

**Ontario Energy Board
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Staff Discussion Paper

Proposed Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond

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1.0 INTRODUCTION

1.1 Purpose of Discussion Paper

In July 2006, the Government of Ontario established a new policy direction for electricity conservation and demand management (“CDM”) activities in Ontario by directing the Ontario Power Authority (“OPA”) to assume responsibility for organizing the delivery and funding of CDM activities through local electricity distributors (“LDCs”).

Given this new approach to CDM, Board staff believes that the implications of this new approach for the regulatory treatment of CDM by LDCs in Ontario needs to be examined. This Discussion Paper (the “Paper”) sets out a long-term framework that Board staff believes will provide regulatory certainty to LDCs in the delivery of CDM programs and reduce barriers to the achievement of the Government’s goal of building a conservation culture in Ontario. Board staff is releasing this Paper to obtain stakeholder comments on a proposed framework for the ratemaking treatment of LDC CDM activities in 2007 and beyond.

1.2 Context

With the passage of the *Energy Competition Act, 1998*, LDCs became “wires only” companies, and were restricted from engaging in business activities other than distribution. With the passage of the *Electricity Restructuring Act, 2004*, LDCs were expressly permitted to engage in certain specified business activities, including CDM. Under that same *Act*, the OPA was created and empowered to enter into contracts to provide, among others, CDM services.

After a three-year moratorium on electricity distribution rate changes under Bill 210, on May 31, 2004, the Minister of Energy granted approval to all LDCs in Ontario to apply to the Board for an increase in their 2005 rates by way of the third instalment of their incremental market adjusted revenue requirement (“MARR”). This approval was conditional upon a commitment to reinvest in CDM an equivalent of one year’s return. Consequently, in 2005 LDCs brought forward, and the Board approved, \$163 million in CDM funding for LDCs, an amount related to the third tranche of their MARR.

The Board subsequently provided processes for LDCs to apply for additional funding as part of the 2006 and 2007 distribution rate adjustment processes. CDM funding through 2006 rates ends in April 2007. The third tranche and 2007 supplemental funding both end September 30, 2007.

On July 13, 2006, the Minister of Energy issued a directive to the Ontario Power Authority (“OPA”) instructing it to organize the delivery and funding of CDM programs through Ontario LDCs (the “Directive”). The Directive established a three year fund of up to \$400 million (the “LDC CDM Fund”), to be administered by the OPA.

1.3 Scope of Paper

This Paper examines the regulatory treatment of CDM activities by LDCs for ratemaking purposes. It also includes an examination of regulatory mechanisms to protect LDCs against distribution load reductions associated with the CDM programs, incentive mechanisms, cost and revenue allocation, and evaluation and reporting requirements.

1.4 Approach

Board staff has prepared this Paper to present staff's proposal for a regulatory framework, and to solicit comments from interested stakeholders. This Paper includes a discussion of comments received by the Board in response to its November 2, 2006 request for comments on a proposal from the Electricity Distributors Association ("EDA") for a revenue stabilization mechanism for LDCs. Board staff has reviewed the EDA's proposal and the comments received, and has included consideration of those comments in this Paper.

1.5 Guiding Principles

The Board has a responsibility to set electricity distribution rates that are just and reasonable.¹ It has been left to the discretion of the Board to select, amongst available approaches, the regulatory framework that is optimally suited to achieving that end, while ensuring consistency with Board's guiding objectives as set out in section 1(1) of the *Ontario Energy Board Act, 1998*.

Building upon this foundation, Board staff believes that the Board's statutory responsibility with respect to CDM is best fulfilled, and its statutory objectives in relation to electricity CDM are best promoted, using a regulatory framework that is designed on the basis of the following principles:

- 1. Implementation of government policy should be facilitated.** Government policy includes: giving the OPA responsibility for organizing delivery and funding of CDM; optimizing conservation as a tool for resource planning; and, identifying and developing innovative strategies to accelerate the implementation of conservation, energy efficiency and demand management measures (as required in the integrated power system plan ("IPSP") regulation).
- 2. Regulatory certainty and predictability should be provided.** The framework should allow LDCs to plan and to make investment decisions.
- 3. Confusion in the CDM marketplace should be minimized.** The framework should ensure that the respective roles of all CDM market participants (including LDCs), the OPA, the Board and consumers are clearly defined and understood.

