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

September 30, 2022

Dear Chuck,

This submission responds to the Independent Electricity System Operator's (IESO's) release of the draft E-LT 1 RFP ("the RFP") and draft E-LT 1 Contract ("the Contract").[1] All capitalized terms in this letter have the meanings ascribed to them in the RFP and Contract, as the case may be, unless defined otherwise in this letter.

Power Advisory has coordinated this submission on behalf of a consortium of renewable generators, energy storage providers, and the Canadian Renewable Energy Association (CanREA) (the "Consortium"[2]).

We would like to thank the IESO for releasing the RFP and Contract in draft form for comment. We think it is important to consult with potential Proponents early on so that the procurement process can be as efficient as possible and not contain any fatal flaws that might deter or limit participation. We encourage you to conduct webinars on the procurement on a frequent and regular basis to promote the exchange of information and ideas related to the LT 1 procurement. We trust that IESO will continue to conduct such engagement sessions in the future.

RFP Comments

We have the following comments on the RFP.

Deliverability Testing

We request that the IESO do whatever is necessary to expedite the Deliverability Testing so that potential Proponents have these results as soon as possible. Given the current procurement schedule the Deliverability results will not be released until the end of November. With the Proposal Submission Date of December 20, 2022, this leaves less than three weeks for potential Proponents to prepare their

[1] See https://www.ieso.ca/en/Sector-Participants/Resource-Acquisition-and-Contracts/Long-Term-RFP-and-Expedited-Process

[2] The members of the Consortium are: CanREA; Axium Infrastructure; BluEarth Renewables; Boralex; Capstone Infrastructure; CarbonFree Technology; Connor, Clark & Lunn; Cordelio Power; EDF Renewables; EDP Renewables; Enbridge; ENGIE; Evolugen (by Brookfield Renewable); H2O Power; Kruger Energy; Liberty Power; Longyuan; NextEra Energy Canada; Pattern Energy; and wpd Canada.

55 University Ave., Suite 700, P.O. Box 32 · Toronto, Ontario, M5J 2H7
416-303-8667 · jchee-aloy@poweradvisoryllc.com

Proposals. This means that potential Proponents could be wasting effort and money on sites that are not Deliverable and consequently ineligible for the Expedited Process.

Stage 1 Completeness Requirements

The evaluation process set out in the draft RFP is far too rigid given the seriousness of the anticipated capacity shortfall. We think it would be advisable for the IESO to build in flexibility in Stage 1 Completeness Requirements to notify Proponents of any items that are not complete and to give them an opportunity to provide the missing items and to not just disqualify the Proponent. This is done in other jurisdictions and is a best practice. If it is built into your evaluation process, there ought to be no issues with procedural fairness. All Proponents will have notice and the IESO just needs to exercise its discretion consistently and mete out equal treatment to any Proposal that has such deficiencies.

Procurement Targets

We request that you disclose the Storage Target Capacity and Non-Storage Target Capacity in advance of finalizing the RFP and Contract on November 1 of this year. The IESO has all the information on the projects that are eligible for the Expedited Process since the LT 1 Request for Qualifications closed on June 30 of this year. Potential Proponents needs to know these targets in order to undertake a competitive analysis and determine whether or not they ought to submit their Proposals.

Proposal Security

It would be helpful to potential Proponents if the IESO could clarify its position set out in Section 3.7(a)(iv) of the RFP where it says that if a Selected Proponent were to *"… fail to execute and deliver the E-LT 1 Contract and all related closing documents required by the IESO …. Such Selected Proponents will be in breach of this E-LT 1 RFP …. and the IESO may …. draw upon the Proposal Security …"* We believe that this is the IESO's sole and exclusive remedy for failing to execute and deliver the Contract, but we request that the IESO expressly state that this is its sole and exclusive remedy. Potential Proponents will be deterred from submitting Proposals if their pre-selection liability is essentially unlimited.

<u>Contract Comments</u>

We have the following comments on the Contract.

