



**POWER
WORKERS'
UNION**

September 17, 2021

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

Via email to engagement@ieso.ca

Re: Resource Adequacy August Engagement Meeting

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 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

CANADIAN UNION
OF PUBLIC EMPLOYEES,
LOCAL 1000, C.I.C.

244 EGLINTON AVE. E.
TORONTO, ONTARIO
M4P 1K2

TEL.: (416) 481-4491
FAX: (416) 481-7115

PRESIDENT
Jeff Parnell

VICE PRESIDENTS
Andrew Clunis
Mike Hambly
Tom Chessell
James Middleton



Printed on recycled
and recyclable paper

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
Inergi 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 August 2021 Resource Adequacy Engagement

September 17, 2021

The Power Workers' Union (PWU) is pleased to submit comments and make recommendations to the Independent Electricity System Operator (IESO) regarding its August 26th 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.

The webinar addressed two topics: an overview of the upcoming medium-term (MT) RFP procurement mechanism; and a review of performance obligations for the capacity auction mechanism. Our feedback pertains to the MT RFP mechanism.

The PWU recognizes that the proposed design considerations for the MT RFP mechanism are preliminary and appreciates the early involvement of stakeholders. The PWU is pleased to see that the PWU's previous feedback regarding the need to consider power system needs beyond capacity and energy, including design criteria such as dispatchability, is being reflected in the RFP procurement process.

The PWU recognizes that the IESO's preliminary MT RFP mechanism focuses on addressing existing resources coming off contract in and around 2026 and that the program's features will evolve over time. The IESO stated that technology is changing rapidly, and that climate change is becoming a driver.¹ However, the PWU is concerned that the proposed design assumptions will not successfully secure non-emitting resources, and instead favour contracting natural gas-fired generation. The IESO has invited feedback to *"continue to shape the acquisition of services to satisfy identified needs."*

In response, the PWU makes the following recommendations to the IESO:

1. Evaluate the participation criteria and bridging mechanisms to ensure available capacity is fully eligible to optimally satisfy Ontario's objectives;
2. Examine how the capacity auction, MT RFP and long-term procurement mechanisms will work together to effectively meet Ontario's needs; and,
3. Provide the relevant analyses that underpin the identified 3-year and 7 to 10-year planned contracting periods for MT and long-term procurements.

Recommendation #1: Evaluate the participation criteria and bridging mechanisms to ensure available capacity is fully eligible to optimally satisfy Ontario's objectives.

The MT RFP's stated objective is to secure specific classes of existing resources whose contracts may be expiring and to do so in the context of several design considerations:

- *Resource Eligibility:* Specifically, existing resources that are coming off contract, merchant resources (e.g. gas-fired generation plants) and any listed uprates. New build resources, imports, and Demand Response (DR) are excluded;

¹ IESO, Opening Remarks from Chuck Farmers during August 2021 Resource Adequacy engagement meeting, 2021.

- *Contract expiry and transition:* Eligible resources with contracts expiring before April 30, 2026 will be participating in capacity auctions for commitment periods ending prior to April 30, 2026 while those with contracts expiring after that date will have the option to terminate their contracts early in order to align with the procurement time frame;
- *Contract Type:* The MT RFP will enable “capacity style” contracts to be awarded based on the values that they bid. This notionally leaves additional revenue opportunities with the suppliers, e.g. their ability to participate in the energy market; and,
- *Rated criteria:* Criteria will consider attributes that provide higher value from a system and operational perspective, such as 4+ hours of energy, 5-min dispatch and locational value.

Together, these criteria favour existing natural gas assets. Stakeholders objected to this bias during the webinar for several reasons.

- 1) *Participation criteria is unfair:* The IESO argued that limiting participation would help avoid: (1) potentially forcing existing facilities to exit if they are not successful thereby impacting reliability; and, (2) any indirect impacts on the Capacity Auction by pulling resources out of the auction into the RFP.

These arguments were challenged by stakeholders during the meeting. Demand response proponents argued that the exclusion of these assets from three-year RFP contracts eliminates the opportunity to reduce costs for ratepayers. The IESO has not provided any analysis that establishes that the exclusion of other resources from the RFP is beneficial to ratepayers.

- 2) *MT RFP is simply a capacity procurement.* This mechanism, although offering a longer (3 year) commitment period versus 1 year for the Capacity Auction relies on other IESO administered markets (IAMs) to ensure financial viability. Analyses have shown that these market approaches are inadequate for securing non-emitting resources.²
- 3) *The value of emissions is not included:* There is no mechanism in Ontario to prioritize non-emitting resources over natural gas-fired generation in the absence of a carbon price. This is the current case with Ontario’s Emissions Performance Standard which exempts the majority of natural gas-fired generation from paying for emissions. The results of the IESO’s underway assessment of a potential gas-generation phaseout in Ontario should be incorporated in the design of the MT RFP.

The future of the biomass-fuelled Atikokan Generating Station (GS) provides a useful illustration of the shortcomings the IESO’s proposed approach. The Atikokan GS contract expires in 2024, almost two years before the MT RFP. The Atikokan GS will therefore have to compete within the Capacity Auction and energy markets, which it cannot do while the IAMs do not value low-emission generating sources.

