

Ontario Energy Board

Commission de l'énergie de l'Ontario



Conservation and Demand Management Report

2016 Results

EB-2014-0278

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Background

In December 2013, the Government of Ontario released its Long-Term Energy Plan (LTEP) that, among other priorities, encouraged conservation and reinforced the policy of considering conservation first in energy planning processes. As a result of the LTEP, the Ontario Energy Board (OEB) received a directive on March 26, 2014 from the Minister of Energy pursuant to sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998* (the CDM Directive).

In accordance with the CDM Directive, the OEB is required to annually review and publish the verified results of each electricity distributor's CDM efforts and report on the progress of electricity distributors in meeting their CDM requirement to make CDM programs available to customers in their respective licensed service area. The OEB was directed to amend the licence of each electricity distributor to add a condition that specifies that each electricity distributor shall make CDM programs available to customers in its licensed service area.

Under a directive from the Minister of Energy dated March 31, 2014, the Independent Electricity System Operator¹ (IESO) is responsible for coordinating, supporting and funding the delivery of CDM programs by electricity distributors, including evaluating and verifying all program results between 2015 and 2020.

Over the course of the 2015 to 2020 term, electricity distributors are collectively responsible for achieving 7 TWh of electricity savings that persist and remain in place on December 31, 2020. Each electricity distributor has been allocated a portion of the 7 TWh target by the IESO.

Electricity distributors were required to submit a 2015-2020 CDM plan to the IESO by May 1, 2015. An electricity distributor's CDM plan describes the manner in which the electricity distributor plans to meet its 2015-2020 CDM target. The 2015-2020 CDM plans were reviewed and approved by the IESO.

Electricity distributors were also requested to indicate if they would be partnering with a neighboring electricity distributor as part of a joint CDM plan. The IESO received 15 joint plans that involved 46 electricity distributors. The benefits of joint CDM plans include the ability to reallocate CDM targets and budgets between electricity distributors, increased performance incentives to distributors for meeting or exceeding performance thresholds, and CDM plan cost-effectiveness determined at the aggregate joint CDM plan level

¹ Formerly the Ontario Power Authority.

rather than at the electricity distributor level. Other benefits include pooling of resources and delivery channels for greater efficiency and effectiveness.

The CDM budget is currently funded from the global adjustment and has been allocated to electricity distributors for all program expenses, such as customer financial incentives and CDM Program administrative expenses. The budget was established by the IESO with input from stakeholders and was based on the 7 TWh energy savings target and established minimum cost effectiveness thresholds.

OEB Review Process

As outlined in the CDM Directive, the OEB is responsible for reviewing and publishing the annual CDM results for all electricity distributors. The OEB is also responsible for reporting on the progress of electricity distributors in meeting their CDM Requirement of making programs available within their service area, and as far as practicable, to each customer segment.

With respect to the 2016 annual CDM results, the OEB notes that, as previously stated, the IESO is responsible for evaluating and verifying all program results reported by electricity distributors. The IESO relies on [Evaluation, Measurement and Verification \(EM&V\) protocols](#) that are robust and well documented. The IESO EM&V process relies on a variety of data collection and analytic methods such as equipment metering, billing data analysis, and surveys. The IESO's 2016 evaluation reports can be found on its [website](#).

The OEB has not conducted a detailed audit or its own independent evaluation of electricity distributors' 2016 CDM program results.

Throughout late 2017, the OEB reviewed the IESO's draft 2016 Annual CDM Results Report and submitted comments to the IESO. In this process the OEB sought clarification relating to program and spending results. Following completion of the OEB's review, the IESO submitted an updated 2016 Annual CDM Report that addressed the OEB's comments and provides further clarity particularly related to programs in the commercial sector. On March 26, 2018, the IESO provided the OEB with its 2016 Annual Verified Local Distribution Company CDM Program Results Report (IESO CDM Report).

The OEB has reviewed the 2016 CDM results for reasonableness and progress towards the expected achievement of CDM targets. Electricity distributors are meeting expectations at this stage of the Conservation First Framework (CFF).

