

**Ontario Energy
Board**

**Commission de
l'énergie
de l'Ontario**



GUIDELINES FOR ELECTRICITY DISTRIBUTOR CONSERVATION AND DEMAND MANAGEMENT

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1. OVERVIEW

1.1 Background

The Conservation and Demand Management Code for Electricity Distributors (the CDM Code) sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licences. The CDM Code also sets out the conditions and rules that licensed electricity distributors are required to follow if they choose to apply for Board-Approved CDM programs to meet the CDM targets.

The CDM Code was created in response to a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure (the Directive) pursuant to sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*.

These guidelines provide more specific guidance on certain provisions in the CDM Code and what evidence should be filed by distributors in support of an application for Board-Approved CDM programs. In addition, the guidelines provide details on the lost revenue adjustment mechanism (LRAM) related to CDM programs implemented under the CDM Code. The Board expects that this document may be updated from time to time as required.

1.2 Overview of the CDM Guidelines

The Board expects that distributors will follow these guidelines at a minimum. Distributors are reminded that they should in all cases demonstrate to the satisfaction of the Board that any given application should be approved, and are responsible for ensuring to that end that all relevant information is before the Board (including evidence that may have been filed in an earlier proceeding).

The guidelines are intended to be read in conjunction with, and supplemental to, the CDM Code. However, the CDM Code is an enforceable provision within distributors' licences. The guidelines are intended to act as a Board policy document that establishes a baseline of the Board's expectations that a distributor should meet.

2. TIMEFRAME

The CDM Code applies to the 4-year period that started on January 1, 2011 and finishes on December 31, 2014. The CDM Guidelines are applicable to this same timeframe.

3. CDM TARGETS

Time of Use Pricing

The Board recognizes the manner in which the CDM targets were developed¹ and that a portion of the aggregate electricity demand target was intended to be attributable to savings achieved through the implementation of Time-of-Use (TOU) prices.

The Directive states at Section 1 that the Board is to “amend each distributor’s licence to add a condition requiring the distributor to achieve reductions in electricity consumption and reductions in peak provincial electricity demand through the delivery of CDM Programs”. Section 3 of the Directive specifies that distributors can meet their CDM targets in three ways: through Board-Approved CDM programs, through Ontario Power Authority (OPA)-Contracted Province-Wide CDM programs, or a combination of the two.

It is the Board’s understanding that currently there are no OPA-Contracted Province-Wide CDM programs directly related to the implementation of TOU pricing. The Board notes that the implementation of TOU pricing is clearly a program designed to incent the shifting of energy usage, and therefore peak demand reductions are expected, and energy conservation benefits may also be realized. Furthermore, the Board establishes TOU prices and has made the implementation of this pricing mechanism mandatory for distributors. On this basis, the Board will consider the implementation of TOU pricing to be a Board-Approved CDM program for the purposes of achieving the CDM targets. The Board notes that the costs associated with the implementation of TOU pricing are recoverable through distribution rates, and not through the Global Adjustment Mechanism (“GAM”). As such, no additional funding would be approved related to the implementation of TOU.

In accordance with the Directive, for savings to be eligible to be counted towards the CDM targets, distributors must rely on the verified savings that are the result of using the OPA’s Evaluation, Measurement and Verification (EM&V) Protocols. The Board is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. An approach that permitted distributors to conduct their own evaluations could result in aggregate savings in excess of the savings assessed for the province as a whole.

If a distributor seeks to deliver a specific program that would result in incremental shifting of energy use the distributor would need to apply for a Board-Approved CDM program, subject to all requirements of the CDM Code and this guideline. A program for additional savings approved by the Board could be granted incremental funds through the GAM.

¹ [OPA Advice to the Ontario Energy Board: CDM Target Allocation for Ontario LDCs](#), June 21, 2010 (EB-2010-0216).

Alternatively, if the OPA developed a Province-Wide CDM program related to TOU, verifiable results could be counted towards a distributor's targets.

Pre-2011 OPA-Contracted Province-Wide CDM Programs

The Board also recognizes that some distributors entered into contracts for OPA-Contracted Province-Wide CDM programs at the end of 2010, with little to no program activities undertaken until 2011. The Board is of the opinion that it is reasonable to allow distributors to count the new savings arising from the portion of these programs that have taken place in 2011 against their CDM targets. Distributors must still follow the OPA's EM&V Protocols in evaluating and verifying these savings, as outlined in the CDM Code. The Board will not consider any savings that persist from historical programs (i.e. programs implemented prior to 2011). The Board will not count savings that take place after December 31, 2014 towards a distributor's CDM targets.