¹ *Ontario Energy Board Act, 1998*, section 78(2) and 78(3).
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- 4. Administrative efficiency should be attained to minimize regulatory burden to LDCs, and costs to ratepayers.** The framework should provide for processes that are as streamlined as possible and that avoid any unnecessary duplication of requirements on LDCs by the Board and the OPA. The costs imposed on all participants should not exceed the benefits achieved.

1.6 Organization of Paper

This Paper is organized as follows. Section 2 sets out the Government's policy framework for CDM, specifically, its conservation targets and vision for the IPSP. Section 3 provides an overview of the role that LDCs have played in the delivery of CDM over the past few years and discusses the potential role of LDCs beyond 2007. Section 4 discusses the proposed regulatory treatment of LDC CDM activities. Section 5 addresses the integration of the proposed framework with future rate adjustment processes, and concludes by highlighting certain issues related to the delivery of CDM programs by LDCs.

2.0 THE POLICY FRAMEWORK

2.1 Culture of Conservation & CDM Targets

The Government of Ontario has committed to building a "culture of conservation" and has undertaken a coordinated effort involving different levels of government, LDCs, the Board, the Independent Electricity System Operator, the private and not-for-profit sectors, and electricity consumers. The Government has also set targets for total peak demand reduction from CDM activities, and has issued several directives to the OPA regarding specific initiatives to assist with achieving those targets. On June 13, 2006, the Minister issued to the OPA the "Supply Mix Directive", which establishes a load reduction target of 6,300 MW by 2025 with the following interim peak demand reduction targets from CDM initiatives:

- 1,350 MW by 2007, and
- 1,350 MW by 2010, and
- 3,600 MW by 2025.

It is expected that CDM capacity procured by the OPA from all market participants (including LDCs) will contribute towards achievement of these objectives.

2.2 Integrated Power System Plan (IPSP)

CDM initiatives will form part of the OPA's IPSP. Under the *Electricity Act, 1998*, the OPA is responsible for developing both an IPSP and adequate procurement processes for managing electricity supply, capacity and demand, in accordance with the IPSP. In developing the IPSP, the OPA is required to identify and develop innovative strategies to accelerate the implementation of conservation, energy efficiency and demand management measures. The IPSP must meet the conservation, generation and

transmission goals set out in the Supply Mix Directive in an economically prudent and cost effective manner.²

The IPSP will therefore act as the OPA's roadmap for, among other things, CDM initiatives, and it is expected that CDM programs that may be delivered by LDCs would be consistent with the OPA's direction, as articulated in the IPSP.

2.3 Definition of CDM

Conservation and demand management encompasses a wide range of activities and programs. The Government of Ontario has adopted a broad definition of CDM, which it has communicated to LDCs through its May 31, 2004 letter which granted approval for the MARR-related rate adjustments, and through its June 13, 2006 Supply Mix Directive to the OPA. CDM is considered to include the following categories of activities:

- **Conservation behaviour**
- **Energy efficiency**, including the use of energy efficiency standards under the *Energy Efficiency Act* and the Building Code
- **Demand management**
- **Fuel switching**
- **Distributed generation**, including self-, co- and tri-generation, geothermal heating and cooling, net metering, and solar, wind and biomass systems

3.0 THE ROLE OF THE DISTRIBUTOR

3.1 2005 to 2007

In 2004 the Government permitted LDCs to apply to the Board for an increase in their 2005 rates as part of the third instalment of their MARR. As a result, LDCs prepared, and submitted CDM plans to the Board.

LDCs delivering CDM programs currently funded through distribution rates are responsible for the full life-cycle management (i.e. planning, design, delivery, evaluation and reporting) of CDM programs implemented in their service areas. LDCs must obtain Board approval of CDM plans and budgets and provide regular reports to the Board on the progress of the CDM programs.