The OEB will continue to review and consider the merits of a more intensive review of the IESO's evaluation and monitoring processes throughout the 2015 to 2020 CFF.

2016 CDM Results²

The results for 2016 are for the second year of the six year CDM framework. The OEB has posted the IESO CDM report on its [website](#). The IESO's CDM Report outlines the 2016 CDM program results, including all electricity savings as a result of the various CDM programs delivered in 2016, participation levels and spending figures.

In total, electricity distributors achieved 1.2 TWh of electricity savings in 2016 (or 17% of the overall 2015-2020 target of 7 TWh target) of which 1.1 TWh are expected to persist until at least 2020. Together with adjustments to the 2015 verified results³, 38% of the CFF target has been achieved at the end of 2016. This is in excess of the average annual target over the 2015-2020 period (i.e. 100% of target over a 6-year period is on average, about 16% per year).

At the electricity distributor level, two⁴ electricity distributors have already achieved their 2015-2020 CFF target and two other electricity distributors have achieved in excess of 90% of their target. All electricity distributors with the exception of 4 have achieved at least 20% of its target. Based on further preliminary results for 2017, the IESO indicated its expectation that greater savings were achieved in 2015 and 2016 but the results will be verified and included in future annual program evaluations.

The following are highlights taken from the IESO 2016 CDM Report:

- The Save on Energy Retrofit Program, an initiative that targets commercial and light industrial customers, remained the dominant source of savings in 2016. In total, the program delivered 567 GWh of electricity savings, representing more than 49 percent of total portfolio savings, primarily through the completion of lighting retrofit projects (72% of program savings).
- The 2016 program year saw the greatest savings achievement ever for the consumer focused Save on Energy Coupon Program, achieving 428 GWh of electricity savings, largely due to the redemption of coupons for LED lighting measures.

² Numbers and program achievements were taken from the March 26, 2018 IESO CDM Report.

³ The 2015 adjustments represent savings resulting from projects completed in 2015 but not reported to the IESO on time for inclusion in the 2015 program year verification process.

⁴ Hearst Power Distribution Company Ltd and North Bay Hydro Distribution Ltd

- The consumer focused Save on Energy Heating & Cooling Program was the third-best performing program in 2016 having achieved 76 GWh of electricity savings.
- With the exception of the Save on Energy Retrofit Program, all programs delivered to the commercial sector in 2016 regressed in performance, with an average drop of 75% in savings. The drop in savings is due to a combination of factors including: long project lead times from the start of the current framework, program redesigns, project ramp-up periods and increased project reporting lead times.
- Long project lead times and post project measurement & verification processes in the industrial sector focused on the Save on Energy Process and Systems Upgrades program resulted in only four projects being verified in 2016, resulting in 12 GWh of verified energy savings. Several projects completed in 2016 are still undergoing post project data collection and reporting. The impacts of these projects will be verified in a future year's evaluation and reported as 2016 adjustment results in future results reports. Only savings verified through the IESO's formal EM&V process are included in the IESO's report.
- Electricity distributors launched 12 LDC Local Programs and 20 LDC Innovation Fund Pilot Programs since the beginning of the framework. Two Local Programs and ten Pilot Programs were in market for a sufficient period of time and achieved sufficient participation to have undergone the EM&V process achieving 2 and 15 GWh of verified savings, respectively. All other local and pilot programs achieving sufficient participation and savings will be evaluated in a future year's evaluation. Only savings verified through the IESO's formal EM&V process are included in the IESO's report.

With respect to spending, 13% (or \$230.3 million) of the overall budget was spent over the 2015 and 2016 period. This is less than the allocated CFF budget. Further, in 2016, all electricity distributors achieved the necessary cost effectiveness test result thresholds outlined in the Electricity Conservation Agreement.

Conclusions

The OEB concludes that overall the IESO and electricity distributors have been effective in the second year of the six-year Conservation First Framework. The OEB will continue to monitor progress.