4. DUPLICATION WITH OPA PROGRAMS

The Board notes that the Directive strictly prohibits duplication of OPA-Contracted Province-Wide CDM programs by Board-Approved CDM programs, and this has been reflected in the CDM Code. A determination of whether a proposed program is duplicative of an OPA-Contracted Province-Wide CDM program will be made by a Board panel based on the particular facts before it.

The Board understands that the OPA sent a letter to distributors, dated July 27, 2011², indicating its willingness to work with interested distributors in developing additional CDM programs to supplement the OPA-Contracted Province-Wide CDM programs. The Board is of the view that the appropriate time for a distributor to engage the OPA in relation to whether a proposed program is duplicative would be prior to the distributor filing an application with the Board for approval of the proposed Board-Approved CDM program.

The Board expects distributors to engage in a detailed and thorough discussion with the OPA prior to filing a Board-Approved CDM program application.

The OPA has indicated a willingness to provide an analysis of a distributor's potential Board-Approved CDM program that discusses³, amongst other things, the OPA's view of whether the proposed Board-Approved CDM program is duplicative. The Board's expectation is that this would include the OPA's view on a program by program basis of the criteria it considered in assessing duplication. This assessment should be based on the existing OPA-Contracted Province-Wide CDM programs. In order to allow the OPA to conduct such an analysis, the distributor should provide the OPA with sufficient information about the proposed Board-Approved CDM program.

² An example of these letters was filed as part of EB-2010-0011 by Toronto Hydro on August 3, 2011.

³ The Board noted this willingness in the EB-2010-0011 Decision and Order, page 11.

The Board is of the view that the inclusion of the OPA's assessment in any application for a Board-Approved CDM program should result in a more efficient regulatory process, and therefore distributors are expected to file the OPA's assessment in addition to those outlined in Section 3.1.4 of the CDM Code.

In addition to the provisions set out in section 2.3.3 of the CDM Code as to what constitutes duplication, the Board will generally consider CDM Programs that include the features listed below as duplicative of existing OPA-Contracted Province-Wide CDM programs:

- CDM programs that combine conventional elements of two or more existing OPA Programs; and/or
- CDM programs that extend an OPA program to a different market segment or segments (e.g. extending a residential program to the commercial sector).

In order to demonstrate that a proposed Board-Approved CDM program is not duplicative of any existing OPA-Contracted Province-Wide CDM programs, the Board is of the view that the onus is on the applicant to provide clear, cogent, and convincing evidence.

Non-duplicative programs may include region-specific or market-specific considerations which would require novel approaches. These CDM programs could arise where specific industry concentration or customer type in a particular service area requires unique approaches in order for a distributor to achieve its CDM targets. Distributors should seek to develop unique Board-Approved CDM programs that avoid market-place confusion and ensure the prudent use of rate-payer funds by avoiding duplication of resources, namely those of the OPA.

In an application for a Board-Approved CDM program, distributors should include:

- A description of the OPA-Contracted Province-Wide CDM program or programs that most nearly provide similar activities; and
- A detailed, analytical comparison of the proposed program with the OPA-Contracted Province-Wide CDM program or programs so as to demonstrate the extent to which it is non-duplicative. The following should be used at a minimum in the comparison:
 - Program objective
 - Targeted customer segment (e.g. residential, commercial, industrial, etc.)
 - Technology/measures used or implemented
 - Marketing strategy
 - Incentives provided

5. OPA PROGRAM ESTABLISHMENT

For the Board to be confident in its determination that Board-Approved CDM programs are not duplicative, OPA-Contracted Province-Wide CDM programs must be available on the public record in sufficient detail and with sufficient finality. Generally, OPA-Contracted Province-Wide CDM programs will be considered established by the Board once the program schedules have been made available publicly and posted on the OPA's webpage⁴.

The Board reminds distributors that the simple filing of the program schedules for OPA-Contracted Province-Wide CDM programs is not sufficient for comparison with proposed Board-Approved CDM programs as detailed in Section 3 above.