Under the current model, the Board is responsible for approving the funding of CDM programs through distribution rates, with a focus on reviewing the prudence of CDM expenditures. To that end, the Board developed processes for LDCs to apply for third tranche funding through 2005 distribution rates and for additional funding through 2006 and 2007 distribution rates. The filing guidelines for the supplemental funding through 2007 distribution rates were issued by the Board on October 25, 2006 and subsequently

² See the December 27, 2006 "Report of the Board on the Review of, and Filing Guidelines Applicable to, the Ontario Power Authority's Integrated Power System Plan and Procurement Processes", available on the Board's website at www.oeb.gov.on.ca
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incorporated into the Board's Filing Requirements for Transmission and Distribution Applications, issued November 14, 2006.

The current model includes review and approval of spending levels and proposed programs within LDCs' CDM plans, reporting requirements, and evaluation. In order to assist LDCs with performing a cost-benefit analysis of programs, the Board developed a Total Resource Cost ("TRC") Guide, which was released in September 2005.

With regard to reporting, approval of third tranche funding was conditional upon LDCs submitting quarterly and annual reports. For 2006 incremental funding, only annual reports are required.

3.2 2007 to 2010

Once the LDC CDM Fund is up and running, it is expected that funding for, and delivery of, the majority of LDC CDM activities will be coordinated by the OPA through procurement processes. The Directive sets out the respective roles and responsibilities of the OPA and LDCs. According to the Directive, responsibility for the design of standard programs will lie with the OPA. These standard programs may include consumer awareness and education programs, market capacity building, and market transformation programs.

Pursuant to the Directive, the OPA will be responsible for ensuring that all areas of the province have access to an appropriate set of CDM programs. This means that where an LDC has not entered into a contract with the OPA or where the OPA sees a need to deliver one or more specific CDM programs not being implemented by the LDC, the OPA may either directly, or through a third party, deliver the CDM programs to consumers in the LDC's service area.

The Directive also states that the OPA will be responsible for implementing an accountability framework and for reviewing the activity and results achieved by LDCs against that framework.

Under the model laid out in the Directive, LDCs will contract with the OPA for delivery of CDM programs. LDCs will be important delivery agents of OPA-funded CDM programs.

As set out in section 4.1.1 of this Paper, LDCs would also be able to apply to the Board for funding through distribution rates, for initiatives with a local benefit or that are more appropriately funded through distribution rates.

3.3 2010 and Beyond

The Directive is silent on the role of LDCs in, and the source of funding for, CDM beyond 2010. As evidenced by the Government's long term conservation targets set out in the Supply Mix Directive, Board staff are proceeding on the basis that the Government intends that CDM resources will be necessary beyond 2010.

The development of specific LDC CDM funding indicates that the Government considers LDCs to be important delivery agents in the near-term (2007-2010), and that funding through the commodity cost, as part of the Global Adjustment Mechanism is the appropriate funding vehicle. The LDC CDM Fund is, however, an interim measure to provide funding to LDCs for CDM activities, until the implementation of the IPSP and associated procurement processes. In 2010, the OPA will be submitting for review its second generation IPSP. In that plan, it is expected that the OPA will identify the costs and funding needs associated with its planned conservation and supply resources.

In addition, as the conservation culture develops and market signals become clearer, a competitive energy services market may drive conservation without additional funding from ratepayers or the OPA.

The proposed framework outlined in this Paper is not limited to addressing LDC use of OPA funding associated with the LDC CDM Fund; it also addresses the regulatory treatment of funding for LDCs from other OPA CDM procurement processes, and from distribution rates.

4.0 STAFF'S PROPOSED REGULATORY FRAMEWORK

Staff assumes that once the LDC CDM Fund is up and running, there will be two streams of funding available to LDCs for the delivery of CDM programs: funding from the OPA, and funding through distribution rates. The ratemaking implications of each funding stream are different. In developing the proposed regulatory framework, Board staff has been guided by the Board's December 10, 2004 decision in the conservation and demand management proceeding (RP-2003-0203) and the Report of the Board on the 2006 Electricity Distribution Rate ("EDR") Handbook, which together set out the current treatment of CDM activities funded through distribution rates.

