POWER WORKERS' UNION

August 21, 2020

Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON
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Via email to engagement@ieso.ca

Re: Peel/Halton Region (GTA West) IRRP

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 Energy Storage Design Project. The PWU is a strong supporter and advocate for the prudent and rational reform of Ontario's electricity sector and recognizes the importance of clean, low-cost energy to the competitiveness of Ontario's economic sectors.

The PWU believes that IESO processes and initiatives should deliver clean 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

Abraflex (2004) Ltd.
Alectra Utilities (formerly PowerStream)
Algoma Power
Aptum (formerly Cogeco Peer 1)
Atlantic Power Corporation - Calstock Power Plant
Atlantic Power Corporation - Kapuskasing Power Plant
Atlantic Power Corporation - Nipigon Power Plant
Atura - Halton Hills Generating Station
Atura - Napanee Generating Station
Atura - Portlands Energy Centre
Bracebridge Generation
Brookfield Power Wind Operations
Brookfield Renewable Power - Mississagi Power Trust
Bruce Power Inc.
Canadian Nuclear Laboratories (AECL Chalk River)
Cochrane Telecom Services
Compass Group
Corporation of the County of Brant
Covanta Durham York Renewable Energy Ltd.
Elexicon (formerly Whitby Hydro)
Enwave Windsor
EPCOR Electricity Distribution Ontario Inc.
Erth Power Corporation (formerly Erie Thames Powerlines)
Erth Holdings Inc
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)
Kinectrics Inc.
Kitchener-Wilmot Hydro Inc.
Lakeland Power Distribution
Laurentis Energy Partners
London Hydro Corporation
Milton Hydro Distribution Inc.
New Horizon System Solutions
Newmarket -Tay/Midland Hydro Ltd.
Nuclear Waste Management Organization
Ontario Power Generation Inc.
Orangeville Hydro Limited
PUC Services
Quality Tree Service
Rogers Communications (Kincardine Cable TV Ltd.)
Sioux Lookout Hydro Inc.
SouthWestern Energy
Synergy North Corporation
Tillsonburg Hydro Inc.
The Electrical Safety Authority
Toronto Hydro
TransAlta Generation Partnership O.H.S.C.
Westario Power

IESO Peel/Halton Region (GTA West) Integrated Regional Resource Plan Submission

The Power Workers' Union (PWU) is pleased to submit comments and recommendations to the Independent Electricity System Operator (IESO) regarding the Integrated Regional Resource Plan (IRRP) development underway for the Peel Halton Region (GTA West). The PWU is a strong supporter and advocate for the prudent and rational reform of Ontario's electricity sector and recognizes the importance of planning for clean, low-cost energy solutions to enhance the competitiveness of Ontario's economic sectors.

On August 5th, IESO held a webinar to outline two areas in GTA West that have current and forecast capacity and load security issues: the "Pleasant Pocket" in northern Brampton and the "Halton Pocket" comprising parts of Halton Hills and Milton. IESO is seeking feedback on their proposed solutions options that include transmission upgrades, demand response measures, and new local generation.

Based on the materials presented, the PWU recommends that the IESO proceed with the proposed Meadowvale - Hurontario Transmission Line project as the preferred solution to the region's capacity and load security needs.

Recommendation: Build the Meadowvale x Hurontario Transmission Line

The PWU considers that the proposed Meadowvale - Hurontario Transmission Line is the most effective solution to the capacity and load security issues in the Peel-Halton region. Given the lead time for such a project, the PWU also supports demand-side solutions, such as energy efficiency, which can manage peak demand needs while the line upgrades are completed.

a. **New local generation is unacceptable given the cost and emissions.** Between the Halton Pocket and the Pleasant Pocket, the IESO has identified capacity needs ranging between 60-150 MW during peak times. Given the scale of this peak requirement, a local generation solution would have to be either gas-fired generation, or some form of distributed energy storage. The PWU submits that building new gas-fired generation would undermine Ontario's historical progress in reducing emissions from the province's electricity sector and smaller gas-fired generation plants are more costly than the larger existing plants that contribute to the bulk system. Ontario is not expected to face a bulk system capacity shortfall until 2026 assuming the Canadian Nuclear Safety Commission approves OPG's proposed extension of operation of units at the Pickering Nuclear Generation Station. Implementing storage solutions to address short-term peak demand needs has been shown to be extremely costly and inefficient in Ontario.[1] The IESO should not consider options that increase Ontario's emissions and/or entail high costs for consumers. This leaves transmission upgrades and demand-side solutions as remaining options.

b. **New transmission capacity supports Ontario's bulk electricity system.** The proposed Meadowvale - Hurontario Transmission Line would provide the necessary capacity to both the Halton and Pleasant pockets, and improve the flexibility of Ontario's low-cost bulk system for meeting both near and long-term electricity needs.

c. **Demand-side measures can help address capacity issues during the lead time for the new transmission line.** While the capacity needs forecast for the Peel/Halton region demand a new

[1] OEB Market Surveillance Panel report on the ICI, 2018

transmission line in the medium term, in the short-term demand-side measures, such as energy efficiency programs could address the requirement. This is consistent with the IESO's Conservation and Demand Management Framework, which is beginning to prioritize solutions to meet peak demand.

d. **Continue to consider the Northwest GTA Corridor as a long-term planning solution.** This corridor would further bolster the capacity of Ontario's bulk electricity system. Ontario will need new nuclear generation to replace the Pickering Station when it closes in 2025. Assuming that the Peel/Halton region continues to grow at its current pace, this new high-capacity transmission line may best meet these needs. The PWU assumes that the IESO will assess this option in its next Long-term Energy Planning (LTEP) process for the province.

Concluding Remarks:

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 advance innovation across Ontario's electricity system. The PWU is committed to the following principles: Create opportunities for sustainable, high-pay, high-skill jobs; ensure reliable, affordable, clean 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 the objectives for supplying clean, low-cost and reliable electricity in Ontario. The PWU looks forward to discussing these comments in greater detail at the IESO's convenience.