Capacity Payment Mechanism

We have the following comments on the payment mechanism described in Exhibits J, E-1/E-2, F, M, and S:

1. In order to take a view on the appropriate LSAF and HSAF factors, a Proponent needs to have a view on future prices, yet this is what we are trying to hedge against. If a Proponent were to guess wrong it would have no, or a very inefficient, hedge. This is a lot of risk for Proponents.
2. The MPSAF adds significant complexity and administrative burden for no clear benefit either to Proponents or ratepayers.

3. The MPSAF adjustment is not proportional, e.g.., if the AMPS is $0.1/MWh or $100/MWh above the top end of the collar, the claw back is the same. This is very risky for Proponents.
4. 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
5. 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.
6. The ANPC are very onerous and allowing for only 5% of the Qualifying Hours to be credited for Planned Outage Hours in calculating the AMCC increases the likelihood of a Supplier attracting ANPC
7. There is no incentive, beyond market prices, to provide energy. If the spread is not sufficient to cover charging costs and demand charges associated with charging the battery after discharge, there is no incentive to provide energy. This is a rather short-sighted approach for a 20+ year Contract.

We also noted an anomaly in the settlement mechanism that we want to draw to your attention. Since the Low Block Average Price is calculated during the four lowest-priced contiguous hours that are outside the Qualifying Hours and the High Block Average Price is calculated in the four highest-price contiguous hours during the Qualifying Hours, the daily spread is sometime negative.

Market Rule Protection

The IESO Market Rule protection in Section 1.6 of the Contract is much narrower than in previous IESO contracts. This contractual IESO Market Rule protection only protects a Supplier from incurring increased costs associated with Must-Offer Obligation compliance because of an IESO Market Rule amendment.

Supplier's economics is not mentioned in the Contract at all. Furthermore, under Section 1.6, the Supplier's relief is an amendment to the Must-Offer Obligation such that additional costs are not incurred. In other OPA/IESO contracts, if there were ever to be an amendment to the IESO Market Rules that materially impacted a Supplier's economics, either party to the contract had a right to contract amendments to restore the Supplier's economics to what they were prior to the implementation of the rule amendment. This protection is completely missing from the Contract.

There are no provisions dealing with how the Contract will be amended because of the implementation of the DAM or locational marginal prices ("LMP") under the Market Renewal Program ("MRP"). The definition of DAM includes the existing DACP process as well as the DAM under MRP and the definition of HOEP includes any successor LMP.

The lack of robust IESO Market Rule protection is a significant issue given the length of the Term and the impending introduction of MRP. We believe that this could render the Contract unfinancable, which is not in ratepayers' best interest.

Materials Cost Index

We request that you clarify the formula given in Section 2.13 of the Contract. The formula calculates the MCIA, however, it is not clear how the FCP is adjusted based on this. We infer from the text of this section that the FCP is to be multiplied by the ratio of the MCP_m/MCP_b, however, the formula just calculates MCIA and the relationship or linkage between this quantity and the FCP is unclear. Also, there is a 0.5 multiplier in square brackets with no explanation as to why the index is being halved. We recommend that this index not be halved, as Proponents need to be protected from inflationary cost increases.

With regard to the selection of an indexing methodology, we are in favour of an MCIA that is built up from several components: Lithium carbonate; other battery materials; transportation costs; and EPC costs.

MCIA = Lithium Adjustment + Other Battery Materials Adjustment +Transportation Adjustment + EPC Adjustment

FCP_{adj} = FCP * MCIA (adjusted FCP)

where,

Lithium Adjustment = (LPI_{final} /LPI_0) * LCF * FX

- LPI_{final} is the Lithium Carbonate Price Index 12 months after the Contract Date
- LPI_0 is the Lithium Carbonate Price Index at the Proposal Submission Date
- LCF is conversion factor to account for the percentage of Lithium Carbonate in the FCP

Other Battery Materials Adjustment = (OBM_{final} /OBM_0) * OMBCF * FX

- OBM_{final} is the Other Battery Materials Cost Price Index 12 months after the Contract Date
- OBM_0 is the Other Battery Materials Cost Price Index at the Proposal Submission Date
- OBMCF is conversion factor to account for the percentage of Other Battery Materials Costs in the FCP