This section begins with an overview of the sources of funding available to LDCs for CDM, and then moves to a discussion of the proposed regulatory framework as it would apply to each funding stream.

4.1 Program Planning

4.1.1 CDM Funding

OPA Funding

The OPA has four mechanisms for funding CDM activities: the recently announced LDC CDM Fund; the Conservation Fund; the Technology Development Fund; and OPA procurement needed to implement the IPSP and any other Ministerial Directives.

OEB Funding

The Board has provided three processes for distribution rate funding: third tranche, 2006 incremental and 2007 supplemental. The 2006 incremental funding covers the period ending April 30, 2007, while third tranche and 2007 supplemental funding cover the period ending September 30, 2007. The Board provided a process for 2007 supplemental funding because the OPA advised the Board in July 2006 that it was targeting October 2007 for implementation of the LDC CDM Fund. This implementation date would create a funding gap between May 1, 2007 and September 30, 2007, for those LDCs with insufficient third tranche or 2006 incremental funding. The 2007 supplemental funding process addresses this funding gap.

Upon implementation by the OPA of the LDC CDM Fund, most CDM funding for LDCs will be provided by the OPA, either through the Fund or other OPA procurement processes. Board staff is mindful, however, that to successfully meet the Government's energy conservation targets, continued funding of CDM activities through distribution rates may be necessary, and the continued availability of this funding stream is not precluded by the Directive or otherwise.

The availability of funding through distribution rates may provide LDCs with access to funds for unique programs that might not be appropriately funded by all Ontario ratepayers. For example, a load control program that is triggered by conditions on the LDC's local system, rather than solely on province-wide market conditions, or a distribution system improvement initiative to reduce line losses, would both be programs that might be more appropriately funded through distribution rates.

Continued access to distribution rate funding also facilitates the continuity of funding. The Government has committed funding of up to \$400 million for LDC CDM programs for three years, but has not explicitly indicated what dedicated funding may be available to LDCs after 2010. Therefore, it is appropriate to keep the Board's processes in place to be able to facilitate continuity, as appropriate.

Staff Proposal

The framework that staff is proposing for the dual funding model implicitly encourages LDCs to seek funding from the OPA, and to rely on funding through distribution rates where OPA funding is not available or where funding through distribution rates is more appropriate. To ensure effective use of OPA funding and to minimize duplication, there should be some restrictions as to the types of programs for which LDCs may apply to the Board for recovery through rates. Funding through distribution rates should be restricted generally to initiatives targeted to consumers within the LDC's licensed service area, and to initiatives that neither the OPA nor any other entity is already delivering within the LDC's service area. Board staff believes that these criteria are appropriate, in that they recognize the OPA's primary responsibility for funding CDM programs in the province, and encourages participation in the OPA's CDM

processes, while providing CDM funding continuity and preventing the cross-subsidization of one LDC's ratepayers by the ratepayers of another.

4.1.2 Revenue Protection

Background

Unforecasted CDM results can have the effect of eroding LDC revenues due to lower than forecast throughput. Distributors recover fixed distribution costs through both a fixed and a variable rate, which is set based on a forecast of consumption. If actual consumption is less than the forecasted amount used for rate-setting purposes, the LDC earns less revenue than it otherwise would have, all things being equal. Since the intention and effect of CDM activities is to reduce energy use, it also has the effect of reducing throughput and associated LDC revenues, which can result in a disincentive for LDCs to deliver CDM programs.

A mechanism to compensate for LDC-induced lost revenues is intended to remove the disincentive for an LDC to implement CDM programs.

In its December 10, 2004 decision in proceeding RP-2004-0203, the Board concluded that a lost revenue adjustment mechanism ("LRAM") was appropriate for electricity distributors, and that it should apply to CDM expenditures relating to the third instalment of LDCs' MARR. The Board provided such a mechanism as part the 2006 EDR process. In order to claim lost revenue, LDCs must calculate the energy savings by customer class and value those energy savings by the Board-approved distribution charge appropriate to that class. The resulting amount is recorded in a Board-approved deferral account, and may be claimed in a subsequent rate year as compensation for lost revenue. This LRAM is also available for approved CDM activities funded in 2006 and 2007 through distribution rates.

