a cap (i.e., 15% increase to Fixed Capacity Payment) when the impact of IESO Market Rule changes needed under a decarbonized electricity sector.

The inadequate level of market rule protection presents a significant risk for Suppliers, despite the fact that the IESO is compensating for capacity rather than energy. For instance, the IESO has stated that the integration of all energy storage technologies into the power system's network model via participation models will not be addressed until after the scheduled implementation of the Market Renewal Program (MRP) in May 2025. Proponents developing different storage technologies are uncertain about how future changes to the network model in addition to other related amendments from MRP will affect the scheduling, commitment, and dispatch of energy storage resources. Specifically, the future operating profile (e.g., number of annual cycles, depth of cycles, charge hold period, etc.) impacts both the Operating & Maintenance (O&M) and sustainment Capital Expenditures (CapEX) that directly influence a project's financial model and ultimately bid price in a Proposal. If

future Market Rule changes result in a significant departure of the assumed operating profile (e.g., due to State of Charge management by the IESO), an energy storage resources Supplier's economics would be harmed. Further, Market Power Mitigation (MPM) restrictions could magnify the issue and result in greater harm to the Supplier's economics.

ESC recommends that the IESO remove the cap on Market Rule change protection and instead ensure there is a clear process for determining if Supplier's Economic have been harmed and what may be required to demonstrate the magnitude of the impact.

3. Municipal Support Resolution as Rated Criterion

In ESC's view, making the Municipal Support Resolution (MSR) a mandatory requirement in Stage 2 of the evaluation process has the potential to negatively impact relations with local communities both on an individual project and broader procurement basis. By making the MSR a mandatory requirement, the IESO is forcing municipalities to accelerate a decision process that they may not be comfortable with or worse may not fully understand. Instead, ESC recommends that the original approach used in the E-LT RFP should be used where the MSR is used as a Rated Criterion in the Stage 3 evaluation process.

The MSR does not supersede local community permitting and approval process and therefore provides limited demonstration of the ability of the project to successful obtain approvals to build. Instead, a proponent with an MSR prior to bid submission demonstrates enhanced support by the municipality which should be rewarded through evaluated pricing process in the LT1 RFP.

4. Remove Exclusivity of Contract Capacity to IESO in Section 2.12

The LT1 Contract logic is based around a must-offer provision in the IESO-Administered Market under the Day-Ahead Commitment Process (and subsequent Day-Ahead Market). This structure should incentivize participants to seek out the most profitable services during real-time operation while ensure the IESO receives capacity in the day-ahead process during qualifying hours. ESC is concerned the language in Section 2.12 severely restricts the ability of LT1 Suppliers to seek out additional markets and services in real-time due to the "exclusively" language in Section 2.12. ESC recommends the IESO consider revenue sharing (e.g., 50/50) or reasonable granting of additional services with the contract capacity that may be able to serve both purposes. For example, cooptimization of energy storage resources to both provincial capacity and regional capacity needs is an incredible value proposition in the future, particularly as the overall power system evolves and communities grow at different rates.

5. Remove same technology requirement within Eligible Expansion definition

ESC firmly believes that the Eligible Expansion project definition should remove the requirement that the expansion only use the same technology at the existing facility. This approach reduces the competitive pressures in the LT1 RFP by limiting the different types of projects available for submission. Since Eligible Expansions require separate metering, there is no reason why the IESO should restrict to the same technology, particularly when new technologies at existing sites could

leverage common infrastructure (e.g., civil, municipal access, etc.) which will lead to reduced costs for Ontario customers.

6. Establish reasonable off-ramps and contract adjustment provisions in LT1 Contract

Development of new resources for connection and participation in the Ontario electricity network face many known and unknown uncertainties. Unknown uncertainties are part of the development risk reward and are rightly borne by proponents are part of their bid and investment commitment for the project. Known uncertainties should be allocated to the entity (i.e., either the IESO or the Supplier) that is best positioned to manage that risk. If neither entity can fully manage the risk, there should be appropriate off-ramps or contract adjustment provisions to ensure that both parties can achieve their ultimate objectives (i.e., new resources in the system for the IESO and new operating projects for the Supplier). Off-ramps or contract adjustments can include: price adjustments, capacity size changes, contract timeline changes, etc.

There are two key areas where contract adjustment provisions should be included in the LT1 Contract. First, the cost and complexity of interconnection of energy storage resources, particularly large energy storage resources, will be heavily influenced by the findings of the Impact Assessments (i.e., System Impact Assessment (SIA) and Customer Impact Assessment (CIA)). This information cannot be determined prior to bid completion and the analysis outcomes can present opportunities to reduce overall costs to Ontario electricity customers. For example, if through the connection process a transmitter determines the connection may result in the need for additional costs borne by Ontario rate-payers, the LT1 Contract should provide an option for the Supplier and Transmitter to explore alternative arrangements that would reduce costs for Ontario customers. The IESO can retain the right to re-run the Deliverability Assessment Test used during the LT1 proposal evaluation if needed to ensure any changes to connection arrangements are still valid with the procurement assessment process.

Second, engagement with local communities can be enhanced if the design, location and connection of the project can be adjusted after local communities have had a chance to work closely with the proponent. The IESO can maintain the ability to reject potential changes if they believe it would have significantly harmed the fairness of competition in the LT1. However, allowing for more flexibility in the LT1 Contract for Suppliers to work with local communities and ensuring the project's design reflects community desires will result in broader benefit for the entire electricity sector. Communities across Ontario are about to face significant infrastructure building to support a decarbonized economy, the IESO should be working to ensure that experience is not blunt and rigid which could result in public backlash and rejection of needed energy resources. ESC firmly believes that communities have to be a willing partner in any energy storage resource development and the LT1 Contract should support that objective.

