



**POWER
WORKERS'
UNION**

August 9, 2022

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

Via email to engagement@ieso.ca

Re: IESO's Conservation and Demand Management (CDM) Mid-Term Review (MTR)

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 IESO's CDM MTR. 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 CDM initiatives should help deliver Ontario's 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.L.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)
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 Conservation and Demand Management (CDM) Mid-Term Review (MTR) – August 9, 2022

The Power Workers' Union (PWU) is pleased to submit comments and make recommendations to the Independent Electricity System Operator (IESO) regarding the Conservation and Demand Management (CDM) Mid-Term Review (MTR) outcomes. 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 IESO conducted a webinar on July 19, 2022, to summarize the results of their CDM MTR and requested stakeholder feedback. The PWU supports the IESO's initiative to improve the effectiveness of the current CDM framework.

Context

Stemming from the 2019 rescoping of Ontario's CDM program and its budget reduction as part of the government's electricity rate reduction and cost effectiveness initiatives, the MTR was identified as a required element of the 2021-2024 CDM plan in.^{1,2}

Three areas from the MTR webinar materials are noted as being significant by the PWU:

- 1) Customer feedback identified a number of new areas where customers are interested in additional funding [pages 24-26]:
 - a. Support for decarbonization
 - b. Building capacity in net zero inspired opportunities (electrification, deep retrofits, Distributed Energy Resources (DERs), and strategic energy management)
 - c. Alignment across energy efficiency programs (e.g., with Enbridge and federal government)

The above areas entail broader system considerations.

- 2) Business programs are expected to exceed the budget allocation by \$76M and only achieve 88% of the anticipated peak reduction benefits [page 31].
 - a. Peak reduction benefits are a primary objective of the 2021-2024 CDM efforts aimed at commercial, institutional and industrial consumers.²
 - b. The budget exceedance reflects a 16% increase over the \$456M planned budget which, given the lower than anticipated performance, reflects a 32% reduction in cost effectiveness at achieving peak reduction.³

This strongly suggests the need to re-evaluate the cost effectiveness of Ontario's CDM programs.

- 3) The IESO is proposing CDM enhancements in three timeframes [Pages 36-40]
 - a. 2022 – continuous enhancements of existing programs measures (page 36), including
 - i. Non-lighting for small business, manufacturing focused, collaboration with Enbridge

¹ Ministerial directive to the IESO on the Interim Framework for the Delivery of Energy Efficiency Programs, March 21, 2019.

² Ministerial directive to the IESO on the 2021-2024 CDM Framework, September 30, 2020.

³ IESO, 2021-2024 CDM Framework Program Plan, January 2021.

- ii. Aggregator participation – *This is of special significance to Ontario’s CDM objectives.*
- b. 2023 – already planned new programs:
 - i. Deferring some planned 2022 program enhancements to 2023 [existing building commissioning supports, custom lighting];
 - ii. Evolving 2022 programs but under new banners [strategic energy management and midstream lighting].
- c. 2024 – Additional programs due to AAR considerations:
 - i. Decarbonization and net zero new buildings support;
 - ii. Load management with DERs and Behind the Meter (BTM) generation and storage.

The evolving 2023 and 2024 programs are the focus of the PWU’s recommendations.

The IESO has asked for feedback in response to several questions. The PWU’s is providing feedback on the above noted areas in response to the following two questions posed by the IESO:

- a) What conditions are needed to further enable innovation and market-based solutions?
- b) How can the IESO further support the energy transition for consumers in all sectors?

To best leverage the CDM initiatives and support rational evidence-based decision making, the PWU recommends that the IESO:

- 1) Clarify the system needs that the investments in CDM are cost-effectively intended to address;
- 2) Adopt the Framework for Energy Innovation Working Group (FEIWG) Benefit Cost Analysis (BCA) that is under development by the Ontario Energy Board (OEB) and help accelerate its completion; and,
- 3) Collaborate with the OEB and the Ministry of Energy on the role of rate design in achieving the CDM objectives.

Detailed Recommendations

Recommendation #1 – Clarify the system needs that the investments in CDM are cost-effectively intended to address.

CDM programs are intended to address the electricity system’s priority need--to reduce peak system demand.⁴ Many of the opportunities identified in the IESO’s CDM MTR either address other objectives or do not appear to address any clear system need. Issues the IESO should clarify in order to advance the design of cost effective CDM programs and support decision making include:

- The IESO stated that it anticipates that Ontario’s CDM programs will require several years before producing results. The IESO’s analysis should show the anticipated lead times for any programs whose results are expected post 2024. The IESO should also clarify its system requirements for CDM programs as the retirement of Pickering Nuclear Station (PNGS) begins in 2025 and Ontario’s surplus low-carbon, baseload decreases, including the impacts on the economics of CDM options.
 - The IESO should also demonstrate transparently how the 2021-2024 program results will achieve total system cost savings during peak demand times while the province remains in a surplus capacity situation.