LRAM is a retrospective adjustment, which is designed to recover revenues lost from CDM activities in a prior year. It is designed to compensate an LDC only for unforecasted lost revenues associated with CDM activities undertaken by the LDC within its licensed service area.

EDA Proposal

On November 2, 2006 the Board issued a letter inviting stakeholder comment on a proposal from the EDA regarding a revenue stabilization mechanism for LDCs. The proposal is outlined in a report entitled, *Designing an Appropriate Lost Revenue Adjustment Mechanism (LRAM) for Electricity CDM Programs in Ontario*, developed for the EDA by Elenchus Research Associates ("EDA Proposal"). The EDA Proposal sets out a comprehensive revenue stabilization adjustment mechanism ("RSAM") that uses the variance between forecast and actual consumption as the basis for a lost revenue adjustment. Since the RSAM would eliminate the impact of all variances from forecast in electricity demand, it would not only address the impact from all CDM programs,

regardless of whether implemented by the LDC, but also any other factors that might affect electricity demand (e.g. weather and customer growth).

The Board received submissions from 16 parties. There was general support for a mechanism to compensate LDCs for revenues lost due to CDM; however, there was no consensus as to whether the EDA Proposal was appropriate for Ontario's LDCs.

A number of parties commented on the relationship between the RSAM proposed by the EDA and the incentive regulation ("IR") framework that the Board is moving towards. The Consumers Council of Canada, Hydro One Networks Inc., and the Vulnerable Energy Consumers Coalition submitted that the EDA proposal is inconsistent with IR since the mechanism requires the use of a load forecast, whereas the development and approval of a load forecast is not a requirement under the Board's IR framework. Hydro One submitted the EDA Proposal is incompatible with IR because it involves "after the fact adjustments", whereas IR is a forward-looking mechanism. In addition, the revenue neutrality provided by the EDA Proposal removes generally accepted business risks for an LDC, thus reducing the pressure on LDCs to be efficient in managing their business risk. Hydro One contends that this is also contrary to IR.

Several parties commented on the process for considering any revenue stabilization mechanism. London Hydro submitted that a full hearing is needed to consider any amendments to, or replacement of, the current process for both the LRAM and the Shared Savings Mechanism ("SSM"). The School Energy Coalition suggested that the EDA Proposal falls naturally into the Cost of Capital (EB-2006-0088) and 2nd Generation Incentive Regulation Mechanism Proceeding (EB-2006-0089) proceeding.³

Staff Proposal

LRAMs were created to remove a disincentive for LDCs to deliver conservation programs. These revenue protection mechanisms were not originally developed to reduce the risk of energy demand fluctuations generally on LDCs.

LDC revenues can be affected by a number of factors, such as weather, economic growth, customer attachments, housing starts, construction practices, demographics, energy technology changes and conservation activities. Many of these factors are beyond the control of the LDC, although they must manage the consequences. Therefore, the forecast of demand for electricity is an important planning function for LDCs. LDCs must be aware of how changes in the economy and the market may affect them in the future, even when they lack specific information about those effects. This makes forecasting of energy demand a challenging activity.

LDCs have always been exposed to fluctuations in revenue associated with economic and market consequences, which must be considered when determining how rates

³ This proceeding culminated with the issuance of the December 20, 2006 "Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors", available on the Board's website.

should be set and how distributors should be compensated for the risk associated with fluctuations in demand. The delivery of CDM by the LDCs themselves is a new influence on energy demand. The EDA Proposal would require a comprehensive reconsideration of the traditional approach to establishing rates that reflect the business risk of the distributors. However, in order to ensure that distributors are not harmed by activities they engage in directly, Board staff is of the view that LDCs need protection from revenue erosion due to CDM activities that the LDCs implement in their respective licensed service areas.

Given the complexity of implementing a revenue stabilization mechanism of the kind proposed by the EDA, the resulting impact on the incentive rate regulation framework, and the short timeline within which a mechanism is needed, staff believes that a comprehensive revenue stabilization mechanism is not appropriate at this time.

