



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

June 20, 2022

Dear Chuck,

This submission responds to the Independent Electricity System Operator's (IESO's) June 9, 2022 presentation, *LTI RFP and Additional Mechanisms Engagement*.¹

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).

Simplify and Streamline Future RFPs and Other Procurement Initiatives Needed to Address Supply Needs to Enable and Stabilize Investments

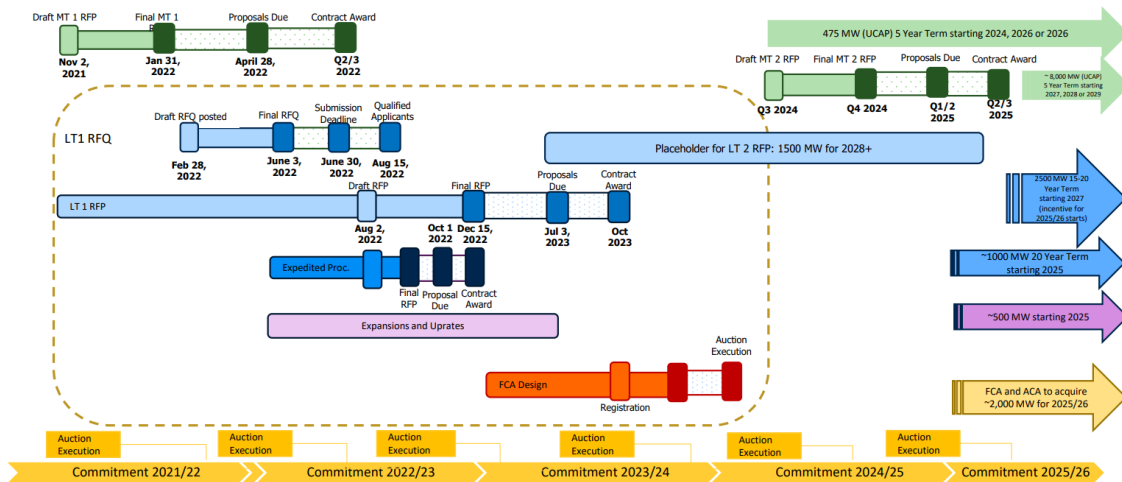
As stated in previous submissions to IESO, the Consortium continues to support IESO's Resource Adequacy Framework (the "Framework"). Within the Framework, the Consortium supports IESO's planned administration of multiple Request for Proposals (RFPs) to execute contracts for projects to be developed and maintained to meet Ontario's growing supply needs, alongside annual Capacity Auctions (CAs) and sole source bilateral contract negotiations (when warranted).

The Consortium believes that IESO's most recent plan for supply procurement initiatives is confusing, many specific procurement initiatives are not well defined, and does not instill confidence for asset managers, project developers, and investors towards meeting Ontario's growing supply needs – especially compared to other competing procurement initiatives within other markets (e.g., Québec, New York, etc.). As depicted in the graphic below from IESO's June 9 stakeholder engagement meeting, the Consortium believes that many individual procurement initiatives can be streamlined towards less procurement initiatives to accomplish the same goals of meeting Ontario's supply needs in a more efficient and clear manner, including more cost-effective outcomes for Ontario's electricity customers.

¹ See <https://ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Long-Term-RFP>

²The members of the Consortium are: CanREA; Axiom 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.

Procurements and Timelines



For example, the planned procurement for Expansions and Uprates should be addressed within future Long-Term (LTP) RFPs and IESO should not go forward with designing and implementing a one-off Forward Capacity Auction (FCA) (i.e., enhance a CA one time).

The planned FCA is simply a retread of the failed Incremental Capacity Auction (ICA) procurement initiative, where majority of stakeholders that responded to IESO's ICA High-Level Design document did not support its further design and implementation. The Consortium is of the opinion that there have been no changes to these stakeholders' recommendations, therefore we are shocked that IESO plans to waste time, resources, and budget to design and implement a one-off FCA. Therefore, the Consortium does not support the FCA procurement initiative.