6. REPORTING

Section 2.2 of the CDM Code sets out the requirements for annual CDM reporting which must be filed with the Board on September 30th of each year starting in 2012. The Board recognizes that distributors will also be required to issue program results with or by the OPA. Where program results filed with or by the OPA contain the same information required to be filed annually to the Board, the distributor can file this same information with the Board, and supplement as necessary for any additional information required by the CDM Code. Board staff will continue to work with the OPA to streamline reporting requirement processes to the extent possible.

7. BOARD-APPROVED PROGRAM TYPES

All types of CDM programs are eligible for approval if they meet the required cost effectiveness tests and are non-duplicative of OPA-Contracted Province-Wide CDM programs, except for programs specifically prohibited in Section 3.1.5 of the CDM Code. Board-Approved CDM programs may be developed for any customer class. In addition to the requirements within the CDM Code, the Board is providing the following additional guidance on specific types of programs.

7.1 Low-Income Programs

The CDM Code permits distributors to meet a portion of their CDM targets through low-income programs. The Board considers the inclusion of low-income programs an important element of a CDM portfolio and distributors are encouraged to include low-

⁴ Throughout these guidelines there are references to several OPA documents. The Board is not responsible for these documents, where they are posted on the OPA's website, or when they may be modified, however, they are an integral part of the process for recognizing savings to be counted towards distributors' targets.

income programs in their plans. This can be achieved through implementing OPA-Contracted Province-Wide CDM programs or Board-Approved CDM programs that do not duplicate those of the OPA. The OPA has established the province-wide low-income program that is available to all distributors. The Board reminds distributors that Section 4.1.2 of the CDM Code specifically allows for Board-Approved CDM programs for low-income customers that do not pass the OPA's cost effectiveness test.

7.2 Educational CDM Programs

The Board will consider Board-Approved Educational CDM programs if the distributor can demonstrate that it has exhausted its portion of the OPA's Program Administration Budget (PAB) which is intended to fund similar educational and marketing activities. Distributors should also provide a clear demonstration that the proposed program will provide demonstrable benefits (i.e. increased awareness of conservation, increased savings/participation levels, etc.). Distributors will be expected to provide a clear description of the similarities and differences between a proposed Board-Approved Educational CDM program and the most similar OPA-Contracted Province-Wide CDM program. Distributors are reminded that any application for a Board-Approved Educational CDM program must still meet the requirements set out in Section 4.3 of the CDM Code and not duplicate OPA-Contracted Province-Wide CDM programs.

8. COST EFFECTIVENESS

The CDM Code requires distributors to use the OPA's Cost Effectiveness Tests to determine the cost effectiveness of programs filed for Board approval. The current Cost Effectiveness Tests include the Total Resource Cost (TRC) Test and the Program Administrator Cost (PAC) Test found in the OPA's Cost Effectiveness Guide, dated October 15, 2010, which is available on the OPA's website. The cost effectiveness tests may be modified by the OPA from time to time.

9. ACCOUNTING TREATMENT

Section 5.5 of the CDM Code states the manner in which the Board will address the disposition of the Board-Approved CDM variance account (Board-Approved CDM Variance Account – 1567). Distributors are reminded that any overspending in relation to a Board-Approved CDM program will require Board approval for recovery. The distributor will need to apply to the Board and clearly state the reasons for the overspending and provide the details of the spending. The Board will ultimately make a determination on whether the amounts will be recoverable.

10. PROGRAM EVALUATION, MEASUREMENT & VERIFICATION

The CDM Code requires that distributors use the OPA's EM&V Protocols when conducting EM&V on Board-Approved CDM programs. The current EM&V Protocols to be used are the OPA's EM&V Protocols, 2011-2014, dated March, 2011 which are available on the OPA's website. The OPA's EM&V Protocols may be modified by the OPA from time to time.

When distributors are preparing applications for Board-Approved CDM programs, they must include an evaluation plan in accordance with Section 3.1.4(a) of the CDM Code. The evaluation plan(s) should follow the OPA's EM&V Protocols and be a straightforward document that provides guidance to a future auditor as to how the respective program(s) should be assessed and evaluated. It should also demonstrate that the applicant has identified the potential risks of the program, and has identified the key data that needs to be collected in order to properly evaluate the program. Distributors should provide the Board with information as to how the respective programs are to be implemented and deployed, their design, and their detailed characteristics and elements. However, it does not have to reflect a full spectrum of possibilities respecting program deployment and implementation, or potential variations in program design. The Board acknowledges that more specific details of the evaluation plan may be developed after the program has been approved and is undergoing its final development. The Board expects that the details within the application must be sufficient for the Board to determine that the key elements of the evaluation plan have been identified.