Board staff recommends that the Board continue to make the current form of LRAM available to LDCs to address revenue erosion resulting from LDC CDM activities, regardless of whether the programs are funded by the OPA or through distribution rates. The LRAM would apply to programs implemented by the LDC, within its licensed service area, including programs delivered by the LDC itself and/or programs delivered for the LDC by a third party (via contract with the LDC, where the LDC has contracted with the OPA but has outsourced CDM program delivery to a third party).

Board staff recognizes that an LDC may be affected by CDM programs delivered by other entities within the LDC's service area. However, staff believes that those impacts can continue to be factored into rates through prospective forecasting in the rate setting process.

In the long-term, however, the current form of LRAM might not be the most appropriate mechanism to address changes in demand due to many sources of conservation activities. To that end, staff is also of the view that consideration of alternative mechanisms to address lost revenue due to changes in demand, including those resulting from all forms of conservation, should be considered as part of the process to develop 3rd Generation IRM or during the Board's review of options for the fundamental redesign of electricity distribution rates.

4.1.3 Incentive Mechanisms

Background

LRAMs remove a disincentive for LDCs to implement CDM, but do not provide an incentive for LDCs to aggressively implement CDM programs. Given a certain level of resources, the LDC must make a trade-off between pursuing a CDM activity versus another revenue generating activity.

In the 2006 EDR process, Board staff's consultant, London Economics Inc. ("LEI"), advised in its report to the Board that it was unreasonable to expect LDCs to pursue programs which provided no financial return for their shareholders. Furthermore, LEI noted that it is important to emphasize that any incentive needs to be in addition to the normal allowed return, otherwise it does not serve as an incentive at all.

CDM Activities Funded by the OPA

Analysis

In the context of OPA-funded CDM activities, two salient questions that arise are: (1) whether incentives are appropriate; and (2) if so, who should provide the incentive.

Achievement of the Government's conservation targets will require significant effort from all market participants that deliver CDM programs to electricity consumers. By creating an OPA-administered CDM Fund solely for LDC delivered programs, the Government has signalled its desire for LDCs to be part of the effort to achieve these targets. Regardless, LDCs, like any other CDM delivery agent, may require financial inducements to aggressively pursue OPA-funded CDM initiatives, given the tradeoffs involved.

Staff is therefore of the view that incentives should be used to encourage participation in the OPA's CDM procurement process in order to ensure that LDCs deliver sufficient CDM programs to maximize achievement of the Government's conservation targets. Incentives should also be linked to measured and verified results, and act as a reward for achieving those results. The incentives should also be consistent with incentives earned by other parties in the market delivering CDM on behalf of the OPA and the Government.

Staff Proposal

As the entity responsible for designing procurement processes, and program contracts, and for the measurement and verification of results, staff believes that the OPA has the opportunity to design results-oriented incentive mechanisms that are most suited for the programs and individual LDCs. The OPA's procurement processes are expected to be competitive processes that may benefit from different incentive structures depending on the resource being procured or the proponent offering to provide the resource.

Staff recommends that the Board should not provide a shareholder incentive mechanism for CDM activities funded by the OPA.

CDM Activities Funded Through Distribution Rates

Analysis

Two salient issues with respect to incentive mechanisms for activities funded through distribution rates are: (1) whether an incentive should be provided; and (2) whether an incentive is necessary for all types of CDM activities funded through distribution rates.

With regard to the first issue, there is an argument against the Board establishing a shareholder incentive mechanism for CDM activities funded through distribution rates before the OPA announces its own plans in regards to incentives. The OPA has not yet determined an LDC CDM incentive structure. Until that is known, there is a risk that the Board will create an incentive that has the unanticipated and inappropriate effect of making one funding source more attractive than the other. This would happen if one shareholder incentive structure is more generous than the other. This would be avoided if LDCs are prohibited from applying to the Board for funding through distribution rates for programs that are offered by OPA. Staff believes, however, that its proposed restrictions on funding through distribution rates (discussed above) are adequate to mitigate against any bias against OPA-funded programs, regardless of the incentive structure, if any, designed by the OPA.