Transportation Adjustment = (OBM_{final} /$TRANS_0$) * TCF * FX

- $TRANS_{final}$ is the Transportation Cost Price Index 12 months after the Contract Date
- $TRANS_0$ is the Transportation Cost Price Index at the Proposal Submission Date
- TCF is conversion factor to account for the percentage of Transportation Costs in the FCP

EPC Adjustment = (EPC_{final} /EPC_0) * EPCCF * FX

55 University Ave., Suite 700, P.O. Box 32 · Toronto, Ontario, M5J 2H7
416-303-8667 · jchee-aloy@poweradvisoryllc.com

- EPC_{final} is the EPC Cost Price Index 12 months after the Contract Date
- EPC_0 is the EPC Cost Price Index at the Proposal Submission Date
- EPCCF is conversion factor to account for the percentage of EPC costs in the FCP

FX is an adjustment for any foreign currency the index is denominated in and the Canadian Dollar between the Proposal Submission Deadline and one year after the Contract Date, when the indexing is calculated.

Considering the diversity of the potential projects, we believe that Proponents should be able to select the conversion factors for each MCIA index component, i.e., the percentage of the FCP to be escalated by the index, and to choose which index to use from several options. For example, Lithium could be indexed against the Shanghai Metals Market index, Asian Metals, Solactive Global Lithium Index, etc. We are in the process of developing a list of suitable indices, which we will furnish to the IESO under separate cover.

We further propose that the MCIA have a type of "collar" such that the IESO risk is capped at a certain pre-determined threshold value, but the Proponent can elect to proceed with the project even if the indexing is capped at that value. Conversely, if the index drops below a certain pre-determined threshold value, the Proponent can elect to abandon development and terminate the contract with the return of its Completion and Performance Security similar to contract termination in Section 2.13(b) of the Contract.

Environmental Attributes

The disposition of Environmental Attributes ("EA") in Section 2.10 is unclear. The IESO has maintained that it will leave EAs under the ownership of the Supplier and not take any assignment of them. However, we note that the Contract states that

> *"The Buyer shall have no interest hereunder in any Environmental Attributes arising from the operation of the Facility or,* ***except in respect of the Supplier's performance requirements under this Agreement****, other products or services associated with the generation of Electricity by the Facility."* (Emphasis added)

It is unclear what this exception for the Supplier's performance obligation refers to exactly. Consequently, it is not clear that this ambiguous language creates rights to the EAs for Suppliers.

Planned Outages

We note that in Exhibits E-1 and E-2 the Planned Outage Capacity Reduction Factor ("POCRF") can be no less than 0.95 in calculating the Adjusted Monthly Contract Capacity . We believe that this is unrealistic since it effectively equates to about 1 Business Day per month, which will often be insufficient to conduct proper maintenance. We think that the cap on the POCRF should be lowered to 0.80 or alternatively, Suppliers should be allowed to nominate a month during which they can conduct a Planned Outage without any penalty. This was the approach used recently in Medium-Term Contract.

Force Majeure

The imposition of a Commercially Reasonable Efforts standard for any Force Majeure dealing with permits and approvals is an unwelcome addition to the Contract and should be removed. Since the Force Majeure clause is a type of exclusion clause, this places a heavier burden on the Supplier to demonstrate that the event is a valid Force Majeure.

Also, considering current supply chain bottlenecks, which are entirely beyond a Supplier's control and do impact on its ability to perform its obligations under the Contract, the Force Majeure provisions should be expanded to include such occurrences. Also, delays incurred because of distribution or transmission system build out and outages should be express Force Majeure – Suppliers have no control over such occurrences.

Subsection 11.1(a) states that *"an event of Force Majeure shall not, in any circumstances, extend the Term."* We think that the Term should be extended in the event of any event of Force Majeure. By definition, Force Majeure is an event beyond the Supplier's control and Suppliers should not be penalized for something that is beyond their control.

