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

August 16, 2024

Dear Chuck,

This submission responds to the Independent Electricity System Operator's (IESO's) publication of the draft Long-Term Energy Supply 2 (LT2-Energy) Contract (the "draft contract") published on July 23, 2024.[1] All capitalized terms in this letter have the meanings ascribed to them in the draft contract. All section references in this letter refer to sections in the draft contract.

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

We would like to thank the IESO for its continued outreach to stakeholders during the initial development of the LT2 RFPs. As we have said before, there are still significant aspects of the LT2 procurements that need to be resolved and it will be important for the IESO to continue to consult with potential proponents to improve the process, ensure the most competitive energy pricing possible, and avoid fatal flaws.

We continue to maintain that Ontario would be best served using a proven revenue model (e.g., PPA with an indexed fixed price that does not depend on market outcomes) to attract the most competition to participate in the RFP, minimize risk on Proponents, and yield the lowest prices for ratepayers. The E-PPA revenue model results in overly complex contract settlement that lacks transparency and is prone to errors. That said, we do appreciate the efforts made by the IESO to address the concerns with the Enhanced Power Purchase Agreement (E-PPA) revenue model brought forward by the Consortium in our January 15, 2024, April 23, 2024, June 28, 2024, and July 19, 2024, submissions ("prior submissions").

We have reviewed the draft contract in detail and have the following comments to help improve the document.

General Comments.

We understand that the draft contract is based on the LT 1 Contract. There are LT 1 Contract defined terms and references in the draft contract that need to be removed or revised, seeing that the subject matter of the draft contract is the procurement of energy from Suppliers and not capacity.

Exhibit F – Non-Performance Charges

[1] https://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/long-term-rfp/lt2-rfp-Energy-Contract-draft-July-2024.pdf

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

We believe that there are several errors in Exhibit F. As the equation is currently drafted in Exhibit F it is not dimensionally correct and the result of the mathematical operation does not bear any relation to a Facility's Actual Production Factor. We think that the correct equation for the Actual Production Factor should be:

$$APF_p = TDE_p/(CC \times (TH_p - Eh_p))$$

The draft contract states that the Actual Production Factor is calculated over the most recent three Contract Years and <u>not</u> a three-year rolling average basis as was presented at the June 13 webinar (see side #47 in the IESO presentation[3]). We think this means the NPC will remain constant for the entire year and doesn't get adjusted due to improved performance until the Contract Year is completed and the next Contract Year begins. This is a significant change from what was stated during the June 13, 2024, IESO webinar. We urge the IESO to revert to the rolling average concept presented to stakeholders.

Given how Actual Production Factor and Performance Factor Shortfall are used in subsequent formulae, we do not see a need to multiply these values by 100 as Exhibit F states.

We have identified several issues with the formula for the Non-Performance Charge:

$$NPC = FP \times 0.8 \times PFS \times CC \times TH_p$$

We believe that CC x TH_p term in the NPC equation needs to be multiplied by Annual Average Imputed Production Factor since this will result in the term representing the expected production from the Facility. Multiplying CC by TH_p implies that the Facility generates every hour over the three-year period, which cannot be correct.

The NPC payback really ought to be the difference between the FP and average ADALMP over the three-year period since this is arguably the "overpayment" by the IESO for the actual production, i.e., the IESO isn't paying the full FP for the production, it pays the difference between the FP and prevailing average ADALPM.

Use of TH_p in a charge that applies to a Monthly Payment results in a very large NPC that would persist for an entire Contract Year. We think that SMH_m should replace TH_p since the charge applies every month over the entire year.

Please note that if the equation for the Performance Factor Shortfall is multiplied by 100, then the equation for NPC needs to be divided by 100.

Exhibit J – Calculation of Monthly Payment

Section 4.1 states that if *"the Monthly Payment is a negative amount, the absolute value of the Monthly Payment shall be payable from the Supplier to the Buyer."* We strongly urge that any revenues earned in excess of the Facility revenue requirement (product of the Fixed Price, Contract Capacity, Annual Average Imputed Production Factor and number of hours in the Settlement Month) be retained by the Supplier to cover the remaining day-ahead-to-real-time risk it is exposed to under the draft contract.

[3] https://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/long-term-rfp/lt2-rfp-20240613-engagement-presentation.pdf

In Section 2 of Exhibit J, there appears to be a typographical error in the first equation setting out the test for whether the $DARTA_h$ = $0

$$\text{If } [\min(ADAQ_h, FDAQ_h) \times ADALMP_h] + ARTLMP_h \times [FRTQ_h - \min(ADAQ_h, FDAQ_h)] \geq 0.85 \times ADALMP_h \times \min(ADAQ_{-h}, FDAQ_h) \times IFDF_h, \text{ then } DARTA_h = \$0.$$

We believe that the subscript on ADAQ should be "h" and not "-h" (highlighted above)

IESO Market Rule Protection

Section 1.6 deals with Supplier protection from changes in IESO market rules. Unlike other IESO PPAs, such as the Large Renewable Procurement ("LRP"), where a market rule amendment that materially affects the Supplier's Economics[4], triggers the protection, the trigger in the draft contract is the inability of the Supplier to comply with its obligations under the contract without incurring material costs. We believe that the IESO ought to revert to the language in the LRP contract. There is a lot of uncertainty around the implication of the implementation of the IESO's Market Renewal Program ("MRP") to LT2 projects and we believe that LRP-like language affords Suppliers better protection considering this uncertainty.