In its December 10, 2004 decision in proceeding RP-2003-0203, the Board found that a shareholder incentive was an appropriate way to encourage LDCs to pursue CDM programs. The Board approved a shareholder incentive of 5% of the net savings, as established by the TRC test. This SSM applies only to expenditures on the customer-side such as efficiency improvements in the use of electricity, and not to utility-side expenditures such as distribution system improvement projects. The Board concluded that the inclusion of capitalized assets into rate base provides sufficient incentives, and that an additional incentive in the form of the SSM is not necessary.

Staff Proposal

Staff sees no change in circumstances that would suggest that LDCs no longer need a shareholder incentive to encourage them to participate in CDM. **Staff recommends that the Board continue to provide an incentive mechanism for CDM activities funded through distribution rates, and that this mechanism be consistent with the model currently in place.**

Board staff notes, however, that in its 2006 EDR Report of the Board, the Board reported the views of some parties that the SSM formula could be enhanced to encourage superior performance. To date, the Board has not received any applications from LDCs for an SSM. Staff believes, therefore, that it would be premature at this time to define a more refined incentive mechanism. Once experience is gained with the current formula, a review and reconsideration may be warranted.

4.2 Program Delivery

4.2.1 Cost Allocation

Background

Board staff anticipates that going forward, LDCs may concurrently undertake CDM activities funded through distribution rates, and CDM activities funded by the OPA. The appropriate method for allocating any joint costs between these two lines of activity must be considered due to the ratemaking implications. One example of such joint costs could include the costs of LDC call centre staff who receive customer calls related to OPA-funded CDM activities, and calls about customers' electricity accounts. The Board needs to determine whether these joint costs should be allocated on a marginal or fully allocated basis.

Using a fully allocated costing method results in the allocation of direct costs and a proportional share of indirect costs. This methodology would, for example, include a proportional allocation of an employee's benefits. The proportional share of the indirect costs attributable to OPA-funded CDM activities would then be removed from the LDC's distribution rates, and more appropriately recovered through the LDC's OPA-funded CDM activities.

Using a marginal costing method results in an allocation of only the variable costs, and excludes any fixed or overhead costs. Using the employee example, marginal costing may consider only an allocation of the employee's hourly wage, but not the full cost of employing that person which may include benefits or other costs. Under marginal costing, no existing costs that would be incurred in the absence of OPA-funded CDM activities would be removed from distribution rates.

Analysis

Adopting a marginal costing approach may be desirable if it effectively facilitates broader reach of the OPA's CDM funding, which would help to further the Government's energy conservation goals. This incentive arises because only incremental costs incurred by the LDC are contracted for, and allocated to, the OPA-funded CDM activity; no existing costs are removed from the LDC's distribution revenue requirement, and there is, therefore, no reduction in distribution rates. Instead, LDC CDM budgets would be lower so the OPA CDM fund may go farther since distribution rates would contribute to funding fixed and overhead costs. Some parties might view this as cross-subsidization. Others might view it as a more efficient use of resources to get benefits or services that would otherwise be more expensive.

Marginal costing can also provide LDCs with a competitive advantage over non-LDCs when bidding in OPA CDM procurement processes. Since a portion of the LDC's costs would be paid for by the LDC's distribution ratepayers, the LDC may be able to underbid a non-LDC, which must recover its full costs under the contract. If non-LDCs were

unable to compete on a level playing field, they may opt not to participate in the OPA's CDM processes, thus eliminating potential CDM market players. Such a result appears contrary to the OPA's long-term strategic approach to conservation, as articulated in the Chief Energy Conservation Officer's 2006 Annual Report, which has a near-term objective of building capability among all market players.

While allowing the use of some of the existing infrastructure of an LDC to implement CDM programs may contribute to the overall benefit of CDM program delivery, there should be some recognition of the added burden that this places on the LDC. Management attention may be divided and operational risks (e.g. insufficient resources to provide effective distribution and related customer care services) may be increased as a result of these activities.

