

ONTARIO ENERGY ASSOCIATION

2021-2024 CONSERVATION AND DEMAND MANAGEMENT FRAMEWORK: ERO 019-2132 SUBMISSION

August 22, 2020

To shape our energy future for a stronger Ontario.



ABOUT

The Ontario Energy Association (OEA) is the credible and trusted voice of the energy sector. We earn our reputation by being an integral and influential part of energy policy development and decision making in Ontario. We represent Ontario's energy leaders that span the full diversity of the energy industry.

OEA takes a grassroots approach to policy development by combining thorough evidence based research with executive interviews and member polling. This unique approach ensures our policies are not only grounded in rigorous research, but represent the views of the majority of our members. This sound policy foundation allows us to advocate directly with government decision makers to tackle issues of strategic importance to our members.

Together, we are working to build a stronger energy future for Ontario.

The recommendations contained in OEA papers represent the advice of the OEA as an organization. They are not meant to represent the positions or opinions of individual OEA members, OEA Board members, or their organizations. The OEA has a broad range of members, and there may not always be a 100 percent consensus on all positions and recommendations. Accordingly, the positions and opinions of individual members and their organizations may not be reflected in this report.

The Ontario Energy Association is pleased to provide this response to the Ministry of Energy, Northern Development and Mines (the Ministry) on the proposed new CDM Framework that would, if approved, launch on January 1, 2021.

INTRODUCTION

The OEA has reviewed the summary proposal which states that the Ministry is seeking to develop a new four-year CDM Framework with the following primary characteristics:

Delivery:

- The Framework would continue to be centrally delivered by the IESO.

Objectives and customers served:

- Targeting provincial bulk system needs (primarily peak demand reductions) and local/regional system needs.
- Focusing on providing education and tools for residential customers to empower them to improve their energy efficiency.

Program Types:

- Programs that incentivize whole building electricity savings and peak demand reduction and help businesses to increase their internal energy management capacity.
- Programs that target local/regional needs, procured through a competitive process.
- Customer-driven solutions for larger/complex projects.
- Customer friendly and direct install programs that enable easy access and savings for standardized measures, including programs for small businesses.
- Programs for on-reserve First Nations communities, including for remote communities soon to be connected to the provincial electricity grid.
- A program for income-eligible households that would provide energy saving measures and installation of measures at no cost to the participant.

The OEA agrees that CDM policies and programs in Ontario need to be reformed to align their objectives with Ontario's changing system needs and government priorities.¹ Based on Ontario's evolving needs, the OEA has a number of recommendations for the future of CDM.

BACKGROUND

Ontario's previous Conservation First Framework (CFF) enabled the energy efficiency and utility demand response programs that serve the province's electricity users. Guided by policy direction from the Ministry, through the Long-term Energy Plan (LTEP), the

¹ For example, see the OEA's previous submission on renewing CDM: <https://energyontario.ca/wp-content/uploads/2018/12/Reforming-Conservation.pdf>

Independent Electricity System Operator (IESO) led the development and administration of these programs. The programs were then delivered by the province's 60+ Local Distribution Companies (LDCs) as well as the IESO.

This CDM Framework had a proven track record of:

- Lowering costs for consumers
- Improving business competitiveness
- Relieving local or regional capacity constraints and deferring higher-cost capital solutions
- Improving and maintaining system reliability and resource adequacy in Ontario

On March 21, 2019, the IESO was directed to discontinue the previous CFF and replace it with a streamlined suite of programs centrally delivered by the IESO under the 2019-2020 Interim Framework.

Conservation programs are strongly supported and popular with residential and business customers. Hundreds of thousands of Ontario electricity customers participate in conservation programs. Thousands of Ontario businesses have created or maintained jobs through lowering their electricity bills thereby keeping their businesses competitive; for example, from 2015-2017 Q1 there were more than 26,000 participants in LDC-delivered business retrofit programs.²

In Ontario, under the CFF and the prior framework, conservation created an estimated \$1.8 billion/year in GDP and about 16,000 jobs annually during the 2011-2017 period.³ Delivering conservation programs creates and sustains a supplier network of predominantly small and medium size contractors and suppliers that are most impacted by the economic fall out of the pandemic. These local businesses provide the expertise needed to support businesses and industry to manage and reduce their utility costs, which will be an important consideration as the Ontario economy recovers from this economic shock. These workers and equipment suppliers are predominately within the region or province.