We also noted that Section 1.6 further states that *"the amendments contemplated in this Section 1.6(b) shall not involve* ***an increase in the Fixed Capacity Payment*** (sic) ***or a decrease in any Monthly Imputed Production Factor****, unless otherwise agreed by the Parties"* (emphasis added). This effectively removes an increase in the Fixed Price and reduction in the Monthly Imputed Production Factor from an arbitrator's jurisdiction. An increase in Fixed Price or decrease in the Imputed Monthly Production Factor may be the only way to protect Suppliers from IESO market rules changes. We urge the IESO to strike this language from the draft contract.

Environmental Attributes

We understand that the IESO is prepared to leave the ownership of the environmental attributes with Suppliers. There is an exception to this for Environmental Attributes associated with Future Capacity Related Products, and we were wondering why this exception is being made since it seems to conflict with the position of leaving Environmental attributes with Suppliers.

> *"The Buyer shall have no interest hereunder in any Environmental Attributes arising from the operation of the Facility or,* ***except in respect of any Future Capacity Related Products****, other products or services associated with the generation of Electricity by the Facility." (emphasis added)*

Agricultural Impact Assessment (AIA)

The draft contract states that the Supplier has an obligation to obtain an AIA no later than 18 months after the Contract Date ("AIA deadline"). Furthermore, if the Supplier cannot obtain its AIA by the AIA deadline, then the IESO may elect to terminate the contract and return the Supplier's Completion and Performance Security.

[4] Where Supplier's Economics is defined in the LRP contract as the net present value of the revenues from delivering electricity that are reasonably forecast to be earned by a Supplier, net of any costs that such Supplier would be reasonably expected to incur, and taking into account any Commercially Reasonable Efforts the Supplier is reasonably expected to take to mitigate the effect of any IESO Market Rule amendments, such as by mitigating operating expenses and normal capital expenditures of the business of the generation and delivery of electricity.

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We think that this right needs to be mutual, i.e., if the Supplier cannot obtain its AIA by the AIA deadline or if the requirements or recommendations of the AIA itself render the project uneconomical, the Supplier needs to have the right to terminate the contract without forfeiting its security.

Force Majeure

The draft contract expressly excludes the inability to obtain an AIA from permitting and approvals related Events of Force Majeure. We request that this exclusion be removed so that Suppliers can obtain relief, especially given the fact that there is an AIA deadline. We also request that delays in construction of transmission or distribution infrastructure and delays due to supply chain bottlenecks be expressly included as Events of Force Majeure.

Early Completion Bonus

The draft contract does not include the Early COD Payment Multiplier that was a feature of the E-LT 1 and LT 1 contracts[5]. We request that the Early COD Payment Multiplier be reinstated to provide Suppliers with an incentive to bring new energy supply online as soon as possible.

Materials Cost Indexing Adjustment

The draft contract also does not contain the Materials Cost Indexing Adjustment that formed part of the E-LT 1 and LT 1 contracts.[6] We request that some form of pre-COD indexing be reinstated to provide some protection for Suppliers from inflationary pressures that persist in the economy.

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)
Justin Rangooni (ESC)
Leonard Kula (CanREA)
Elio Gatto (Axium Infrastructure)
Roslyn McMann (BluEarth Renewables)

[5] https://www.ieso.ca/-/media/Files/IESO/Document-Library/long-term-rfp/LT1-Contract-20230929.pdf and https://www.ieso.ca/-/media/Files/IESO/Document-Library/long-term-rfp/E-LT1-Contract-incorporating-Addenda-20230203.pdf

[6] Ibid.

Adam Rosso (Boralex)
David Oxtoby (CarbonFree Technology)
Jason Woods (Connor, Clark & Lunn)
Luke Pangman (Cordelio Power)
David Thornton (EDF Renewables)
Nathan Roscoe (EDP Renewables)
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Julien Wu (Evolugen by Brookfield Renewable)
Stephen Somerville (First Light)
JJ Davis (Kruger Energy)
Deborah Langelaan (Liberty Power)
Michelle Gardner (NextEra Energy)
Brandon Kelly (Northland Power)
John O'Neill (Pattern Energy)
Jennifer Tuck (Potentia Renewables)
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