The IESO’s stated objective of keeping all existing assets in play suggests that special consideration should be awarded to Atikokan GS after its contract expires to ensure it remains a viable low-carbon asset for the MT RFP. This makes the Atikokan GS an ideal candidate for bilateral negotiations in the AAR framework. Additionally, key criteria should be included in the RFP that values the benefits of this low-carbon, domestically fuelled asset: 200 MW of low-emission baseload and/or peak capacity; strategic

² Strategic Policy Economics, Electricity Markets in Ontario, 2020.

location in the northwest; and its significant GDP and job contributions to Northwest Ontario. Studies have shown that expanding the procurement criteria accordingly is critical for maximizing the societal benefits from Ontario's energy spend.³

Recommendation #2: Examine how the capacity auction, MT RFP and long-term procurement mechanisms will work together to effectively meet Ontario's needs

The IESO's proposed MT RFP mechanism is intended to address system needs, however, it will only procure capacity for a short term. From a capacity perspective, Ontario's electricity demands can be characterized in several ways: peaking and reserve; intermediate; and, 24x7 baseload.⁴ Securing optimal capacity is informed by these demands and selection of appropriate procurement mechanisms. As a capacity procurement tool, the proposed MT RFP may be ideally suited for meeting peak and reserve needs, much like the capacity auction, however it does not address the need for optimally procuring low-carbon, baseload capacity.

Yet, forecasts for 2026 clearly indicate that Ontario will need to replace 3,000 MWs of low-carbon baseload capacity and additional intermediate capacity, with the closure of the Pickering Nuclear Generating Station. The proposed MT RFP is structured to only procure capacity from resources on the basis of continuously producing a minimum of 4 hours of energy. Given the economics, this eliminates consideration of generating assets that would economically supply 12 hours per day of energy or 24x7 baseload. The focus on capacity also means forgoing significant societal benefits such as reduced GHG emissions in the absence of a price on carbon.

Adequate system resource planning should consider the full suite of energy system needs when designing the MT RFP to ensure the resulting procurement satisfies those needs. The proposed MT RFP biases the procurement to natural gas peaking and reserve generation capacity. When these assets are used to supply the needed baseload power, it will lead to higher GHG emissions and increased imports of price-volatile, natural gas.

The MT RFP approach of three-year contracts is premised on a short-term, "just in time" decision-making process that ignores Ontario's real long-term energy supply challenge. This will have implications for Ontario's unfolding supply mix. The IESO must define the cadence for MT RFPs and long-term procurement mechanisms and the objectives that the cadence will be set to achieve. These mechanisms must work seamlessly with an eye to a reliable supply mix and to avoid the scenario of MT RFPs procuring assets that eliminate other options for longer lived assets that could better meet Ontario's needs.

By sticking with a capacity procurement model based on three-year terms, non-emitting energy providing resources will never be procured and Ontario will be locked into a cycle of continuously procuring natural gas fired resources. The inevitable outcome is that the MT RFP will have to be replicated at the expiry of the initial three-year term. The IESO should re-define its MT RFP approach to:

³ Strategic Policy Economics, Electrification Pathways, 2021.

⁴ Strategic Policy Economics, Electricity Markets in Ontario, 2020.

- separately procure peaking, intermediate and baseload supply capacity to meet the associated system needs;
- include procurement criteria that incorporate societal benefits; and,
- identify the timelines associated with Ontario's forecast capacity needs. Any forecast sustained need that persists beyond 3 years should be procured via long-term contracts.

Recommendation #3: Provide the relevant analyses that underpin the identified 3-year and 7 to 10-year planned contracting terms for MT and long-term procurements

During the webinar, several industry stakeholders expressed concerns that the proposed 3-year MT RFP and 7 to 10-year long-term procurement contracts do not provide sufficient revenue certainty for developers. In response, the IESO indicated that it was striking a balance between short and long-term risks. However, the IESO's underpinning assumptions remain unclear. It is accepted that there must be a balance struck among risks, but stakeholders are signalling that the commitment periods are too short.

There are analytical methods available to assess the implications of various contracting approaches on future supply risks. One such method is to employ a real options analysis.⁵ This would enable the IESO to: clarify the interrelationships between the proposed MT RFP design and the mechanisms that will be used to meet Ontario's long-term electricity needs; establish a clear set of objectives, including environmental and societal; and communicate the scope and timeline for developing the latter mechanisms and implementing an integrated procurement approach.

Closing

While the IESO has made significant progress redefining its planning approach, significant risks associated with Ontario's mid-term and long-term electricity needs remain unresolved. Over the longer-term Ontario could be locked into to higher cost, higher-emission supply decisions with the proposed MT RFP. The IESO should be addressing these mid and long term needs concurrently with an integrated approach.

The PWU has a successful track record of working with other stakeholders 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.

⁵ PWU, Submission on York Region NWA Demonstration Project July 2021 Meeting, 2021.