Importantly, the International Energy Association (IEA) recently published an article addressing the role of energy efficiency and economic stimulus in relation to the COVID-19 pandemic, noting that “well-designed economic recovery programmes can use the potential of energy efficiency to support the existing jobs, create new ones and boost economic activity in key labour-intensive sectors such as construction and manufacturing.”⁴ The IEA notes specifically three categories for energy efficiency to focus on: “Stimulus policies targeting the buildings and construction sector often have the greatest macroeconomic impacts,” as well as technology replacement, and large infrastructure projects (e.g., transportation fuel-switching).⁵

² <http://www.ieso.ca/-/media/Files/IESO/Document-Library/conservation-reports/Quarterly/q1-2017-conservation-progress-report.pdf>

³ Calculated using data from Dunsky (2018): http://cleanenergycanada.org/wp-content/uploads/2018/04/TechnicalReport_EnergyEfficiency_20180403_FINAL.pdf

⁴ <https://www.iea.org/articles/energy-efficiency-and-economic-stimulus>

⁵ Ibid.

TOWARDS A NEW FRAMEWORK: THE NEED FOR CHANGE

In Ontario, electricity costs have risen significantly over the years; however, CDM programs have helped mitigate this rise – playing a critical role in both minimizing overall system costs for all electricity rate payers and helping program participants reduce their individual bills.⁶

With an appreciation of the current electricity system supply/demand dynamic comes the conclusion that CDM must transition from a resource focused primarily on energy savings today to one focused on peak (or capacity) reductions, while not losing sight of the benefits that effective energy savings and cost savings to customers that these programs deliver.

When coupled with other distributed energy resources (DERs)⁷, conservation programs can be designed and deployed to ensure that capacity shortfalls forecast for the mid-2020s are minimized cost effectively. Taking into consideration the system benefits at the provincial generation- and transmission-level, as well as the locational benefits at the distribution level, conservation and demand management, and other DERs, such as demand response and behind-the-meter storage and generation, can be valued as a resource. They should compete as a resource against traditional infrastructure options with the goal of system optimization considering affordability, reliability, and sustainability. This transition is not new or only relevant in Ontario. The consideration of DERs as cost effective Non-Wires Alternatives (NWA) is gaining precedent in many jurisdictions.

When peak demand is driving system shortfalls and infrastructure spending, NWAs (including energy efficiency), seek to identify the lowest cost option to meet the required load relief. NWAs are targeted efforts aimed at deploying a mix of DERs that has been customized to avoid a specific system shortfall. This can achieve savings for ratepayers by pursuing NWAs only in areas where the infrastructure spending can be avoided, and only NWAs that are lower cost and risk than the infrastructure option.

To ensure full consideration of DERs/NWAs, local and regional system constraints and costs must be evaluated. This speaks to the role of the LDCs in providing critical insight into their service territories and customers to the IESO, the Ontario Energy Board (OEB) and other stakeholders. These insights will be critical to take full advantage of the value of a more targeted conservation framework and DERs more broadly, ensuring that the greatest value for the distribution system and the wholesale system are maximized.

It should be noted that savings claimed under CDM programs are net of free riders (the portion of participants that evaluation reports determine would implement a measure in a business as usual scenario) and represent only the level of improvement above what is required by codes and standards. Conservation savings are therefore representative of incremental performance that would not have been achieved without program support.

⁶ This section is largely based, including more detail on the role of CDM in reducing GHG emissions, on the OEA's Continuing Achievements: Climate Strategy Submission: <https://energyontario.ca/wp-content/uploads/2018/11/OEA-Climate-Strategy-Submission.pdf>

⁷ For example, distributed generation, demand response, and energy storage.

Finally, it is important to understand that this transition to a new form of conservation and demand management at the utility level, and DER integration with system options will not take place instantaneously. As efforts are transitioned to a capacity focused framework, continuity is critical to leveraging the value that targeted CDM and, DERs/NWAs can bring to the province over the next 15 years.

DEVELOPING A NEW FRAMEWORK

The new CDM framework should consider an integrated and coordinated energy strategy and framework that is customer-centric, drives economic growth, reduces system costs, and meets climate change objectives.

This new framework should be integrated and consistent with the government's future energy planning framework, the IESO's resource adequacy consultation (including how to procure capacity in the future) and planning outlooks, as well as OEB policy development, including Distribution System Plan requirements, the Regional Planning Process, DSM and DERs.

Further, the new CDM framework should include a clear, sound, and transparent process for the establishment of targets and budgets related to both provincial bulk system needs (primarily peak demand reductions) and local/regional system needs so that ratepayer savings and system efficiency benefits can be optimized. Achieving optimized ratepayer and system savings, in turn, requires that the new framework should ensure the independent oversight of program delivery and results.

This approach should examine the potential gains to be made from facilitating collaboration between natural gas and electric utilities, as well as third party providers to deliver integrated conservation programs. For example, Heating and Cooling Programs, which primarily influence peak demand, are likely to be an effective platform for an integrated energy approach.