10.1 Use of Assumptions

The OPA's Measures and Assumptions Lists must also be used to conduct the cost effectiveness test. The current versions to be used are:

- OPA's 2011 Prescriptive Measure and Assumptions, Release Version 1, March 2011;
- OPA's 2011 Quasi-Prescriptive Measures and Assumptions Lists, Release Version 1, December 2010; and,
- OPA's Avoided Supply Cost Assumptions Table, Appendix A, OPA Cost Effectiveness Guide, October 15, 2010.

All documents can be found on the OPA's website and may be modified by the OPA from time to time.

11. PROGRAM DEVELOPMENT COSTS

Consistent with the natural gas distributor Demand Side Management (DSM) framework, the Board will allow the recovery of prudently incurred program development costs by distributors. However, unlike with natural gas distributors, if disposition of

program development costs are approved by the Board, these costs will be recovered through the GAM, not distribution rates. In assessing whether a cost has been prudently incurred, the Board must consider that any approved costs would be recovered from all ratepayers in the province, not just the distributor's own customers.

If applying for a Board-Approved CDM program, applicants can incorporate their program development costs into the cost of each individual program. If more than one program was developed, the distributor should assess whether the development costs are directly assignable to a particular program or whether common costs should be allocated to different programs based on a documented methodology. These total costs for each program would then be taken into consideration for the purposes of the TRC calculation at the portfolio level. If the program is approved by the Board, these costs would be recoverable because the program has passed the cost effectiveness test with the development costs included. However, if the applied for program(s) are not approved, the development costs would not be recoverable.

12. OTHER FUNDING SOURCES

Distributors considering the use of other funding sources (i.e. shareholder funds, municipal grants, etc.) for potential Board-Approved CDM programs are able to apply for approval of such programs as long as the applications are made in accordance with the rules outlined in the CDM Code. As required by the Directive, distributors are required to show that the programs are non-duplicative of OPA-Contracted Province-Wide CDM Programs, and must follow the OPA's EM&V Protocols in order to have any savings arising from such programs counted against its CDM Targets. For the purposes of assessing cost effectiveness as required by the Directive, the Board will take into consideration the net impact on the electricity ratepayer.

13. LOST REVENUE ADJUSTMENT MECHANISM (LRAM)

As noted in the Directive at Section 12, lost revenues resulting from CDM programs should not act as a disincentive to distributors. Over the course of the four-year CDM term, and at the end of 2014, forecasted and/or unforecasted CDM results may have an effect on a distributor's revenues due to variances from forecasted throughput. In order for any reduced capacity and energy use resulting from successful and cost-effective CDM programs to not act as a disincentive, a mechanism to compensate distributors for these losses has been developed. Since the LRAM is also symmetrical, this mechanism will also ensure that the distributor does not benefit to the detriment of ratepayers if actual lost revenues are less than the forecasted amount.

13.1 LRAM History

From 2005 to the end of 2010, distributors delivered CDM programs either through approved distribution rate funding by way of the third instalment of their incremental market adjusted revenue requirement (MARR), or through contracts with the OPA. Some distributors received incremental distribution rate funding separate from MARR. To promote the participation in and the delivery of CDM programs by distributors, the Board made available an LRAM regardless of whether the CDM programs were funded by the OPA or through distribution rates.

Historically, LRAM has applied to programs implemented by the distributor, within its licensed service area. The manner in which distributors were instructed to determine the LRAM amount was set out in the Board's Guidelines for Electricity Distributor Conservation and Demand Management, dated March 28, 2008 (EB-2008-0037) (the "2008 CDM Guidelines"). The 2008 CDM Guidelines directed distributors to calculate the energy savings by customer class and value those energy savings using the distributor's Board-approved variable distribution charge applicable to the customer rate class. The 2008 CDM Guidelines also noted that lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast) are set by the Board, as the savings would be assumed to be incorporated in the load forecast at that time. The LRAM principles outlined below are built on the foundation of those developed and discussed in the 2008 CDM Guidelines.

To date, many distributors have applied to the Board for recovery of LRAM amounts related to historic third tranche and OPA CDM programs. With the implementation of the CDM Code and OPA-Contracted Province-Wide CDM programs, and the inclusion by some distributors of a portion of their CDM targets into their load forecast, the Board found it necessary to introduce an advanced set of LRAM principles to keep distributors whole for the 2011-2014 CDM term.