⁴ Ministerial directive to the IESO on the 2021-2024 CDM Framework, September 30, 2020.

- Ontario’s system needs could also be addressed by alternative approaches. The IESO should clarify how the CDM program costs compare to the other available options for meeting Ontario’s needs e.g., the supply gap risks identified by the Minister.
- With respect to the local/regional needs, the IESO should clearly identify the regions where energy / capacity savings are material to system costs (distribution, transmission, and generation).
- The IESO should clarify the system requirements that would justify using Ontario’s CDM programs to provide funding for the decarbonization and NZ goals of some customers.
 - Ontario, currently, has no material carbon pricing mechanism in place for the electricity system, the IESO does not include any climate related criteria in its underway new generation procurement activities, and the impacts of accelerated electrification are not included in the refresh of the CDM potential study.
 - Climate policies that drive costs in the electricity system should be supported by government policies established for that purpose and should be reflected in all electricity system plans.
 - While the PWU supports the need to reduce emissions from Ontario’s electricity sector, without clear policy direction for achieving the province’s decarbonization and net zero objectives, it is impossible to establish a cost-effective role for CDM. In turn, this makes it difficult to support these expenditures being supported by electricity ratepayers.

Recommendation #2 – Adopt the FEIWG BCA that is under development by the OEB and help accelerate its completion.

The OEB sponsored a year-long effort to assess how new innovations, specifically DERs, should be integrated into Ontario’s electricity system. A report was produced to examine how a benefit cost analysis should be deployed to support decision making clarity for the deployment of DERs.⁵ Identified DERs include all of the potential future CDM programs identified by the MTR – aggregation of BTM energy management systems including HVAC and EVs, BTM generation and storage, and DERs connected directly to the distribution system. The FEIWG BCA framework also identifies the need to consider the full energy system implications of electricity and natural gas.

The development of the FEIWG BCA, which considered the CDM framework approach and its challenges, identified a number of areas where work needs to be advanced to provide useful BCA outcomes for decision-making.⁶

The FEIWG is part of the joint OEB/IESO initiative to advance the integration of DERs and as such whatever framework is finalized, the FEIWG findings should be applied consistently to the cost effectiveness assessment of the CDM programs. It remains unclear as to whether the reassessment of CDM’s achievable potential currently underway will reflect the work of the FEIWG. For example, the IESO indicated that the costs of administering the programs, estimated at 11% for 2021 and 2022 have not been reflected in the CDM cost effectiveness assessments to-date.⁷

⁵ OEB, FEIWG Final Report, June 2022.

⁶ OEB, FEIWG BCA Subgroup Final Report, June 2022.

⁷ IESO, Discussions during the CDM MTR Webinar, July 19, 2022.

Recommendation #3 – Collaborate with the OEB and the Ministry of Energy on the role of rate design in achieving the CDM objectives.

The needs of Ontario’s electricity system are driving both CDM objectives and the rate design programs of the OEB and the Ministry of Energy.

Two themes in the IESO’s planned CDM programs support families and small businesses. The OEB is exploring rate program innovations for similar reasons. The OEB recently submitted recommendations to the government on an enhanced voluntary Time-of Use (TOU) rate intended to help residential users optimize their energy consumption.⁸ The OEB is also evaluating new rate design approaches for non-RPP Class B consumers, which are predominantly small businesses.⁹

Both of these rate design initiatives are aimed at shifting Class B energy consumption away from system peaks, a recognized IESO system need. The effectiveness of these “shifting” rate programs can influence the financial viability of the options and thereby encourage and enhance participation by aggregators. These rate programs may have the potential to incent the CDM objectives without requiring additional IESO subsidies.

The Ministry of Energy currently sets the requirements for several programs including Net Metering and the Industrial Conservation Initiative (ICI). Both programs potentially impact Ontario’s CDM objectives by offsetting energy needs from gas-fired generation and reducing peak demand.

Cost-effectiveness assessments should be informed by these rate programs and, in cases of overlapping CDM programs, should ensure that benefits are not double counted. Furthermore, the energy savings performance of these OEB and Ministry of Energy programs will change dramatically when the impacts of the Pickering Nuclear Generating Station (PNGS) retirement begin to emerge in 2025.

Closing

The IESO should quantitatively establish the cost-effectiveness of its planned CDM initiatives to address evolving system needs and do so within the context of confirmed provincial policies including where they overlap with other initiatives in the energy sector.

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.

⁸ Ministry of Energy, Ontario Advances Work on New Ultra-Low Overnight Electricity Rate: Report on new price plan projects significant bill savings for consumers, April 12, 2022.

⁹ OEB Non-RPP Class B Dynamic Rate Pilot webinar materials, July 28, 2022.