In addition, conservation policies for gas and electricity are developed largely in silos under different evaluation criteria and regulatory timelines that are not aligned. Greater harmonization between the two sectors would benefit ratepayers and the government's ability to meet policy goals.

Currently, the OEB is responsible for the guidelines, approval, and evaluation of natural gas conservation programs while the IESO, under the Interim Framework is responsible for CDM, including evaluating and verifying program results.

The lack of alignment (e.g., agency responsibility, different EM&V) between natural gas and electricity conservation programs is preventing cost effective collaboration between natural gas and electric energy efficiency programming, as well as preventing customers from benefiting from integrated programs.

Further, at a broader policy level, energy policies and environmental policies with respect to conservation and emissions reductions are being developed in silos. The OEA believes

that much could be gained through greater cooperation and coordination between Ministries within government, the OEB, and the IESO.

In addition to a more coordinated energy strategy, OEA members have identified additional improvements, and administrative burden and program cost-reduction ideas to be explored in developing a new framework:

- Reduce or eliminate unnecessary management, Ministerial directives, OEB license and reporting requirements, and decision making on planning and program design by IESO
- Ensure that any directives/program design elements align with both the province's energy and climate change objectives (e.g., the definition of CDM; ensuring that the evaluation of cost effectiveness properly accounts for policy goals, such as reducing system peak, minimizing system costs, GHG emission reductions, etc.)
- Update the IESO's assumptions for determining the avoided costs of CDM programs, including alignment with government policy goals
- Explore options to allow for tailored regional conservation programs and incentives
- Explore moving fully to a pay-for-performance model⁸ to delivery agents for all conservation programs (i.e., incentives set at a \$/kilowatt-hour (kWh) rate for savings with incentive payments based entirely on performance)
- Explore alternative program cost accounting for programs delivered by regulated utilities (e.g., allowing the capitalization of conservation costs to accurately reflect the persistence of benefits, instead of the current requirement of expensing costs fully in the period they are incurred)
- Explore alternative program funding models (e.g., on-bill financing/repayment)⁹
- Explore alternative procurement models (e.g., Regional competitive RFPs for the delivery of conservation services; the role of conservation in the IESO's potential need to acquire capacity for 2023, and the IESO's Capacity Auction)

The OEA also notes that the IESO is currently designing a pilot auction to procure energy efficiency. Specific pilot learning objectives are to assess the interest and ability of different sectors to participate, discover the price for energy efficiency when competition for delivery is enabled, and gain a better understanding of various implementation issues. The work on this consultation should continue and compliment the learnings of the previous conservation frameworks and the future frameworks, all while recognizing that 'competing' procurement streams may limit efficiency of procurement.

Further, a new framework can increase the benefits it provides to all ratepayers and the system by focusing greater attention on reducing system demand, thereby reducing or eliminating future capacity needs through more expensive resources.

For example, in its recent history, CDM programs have been oriented towards reductions in energy consumption with LDCs being given kWh targets. However, these programs have also contributed to reducing peak.

Therefore, the OEA believes that there are many opportunities to achieve greater flexibility and cost-effective peak demand reductions under a new framework:

⁸ See: <http://www.ieso.ca/en/sector-participants/conservation-delivery-and-tools/conservation-eblasts/2018/05/pay-for-performance-rules-and-guidelines>

⁹ For example, see: <https://www.energy.gov/eere/slsc/bill-financing-and-repayment-programs>

- Identify existing cost effective CDM programs (e.g., Heating and Cooling; Business Retrofits) that deliver peak demand reductions and directing greater funding to those programs;
- Explore options for reducing barriers for residential demand response in the IESO's Capacity Auction including efficient data access protocols;
- Continue to procure DR through the IESO's Capacity Auctions to ensure capacity resources are competitively procured to meet short-term system needs;
- Assess pilots currently being undertaken through the Smart Grid Fund and RPP Roadmap for potential programs able to reduce peak demand cost effectively;
- Explore and facilitate the role of cost-effective in-front of the meter technologies in reducing capacity needs;¹⁰
- Explore how to treat and value conservation as a resource on equal footing with traditional transmission and distribution solutions and other NwAs;
- Explore how to facilitate and enable utilities and third-party providers to expand the role of NwAs, including Combined Heat & Power (CHP), which have the ability to meet peak electricity demand, avoid other infrastructure costs, and drive down GHG emissions;¹¹ and,
- Explore opportunities to facilitate behind the meter battery storage and distributed generation.

¹⁰ https://www.ontarioenergyreport.ca/pdfs/2017-07-18_MoE%20IFMC%20FINAL%20Report.pdf

¹¹ The potential for CHP is discussed in detailed in the OEA's Climate Strategy Submission: <https://energyontario.ca/wp-content/uploads/2018/11/OEA-Climate-Strategy-Submission.pdf>

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