

March 17, 2022

Independent Electricity System Operator 1600-120 Adelaide Street West Toronto, ON M5H 1T1

Via email to engagement@ieso.ca

Re: IESO's Long Term RFP Design

The Power Workers' Union ("PWU") represents a large portion of the employees working in Ontario's electricity industry. Attached please find a list of PWU employers. The PWU is a strong supporter and advocate for the prudent and rational reform of Ontario's electricity sector and recognizes the importance of low-cost, low-carbon energy to the competitiveness of Ontario's economic sectors.

The PWU appreciates the opportunity to provide further input on the design of IESO's Long Term RFP for new generation resources. The PWU believes that a well design procurement process is essential to securing the new generation resources that Ontario needs to power its future at the lowest reasonable cost while stimulating job creation and growing the province's gross domestic product (GDP). respectfully submitting our detailed observations and recommendations.

We hope you will find the PWU's comments useful.

Yours very truly,

Jeff Parnell President

244 EGLINTON AVE. E. TORONTO, ONTARIO M4P 1K2 Tel.: (416) 481-4491 Fax: (416) 481-7115

CANADIAN UNION

OF PUBLIC EMPLOYEES. LOCAL 1000, C.L.C.

PRESIDENT Jeff Parnell

VICE PRESIDENTS

Andrew Clunis Mike Hambly Tom Chessell

James Middleton



List of PWU Employers

Alectra Utilities (formerly PowerStream)

Algoma Power

AMEC Nuclear Safety Solutions

Aptum (formerly Cogeco Peer 1)

Atlantic Power Corporation - Calstock Power Plant

Atlantic Power Corporation - Kapuskasing Power Plant

Atlantic Power Corporation - Nipigon Power Plant

Bracebridge Generation

Brighton Beach Power Limited

Brookfield Power Wind Operations

Brookfield Renewable Power - Mississagi Power Trust

Bruce Power Inc.

Canadian Nuclear Laboratories (AECL Chalk River)

Collus Powerstream

Compass Group

Corporation of the County of Brant

Covanta Durham York Renewable Energy Ltd.

Elexicon (formerly Whitby Hydro)

Enwave Windsor

Erth Power Corporation (formerly Erie Thames Powerlines)

Erth Corporation

Ethos Energy Inc.

Great Lakes Power (Generation)

Greenfield South Power Corporation

Grimsby Power Incorporated

Halton Hills Hydro Inc.

Hydro One Inc.

Hydro One CSO (formerly Vertex)

Hydro One Sault Ste. Marie (formerly Great Lakes Power Transmission)

Independent Electricity System Operator

Inerai LP

InnPower (Innisfil Hydro Distribution Systems Limited)

Kinectrics Inc.

Kitchener-Wilmot Hydro Inc.

Lakeland Power Distribution

London Hydro Corporation

Milton Hydro Distribution Inc.

New Horizon System Solutions

Newmarket Tey/Midland Hydro Ltd.

Nuclear Waste Management Organization

Ontario Power Generation Inc.

Orangeville Hydro Limited

Portlands Energy Centre

PUC Services

Quality Tree Service

Rogers Communications (Kincardine Cable TV Ltd.)

Sioux Lookout Hydro Inc.

SouthWestern Energy

Synergy North (formerly Kenora Hydro Electric Corporation Ltd.)

Tillsonburg Hydro Inc.

The Electrical Safety Authority

Toronto Hydro

TransAlta Generation Partnership O.H.S.C.

Westario Power

Power Workers' Union Submission on the IESO's LT RFP March 10 Webinar

March 17, 2022

The Power Workers' Union (PWU) is pleased to submit comments and make recommendations to the Independent Electricity System Operator (IESO) regarding its Long Term (LT) Request for Proposals (RFP) materials presented on March 10, 2022. The PWU remains a strong supporter and advocate for the prudent and rational reform of Ontario's electricity sector and recognizes the importance of planning for low-cost, low-carbon energy solutions to enhance the competitiveness of Ontario's economy.

The PWU is supportive of IESO's effort to competitively acquire the resources that Ontario needs to ensure the resource adequacy of Ontario's electricity system and appreciates that the IESO has accepted the PWU's recommendation regarding the expansion of its RFP beyond capacity-only style contracts.

However, the PWU remains concerned that the IESO approach to the LT RFP is at risk of not acquiring low-carbon emitting resources at the lowest cost. The IESO's current approach continues to limit its options which inhibits competition contrary to the IESO's stated objective. In the short time made available for comment by the IESO, the PWU offers the following observations and suggestions in response to the IESO's feedback form.