The Consortium recommends that IESO not only simplify and streamline supply procurement initiatives but should also set a schedule of procurement initiatives for the next several years with associated supply (MW) targets. That is, this year, IESO should announce a series of future procurements (i.e., "RFP Supply Procurement Roadmap") that clearly define RFPs and their associated MW targets on an annual basis. RFPs should be launched at the beginning of each year with associated contracts awarded by the end of the same year. Further, to create additional predictability and stability, the main terms and conditions of RFPs and associated contracts should remain constant throughout the suite of RFPs and contracts. Overall, this will help create confidence with asset managers, project developers, and investors (e.g., financiers, lenders, etc.).

LT RFP/Contract 1 Compared to LT RFP/Contract 2 and Subsequent LT RFPs/Contracts

Regarding LT RFP 1 and the Expedited Procurement RFP, the Consortium understands that IESO plans to mainly procure capacity, considering power system needs that emerge in the mid-2020s. The Consortium applauds IESO with proposed changes of contract term lengths between 20-years to 22-years. However, the Consortium is still of the view that any energy production duration (e.g., at least 4-



hours) should be a component of Rated Criteria within these RFPs and not included within Mandatory Requirements. The Consortium does acknowledge IESO's plans to revisit this for potential changes to LT RFP 2.

The Consortium is pleased that IESO has acknowledged that subsequent LT RFPs/Contracts will need to address Ontario's future energy supply needs, additional to capacity supply needs. Therefore, the Consortium encourages IESO to start consultations now (not waiting until 2023) with stakeholders on development of an RFP Supply Procurement Roadmap including key and consistent terms and conditions for subsequent LT RFPs/Contracts.

Proposed LT Contract 1 and Expedited Procurement Contract Design – Payment Structure

Despite the contract payment structure IESO has now proposed, the Consortium still recommends a simplified contract payment structure of a single bundled price (i.e., capacity plus energy, \$/MWh and/or \$/MW-month) settled via contract-for-differences (CfD).

Based on previous Consortium submissions to IESO, we have modeled the benefits of a CfD payment structure based on a single contract price and have concluded that such a structure is more cost-effective for Ontario's electricity customers (compared to any other structure IESO has proposed to date). The CfD structure with a single price also helps ensure stable and sufficient contract revenues that will best facilitate the development and financing of needed supply resources.

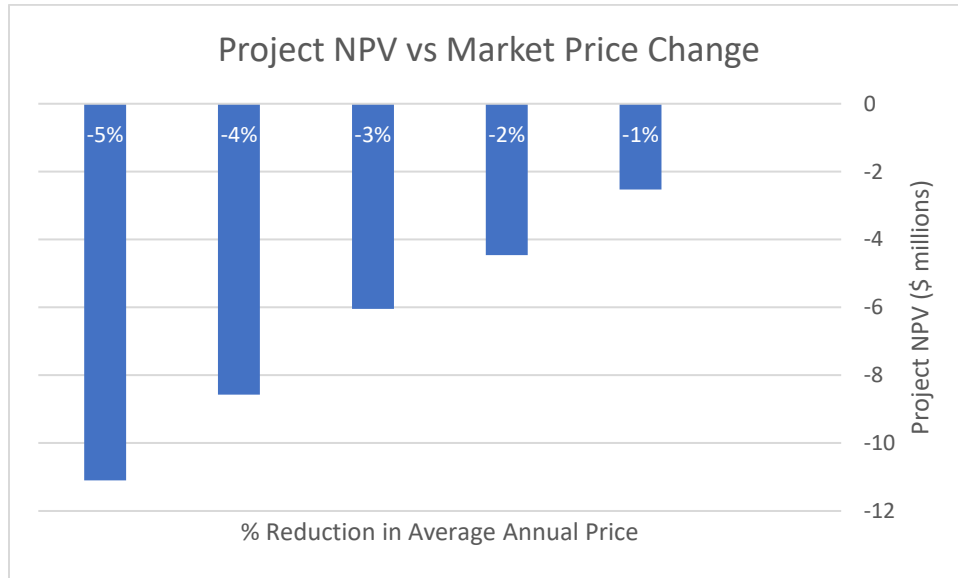
The Consortium is of the view that IESO's proposed Capacity Payment Adjustment Mechanism is unnecessarily confusing and can lead to sub-optimal and costly outcomes. Further, we have never seen such a payment structure in any contract cross multiple markets and jurisdictions.

