

June 18, 2021

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

Via email to engagement@ieso.ca

Re: May 2021 Resource Adequacy Engagement

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 appreciates the opportunity to provide input on the May 2021 Resource Adequacy engagement. 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 believes that IESO processes and initiatives should deliver energy at the lowest reasonable cost while stimulating job creation and growing the province's gross domestic product (GDP). We are respectfully submitting our detailed observations and recommendations.

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

Yours very truly,

Jeff Parnell President

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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)

J-MAR Line Maintenance Inc.

Kenora Hydro Electric Corporation Ltd.

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

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 May 2021 Resource Adequacy Engagement June 18, 2021

The Power Workers' Union (PWU) is pleased to submit comments and make recommendations to the Independent Electricity System Operator (IESO) regarding its May 28th Resource Adequacy Engagement webinar. 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.

During the webinar, several topics were discussed: scope for a resource adequacy information guide; a preview of the structure of the upcoming Annual Acquisition Report (AAR); proposed updates to the capacity auction; and, the transition to using unforced capacity (UCAP) along with design principles and objectives. This submission responds primarily to the IESO's request for comment on the proposed information guide.

The PWU makes the following recommendations:

- 1. The IESO should include additional information as part of the Resource Adequacy Information Guide.
- 2. The IESO should incorporate longer duration energy requirements into procurements.

Recommendation #1: The IESO should include additional information as part of the Resource Adequacy Information Guide.

The Resource Adequacy Information Guide is intended to provide additional information to answer resource-adequacy related questions that have been asked by stakeholders. The IESO should include the following material for planning, acquisitions, and programs in the proposed information guide:

- **Demand Types** IESO should address how the three types of demand baseload, intermediate and peak impact on procurement criteria for low-carbon resources. ¹
- Procurement Mechanisms A clearer definition of what is meant by "short-, mid- and long-term" should be included in the information guide. It is unclear as to whether these mechanisms refer to asset life, contract term, or the anticipated timeframe for procurement of the resource. These definitions need to be detailed, including when the resources are needed, their objectives, and the expected outcomes for each term. For example, Ontario is aware of the sustained long-term capacity gap it faces in 2026 with the retirement of the Pickering Nuclear Generating Station (PNGS). The IESO has indicated that the procurement mechanisms to address this capacity need will not be in place until this long-term capacity replacement is urgently required.
- **Timelines** The IESO should make clear the dates when it will begin its procurement activities. IESO has repeatedly stated that mid- and long-term mechanisms will not begin until after MRP activities end. Clarity on procurement start times can help ensure that the right resources are able to respond in a timely manner.

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¹ PWU, PWU Submission on Resource Adequacy Engagement, October 2020

- Commitment Details Supply needs emerging within the next 5 years represent a sustained need in the province. The closure of the PNGS in 2025 removes 3,000 MW of long-term baseload capability, and represents a significant loss of energy. The IESO currently plans to replace this capacity with a mid-term procurement mechanism. The IESO needs to clarify how these short-and mid-term procurements will address Ontario's sustained long-term, low-carbon energy needs.
- Products and Services The IESO's short- and mid-term mechanisms will procure unbundled
 capacity while their long-term mechanisms could potentially procure future energy resources
 with attributes other than just capacity. These desired attributes should be clarified, including
 those related to GDP contribution, jobs, emissions, and additional societal benefits.
- Transition/Bridging Mechanisms The IESO has indicated that they "will work with individual suppliers to address any short-term misalignments between contract end dates and when commitment periods for the mechanisms are scheduled to begin." The IESO should clarify how they are balancing their desire for competitive procurement mechanisms with the circumstances of specific resources that want their contracts renewed. Such sole-source procurements of specific resources are not subject to full-transparency. The information guide should clarify what criteria it will apply to these types of procurements.
- Governance & Decision-Making The IESO has indicated it will include the decision-making
 rationale in procurement mechanism-specific consultation documents. The information guide
 should lay out the underlying principles, governance and decision-making framework, and
 driving principles that set out how other documents will provide details. Such a central
 reference would help readers avoid having to decipher the principles from their own review of
 several documents or consultations.
- Planning Considerations The information guide should lay out how the planning process (i.e.
 the APO, regional planning, and bulk-system planning) relates to the IESO's Resource Adequacy,
 Annual Acquisition Report (AAR), and to the specific procurement mechanisms under
 consideration.
- Target-Setting Methodology The information guide should be clear about what the principles
 are for setting procurement targets, and how they apply for the whole planning and acquisition
 process. The AAR can provide specifics about principles used for decision-making, but the
 information guide should include information on the relationship to overall governance and
 decision-making.
- **Programs** Similarly, criteria regarding how programs relate to planning for the acquisition process should be identified.

Recommendation #2: IESO should incorporate longer duration energy requirements into procurements.

Recent analysis shows that the baseload capacity gap appearing in 2026 following the retirement of PNGS will create a baseload capacity shortfall that will persist throughout the APO's forecast horizon.² Replacing PNGS's 3,000 MW of low-carbon electricity will require approximately 2 GW of baseload

² Strapolec, Electrification Pathways for Ontario to Reduce Emissions, 2021.

capacity for 98% of the hours in the year. The IESO approach to fill this near-term gap indicates that it will be filled through short- and mid-term procurement mechanisms.³

During the webinar, the IESO stated that the capacity auction and mid-term RFP procurements will have a 4-hour energy requirement. This does not meet the need to replace 24x7 low-carbon baseload generation. In the absence of details on the types of demand the IESO wishes to procure, Ontario's baseload demand will be met by increasing production from existing facilities, procured as capacity that are expected to produce only 4 hours of energy around peak demand times. This will result in the undesirable increase in GHG emission from Ontario's electricity system. To ensure that energy needs in the province are optimally met along with capacity needs, IESO should be articulating the actual energy duration requirements that Ontario needs of the capacity procurement as part of their procurement framework.

Closing

The PWU has a successful track record of 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.

³ The lead time for baseload assets procured through the long-term mechanism will likely be greater than 5 years, and the procurement mechanism for the long-term has not yet been developed.