Proposed 15-year term for project financing certainty

- The PWU supports longer-term contact lengths as the IESO's initial 7-year timeframe proposed by the IESO is too short for most supply options.
- However, the IESO-proposed fixed 15-year timeframe will introduce several unintended consequences.
- Without mandatory criteria for emissions, this timeframe favours natural gas-fired generation bids, assuming such facilities can be sited.
- Higher cost bids can be expected to meet the economic life of the required resources in the
 absence of alternative contract timeframe options. For example, the economic life of
 storage assets could involve multiple 10-year spans and gas-fired generation a 20-year
 economic life.¹ A 15-year time frame will increase the bid cost by 30%, which is not in the
 interest of ratepayers.
- The IESO rejected proposals for flexible contract timeframes due to their potential misalignment with the IESO's planned timelines for procurement. This rejection does not consider the evident uncertainty of resource requirements resulting from its forecast needs for new capacity to meet emerging demand. Analyses indicate that the IESO's Pathways Study will show a significant demand for new, incremental capacity every year between 2028 and 2050.² This suggests there are many opportunities for the IESO to accommodate multiple contract lengths while increasing competition and providing greater planning flexibility.

¹ Reference economic life of these assets per Lazard, EIA, NREL.

² Strapolec, Electrification Pathways for Ontario, 2021, illustrates how demand for electricity will be growing exponentially for the next three decades.

The IESO should revisit its proposed 15-year term contract approach as it limits competition and increases costs for ratepayers.

IESO's approach to revenue streams, energy market hedge mechanisms, and energy market efficiency.

The IESO's approach for developing additional revenue steams is inconsistent with its objectives.

- The IESO has omitted power purchase agreements (PPAs) from its approach indicating that PPAs would undermine the market mechanisms proposed in its Market Renewal Program (MRP). The PWU suggests that the IESO's proposed market hedge and Contract for Difference mechanisms are very similar to that of a PPA. As a result, the inherent features of these two mechanisms can also undermine markets.
- The energy component the IESO is addressing only applies to the periods when capacity is required for meeting peak demand, which could be for as little as 20 hours a year. This small number of hours does not materially address the revenue certainty requirements of investors, with the exception of gas-fired generation, given its variable costs and alignment with the energy market. The current bias in the IESO's procurement for natural gas-fired generation and the increased energy adequacy such new capacity entails erodes the revenue certainty for other options, e.g. storage. Gas-fired generation is forecast to be on the margin for almost all hours of the year when the Pickering Nuclear Generating Station retires. The gap between on-peak and off-peak prices may not be that large depending on Ontario's energy adequacy at that time. As a result, storage will be unable to competitively bid against natural gas-fired generation since the variable cost of storage output will cost at least 15% more.

The PWU reiterates its recommendation that the IESO's proposed framework should ensure the competitive acquisition of storage for peaking purposes and discourage the procurement of natural gas-fired generation capacity baseload and intermediate demand.³

IESO's Approach to Deliverability

The IESO's proposed process, which requires proponents to identify proposed locations before an RFP is issued and then the IESO advising proponents as to the viability of their proposed locations is overly cumbersome and complex. This iterative approach undermines the intent of a competitive RFP process.

- The efficiency of the proposed process would benefit from the IESO clarifying its priority needs e.g., by minimizing additional investments in the transmission system. By clearly identifying where the capacity is required (e.g. maximum desired capacity on the demand side of Transmission Stations A, B, and C) proponents can offer competitive bids for those locations. The IESO already knows where the system constraints are and where new capacity is required.
- The IESO could expedite the procurement process and maximize competition by identifying its priority locations at the beginning of the process.

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³ PWU submission to the IESO on its LT RFP presentation of February 8th, 2022.

The IESO's proposed intermediate deliverability assessment process reduces competition as it does not adequately inform market participants.

Draft RFQ qualification parameters

The IESO's proposed RFQ parameters narrow the available resource options which limits competition and increases costs. Two of the IESO's requirements stand out.

- Behind the meter (BTM) installations do not qualify. As noted by some participants, most of Ontario's storage installations have been behind the meter. This criterion will unnecessarily limit the number of potential bidders.
- Market experience is valued. This criterion would make sense if the IESO were procuring gasfired generation. For all other non-emitting supply options, markets do not provide a suitable construct for their procurement and operation.⁴ The IESO may need a different model to procure storage to optimize its desired outcomes.

Other considerations

Given Ontario's established needs for capacity and the relatively short-time available to meet them, the PWU continues to recommend that the IESO should proceed with its proposed procurement for up to 1000 MW by 2027 but to also initiate tailored resource procurements for meeting baseload, intermediate and peak demands in 2028, 2030, and 2035.

Closing

The PWU has a successful track record working with others in collaborative partnerships. We look forward to continuing to work with the IESO and other energy stakeholders to strengthen and modernize Ontario's electricity system. The PWU is committed to the following principles: Create opportunities for sustainable, high-pay, high-skill jobs; ensure reliable, affordable, environmentally responsible electricity; build economic growth for Ontario's communities; and, promote intelligent reform of Ontario's energy policy.

We believe these recommendations are consistent with, and supportive of Ontario's objectives to supply low-cost and reliable electricity for all Ontarians. The PWU looks forward to discussing these comments in greater detail with the IESO and participating in the ongoing stakeholder engagements.

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⁴ Strapolec, Electricity Markets in Ontario, 2020.