7. Remove round trip efficiency minimums in LT1 Contract

ESC does not see a reason why the IESO requires a round trip efficiency within the LT1 Contract. Design of energy storage resources parameters, including round trip efficiency, is one of the many optimization processes proponents can use when determining the most competitive project for submission. By mandating a minimum round trip efficiency the IESO is restricting optimization at a cost to customers. The requirements as part of the capacity check test and qualifying hours will ensure that the ultimate project design meet the needs of the IESO. ESC recommends removing the cycling efficiency requirements in Exhibit R

8. Establish Procurement Roadmap

Electricity markets around the world are entering a period of rapid transition as economies grapple with how best to implement decarbonization. Energy storage resources will play a significant role in many areas of the electricity network. At this time, the LT1 procurement is narrowly focused on southern Ontario capacity needs. There are many other areas where energy storage resources can offer services to the Ontario electricity sector including regional capacity needs, transmission system optimization and ancillary services. Under Ontario's hybrid market design, long-term contracts are required to recover fixed costs and manage policy and regulatory change risk. A procurement roadmap is an important view on how the IESO intends to manage needs and how they expect different services to compete.

The fluctuating nature of boom/bust cycles in procurement is generally ineffective and can harm the reputation of system planners and the wider electricity sector. Such cycles incentivize developers to hastily engage with communities within a short timeframe to meet a narrow window of opportunity, often disregarding the priorities of those communities and broader provincial policy objectives. A more constructive and sustainable alternative is to commit to consistent and ongoing procurement processes that flexibly adjust the quantities or types of resources procured based on evolving bulk and regional system needs. This approach not only provides long-term support for project development but also fosters meaningful community engagement, leading to mutually beneficial projects.

Furthermore, annual or bi-annual procurements offer the opportunity for competition among a diverse range of resources. This includes continuing the operation of existing resources, expanding their capacity, repowering existing facilities, and developing new projects from scratch. Entities could be allowed to offer different term lengths reflecting various capital commitments and investment horizons. Energy storage resources can enhance many different types of non-emitting generation and should be encouraged to engage with existing facilities as well as new builds.

Consistent procurements also take into account the dynamic changes occurring in the electricity sector, both on the demand and supply sides. By mitigating project attrition, ongoing procurements would enable the IESO to wind down or make necessary changes to projects facing unforeseen and potentially costly challenges. Additionally, ongoing procurements provide valuable insights and information regarding the cost of resources and the capabilities of emerging technologies, contributing to informed decision-making on potential options to address other issues in the power system.

ESC recommends that the IESO establish a procurement roadmap and incorporate competitive procurements into addressing the many different areas of system needs including regional and local power systems.

9. Support for Published Prices and Access to Market and Planning Data

ESC is very pleased to see the IESO's commitment to publishing pricing from E-LT RFP and other procurement processes (e.g., Medium Term RFP). ESC is specifically pleased at the upcoming release of individual project pricing.

Price discovery plays a crucial role in fostering competitive markets. Although it is understandable that winning proponents may have reservations about publishing their bid prices, in Ontario's hybrid electricity market, where procurements are primarily conducted by a single buyer (i.e., a monopsony), the publication of prices becomes an essential element in promoting transparency and fairness.

Transparency in price disclosure provides valuable information to market participants, stakeholders, and the general public, allowing them to assess the competitiveness and efficiency of the procurement process. It enables market observers to understand the pricing dynamics, identify trends, and evaluate the cost-effectiveness of different resources. This transparency helps build trust and confidence in the market by demonstrating that the procurement decisions are based on fair and objective evaluation criteria.

Furthermore, publishing prices supports effective market monitoring and oversight. It allows regulators and policymakers to assess market performance, identify potential anticompetitive behavior, and detect any anomalies or discrepancies. This information can guide regulatory interventions if necessary, ensuring that the market operates in a manner that maximizes the benefits for consumers and promotes a level playing field for all participants.

Overall, in a hybrid electricity market like Ontario's, where a monopsony is the primary buyer, publishing bid prices is a vital component for upholding transparency, promoting fairness, and facilitating effective market oversight. It enables stakeholders to make informed decisions, fosters competition, and ensures the efficient allocation of resources, ultimately benefiting consumers and the broader electricity sector.

ESC notes that the IESO published a third-party report on market and planning data comparison to other ISOs across North America. In ESC's assessment of the report, the IESO is an outlier when it comes to publishing some market data, specifically market offer and bid data. ESC believes this information is critical for resources under a Fixed Capacity Payment structure, particularly for energy storage resources. Forecasting future market revenue requires proponents to assess what the future electricity prices might be as well as what impact their proposed project (and other successful projects) will have on those future prices. Historical bid and offer information provides critical insight

into how market clearing prices would have clear with the addition of new resources. For energy storage resources, this is doubly true as they must participate both as an energy bidder (when trying to be scheduled to consume energy) and as an energy offeror (when trying to be schedule to inject energy). ESC strongly recommends that the IESO investigate following best practices in other jurisdictions and determine how to best to begin providing market data (e.g., anonymous bid and offer data).