Overall, based on our modeling, we believe there will be significant risks to proponents bidding percentage adjustments to their fixed contract payment in accordance with thresholds relating to average wholesale energy market prices. Consequentially, we believe proponents will likely not take up the option of bidding any adjustments, and therefore simply increase their bid capacity prices. This will also unnecessarily raise costs to Ontario's electricity customers.

Listed below is a brief explanation and summary of our modelling results.

We have undertaken some preliminary modelling. The proposed contract payment mechanism does not provide a hedge against the uncertain future of wholesale energy market prices. To bid adjustments to the capacity payment to keep contracted generators whole, generators need to understand future potential distribution of prices to assess the quantum of the adjustment and risk associated with it. Our preliminary modelling shows that even a small change in wholesale energy market prices could potentially trigger capacity payment adjustments that could render a project uneconomical (see Figure, below, which used the example parameters from IESO's June 9 stakeholder engagement meeting). Using this payment mechanism, generators will have to set their bid capacity prices on the assumption that wholesale energy prices will be at the floor level of the IESO set price collar. This means that

Ontario's electricity customers will end up overpaying because the riskiness of the contract payment mechanism forces generators to take a cautious approach to pricing their projects.



The CfD payment structure used in past contracts executed by IESO and the former Ontario Power Authority (OPA) (prior to OPA merged into IESO) provides the required revenue certainty that generators will need to obtain debt financing for their projects. The proposed IESO payment structure does not provide any revenue certainty because to set the adjustment levels to maintain an adequate level of revenue required by projects, generators need to understand where future wholesale energy prices will be going, which is the crux of the problem – future price uncertainty, especially given uncertainties when Locational Marginal Prices (LMPs) will be implemented as part of IESO's Market Renewal Program (MRP).³

Deliverability Test

As stated within our last submission to IESO, the Consortium continues to request more details regarding the Deliverability Test, including but not limited to:

³ In June this year via responses to intervenors interrogatories within IESO's 2022 revenue requirement application, IESO revealed that the November 30, 2023 MRP implementation date will not be met nor will its six-month contingency delay (i.e., late May 2024). IESO further stated that they plan to announce the revised MRP implementation date by the end of Q3/22.



- IESO determination of an 'acceptable' level of transmission congestion (e.g., for the Feed-in Tariff (FIT) Program, OPA decided that transmission congestion be capped at 4% resulting from all contracted generators reaching commercial operation);
- Clear rules to establish processes to manage connection queues, evaluation of connection of proposed projects, assignment of available connection to projects, etc.; and
- How other procurement initiatives (e.g., hydroelectric generation programs, results from CAs, etc.) factor into managing connection queues, evaluation of connection of proposed projects, assignment of available connection to projects, etc.

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,

A handwritten signature in black ink, appearing to read "Jason Chee-Aloy", written over a light gray horizontal line.

Jason Chee-Aloy
Managing Director
Power Advisory

cc:

Jordan Penic (IESO)
Shawn Cronkwright (IESO)
Katherine Sparkes (IESO)
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Greg Peterson (Capstone Infrastructure)



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David Thornton (EDF Renewables)
Nathan Roscoe (EDP Renewables)
Lenin Vadlamudi (Enbridge)
Michelle Dueitt (ENGIE)
Julien Wu (Evolugen by Brookfield Renewable)
Stephen Somerville (H2O Power)
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