Municipal Support Confirmation

We think that not being able to obtain a Municipal Support Resolution should not be a Supplier Event of Default or a letter from a Land Use Planner is also redundant since Subsection 2.9(a) obligates the Supplier to comply with all Laws and Regulations, which includes *"municipal or provincial laws, orders-in-council, by-laws, codes, rules, policies, regulations and statutes."* Compliance with municipal permits and approvals would be captured by this covenant in the Contract.

Absence of Contractual Offramps

Unlike the previous contracts, there are no contractual offramps for Suppliers. Given the fact that it is unclear that the IESO has laid the groundwork for the needed LDC, HONI and approvals-granting ministry preparedness for the wave of development that is coming, we think that there needs to be certain contractual offramps. For example, s. 2.1(d) of the FIT contract provided the Supplier with a right to terminate the contract if its Network Upgrade Costs or LDC Connection costs were substantially higher than could have been reasonably foreseen. Section 2.1(e) of the FIT contract provided the Supplier with the right to terminate the FIT contract if the Supplier had provided a declaration of more than 50% Aboriginal participation and was subsequently denied financing by Aboriginal Loan Guarantee Program operated by the province, and such denial had a Material Adverse Effect on the Supplier. We think that offramps in favour of the Supplier for delays in obtaining equipment or cost increases for equipment not accounted for adequately by the Materials Cost Index, should be incorporated into the Contract.

Achievement of Commercial Operation by the Milestone Date for Commercial Operation ("MCOD")

We note that the unclear language in the FIT contract related to whether a termination right arises if a Supplier does not achieve Commercial Operation by the MCOD has been removed from the Contract. We welcome this clarity, but we think it would be best if the IESO expressly stated that no such right arises under the Contract. We are concerned that Section 16.12 states that time is of the essence in performing the parties' respective obligations under the Contract and that Subsection 2.3(c) establishes that achieving Commercial Operation by the MCOD is an obligation under the Contract. We think that IESO should state that notwithstanding anything to the contrary in the Contract, the Delay Liquidated Damages are the IESO's sole and exclusive remedy if Commercial Operation is not achieved by MCOD. We believe that this is the IESO's intent.

Pre-COD Termination

We would recommend that the IESO's remedy for a pre-COD Supplier Event of Default be limited to termination of the Contract and forfeiture of the Supplier's Completion and Performance Security only.

Assignment and Change of Control

The Assignment and change of Control provisions in Sections 16.5 and 16.6, are more restrictive than in other IESO contracts and should be relaxed. Once COD has been achieved Assignments to affiliates under any circumstances and change of Control ought not to be subject to IESO consent and ought to be done as a matter of course with notice being provided to the IESO. We think that the provisions for change of Control and assignment in the FIT contracts should be reinstated in the Contract.

The Consortium thanks IESO for on-going stakeholder engagement meetings regarding LT RFP 1 and other related stakeholder engagement meetings relating to supply procurements and resource adequacy.

We will be pleased to meet with IESO about this submission at a mutually convenient time.

Sincerely,

Jason Chee-Aloy
Managing Director
Power Advisory

cc:
Barbara Ellard (IESO)
Brandy Giannetta (Canadian Renewable Energy Association)
Elio Gatto (Axium Infrastructure)
Roslyn McMann (BluEarth Renewables)
Adam Rosso (Boralex)
David Oxtoby (CarbonFree Technology)
Patrick Leitch (Capstone Infrastructure)
Jason Woods (Connor, Clark & Lunn)
Paul Rapp (Cordelio Power)
David Thornton (EDF Renewables)
Nathan Roscoe (EDP Renewables)
Lenin Vadlamudi (Enbridge)
Michelle Dueitt (ENGIE)
Julien Wu (Evolugen by Brookfield Renewable)
Stephen Somerville (H2O Power)
JJ Davis (Kruger Energy)
Deborah Langelaan (Liberty Power)
Jeff Hammond (Longyuan)
Cheryl Dietrich (NextEra Energy)
Rob Campbell (Pattern Energy)
Ian MacRae (wpd Canada)