13.2 LRAM Mechanism for 2011- 2014

The Board will adopt an approach for LRAM for the 2011-2014 CDM period that is similar to that adopted in relation to natural gas distributor DSM activities. The Board will authorize the establishment of an LRAM variance account (LRAMVA) to capture, at the customer rate-class level, the difference between the following:

- i. The results of actual, verified impacts of authorized CDM activities undertaken by electricity distributors between 2011-2014 for both Board-Approved CDM programs and OPA-Contracted Province-Wide CDM programs in relation to activities undertaken by the distributor and/or delivered for the distributor by a third party under contract (in the distributor's franchise area); and
- ii. The level of CDM programs activities included in the distributor's load forecast (i.e. the level embedded into rates).

Distributors will generally be expected to include a CDM component in their load forecast in cost of service proceedings to ensure that its customers are realizing the true effects of conservation at the earliest date possible and to mitigate the variance between forecasted revenue losses and actual revenue losses. If the distributor has included a CDM load reduction forecast in its distribution rates, the amount of the forecast that was adjusted for CDM at the rate class level would be compared to the actual CDM results verified by an independent third party for each year of the CDM program (i.e., 2011 to 2014) in accordance with the OPA's EM&V Protocols as set out in Section 6.1 of the CDM Code. The variance calculated from this comparison will result in a credit or a debit to the ratepayers at the customer rate class level in the LRAMVA.

The LRAM amount is determined by applying by customer class the distributor's Board-approved variable distribution charge applicable to that class to the volumetric variance (positive or negative) described in the paragraph above. The calculated lost revenues will be recorded in the LRAMVA. Distributors will be expected to report the balance in the LRAMVA as part of the reporting and record-keeping requirements.

If during the term of the four-year CDM program (2011-2014) a distributor's rates are rebased, the revised load volumes approved in that rebasing application will form the basis of the comparison to the actual verified annual results to determine the variances to be recorded in the LRAMVA.

In the situation where the distributor has not included CDM impacts in its load forecast, the distributor is expected to make it clear in their rate application that CDM impacts have not been included, why they have not been included and whether the distributor intends to address CDM impacts through an LRAM. If the approach is accepted by the Board, the LRAM would then be based on the actual results verified by an independent third party in accordance with the OPA's EM&V protocols without comparison to a CDM adjustment in a previous Board-approved load forecast.

With respect to the entries in the LRAMVA, distributors must calculate the full year impact of CDM programs on a monthly basis, based on the volumetric impact of the load reductions arising from the CDM measures implemented in that month, multiplied by the distributor's Board-approved variable distribution charge applicable to the customer rate class in which the volumetric variance occurred. The calculated monthly amounts attributable to each customer rate class will be recorded in a separate sub-account of LRAMVA for each rate class.

13.3 Carrying Charges

The LRAMVA will attract carrying charges. The carrying charges will be calculated using simple interest applied to the monthly opening principal balances in the applicable customer class sub-accounts. The interest rate will be the applicable quarterly rate prescribed by the Board. The calculated carrying charges for all sub-accounts will be recorded in a separate carrying charges sub-account of the LRAMVA.

13.4 Disposition of the LRAMVA

At a minimum, distributors must apply for disposition of the balance in the LRAMVA at the time of their Cost of Service rate applications. Distributors may apply for the disposition of the balance in the LRAMVA on an annual basis, as part of their Incentive Regulation Mechanism rate applications, if the balance is deemed significant by the applicant. The LRAMVA shall not be included in the pre-set disposition threshold calculation in determining materiality for disposition for Group 1 accounts as per the July 31, 2009 Report of the Board: *Electricity Distributors' Deferral and Variance Account Initiative* (EB-2008-0046).

All requests for disposition of the LRAMVA must be made together with carrying charges, after the completion of the annual independent third party evaluation in accordance with Section 6.1 of the CDM Code.

14. LRAM & SHARED SAVINGS MECHANISM FOR PRE-CDM CODE ACTIVITIES

When making an application for either LRAM or SSM in association with CDM programs delivered before 2011, distributors should continue to follow the 2008 CDM Guidelines. All other aspects of the 2008 CDM Guidelines are superseded by this document and the CDM Code.