Adopting a fully allocated costing approach would result in the removal from distribution rates of the full costs incurred by an LDC in delivering an OPA-funded CDM program. This removal of costs means that the LDC's ratepayers receive a benefit, through lower distribution rates, as a result of the economies of scale resulting from shared resources. There is no cross subsidization between the OPA-funded CDM activities, and those activities funded through distribution rates. The benefit also recognizes the potential additional costs of an LDC pursuing these activities, such as the divided management attention and increased operating risks.

Fully allocated costing may also be appropriate from a resource planning perspective since CDM can be viewed as an alternative and compared to electricity supply and system expansion or enhancement. The OPA is required to consider all of these resources in developing the IPSP. A fully allocated costing method would allow for a more meaningful comparison of resource options, given that there would be greater transparency and the full cost would be allocated to the CDM activity.

Fully allocated costing also overcomes the potential negative impacts on competition resulting from marginal costing. The inclusion in a bid of the full costs of delivering CDM programs means that non-LDCs can compete on a level playing field with LDCs. The OPA expressed a preference for a level playing field in its December 20, 2005 submission to the Board's generic CDM issues proceeding (RP-2002-0020 / EB-2005-0523), in which the OPA commented on evidence from Newmarket Hydro which suggested that LDC administrative costs related to the implementation of OPA programs and services should be recognized and recoverable through the Board's ratemaking process. In its submission, the OPA stated:

When bidding in OPA procurement processes, non-LDCs will have to incorporate the recovery of any administrative costs in their bid and it is unclear why the LDCs should not be on the same level playing field.

Staff also notes that a fully allocated costing approach is consistent with the Board's current position for ancillary and non-utility activities undertaken by natural gas utilities.

Staff Proposal

Board staff recommends that a fully allocated costing methodology be applied to all LDC-delivered CDM activities. Capitalized assets associated with distribution rate funded CDM activities could be included in rate base. Assets purchased with funds from the OPA would not be eligible for inclusion in rate base. Where the funding is coming from the OPA, the separation in costs will appropriately establish distribution rates. Where the funding would be from the LDC's rates, fully allocated costing will ensure that the CDM programs are cost effective.

Consistent with the separation of costs, staff also believes that any penalties imposed on LDCs by the OPA would not be eligible for recovery through distribution rates.

This approach is consistent with the basic ratemaking principle of preventing cross subsidization while at the same time facilitating the OPA's long-term goals for a competitive CDM marketplace.

4.2.2 Revenue Allocation

Background

Under contracts with the OPA, LDCs may receive funds related to program budgets, incentives, and other revenues. The regulatory treatment of these revenues, specifically whether they are retained by shareholders or applied to the distribution revenue requirement, may influence shareholder decisions about participation in the OPA's CDM processes. In addition, revenues are also generated by incentives from distribution rate-funded CDM activities. These revenues, as well, need to have defined regulatory treatment.

Analysis

While factoring revenues earned from OPA CDM contracts into distribution rates may benefit an LDC's ratepayers by potentially lowering distribution rates, it would act as a disincentive to LDC participation in the OPA's CDM processes. In addition to being contrary to the principle of facilitating Government conservation policy, it would be unfair to LDCs. Their distribution rates have been set based on what is reasonably necessary to deliver electricity and manage the requisite infrastructure.

Given staff's recommendation that fully allocated costing of CDM activities should apply, treating revenues differently would be inconsistent with the principle of a symmetrical treatment of costs and revenues. If costs associated with OPA-funded CDM activities are separated from the distribution revenue requirement, then revenues should be as well.

Allowing the shareholder to retain all revenues earned through OPA-funded CDM will provide an incentive to LDC delivery of CDM programs. Maintaining separation

between distribution revenues and revenues from OPA-funded CDM would mean that LDCs would not be subject to a reduction in distribution rates due to revenues earned from the OPA.

In addition, the concept of a shareholder incentive for delivery of distribution rate-funded CDM activities would be negated if those funds were used to reduce the revenue requirements of an LDC.

Staff Proposal

Consistent with staff's recommendation for the treatment of costs associated with OPA-funded CDM activities, Board staff recommends that revenues earned from OPA CDM contracts be kept separate from the LDC's distribution revenue requirement. Staff believes that this will best facilitate implementation of Government policy and provide LDCs with regulatory certainty and predictability.

Any net revenues generated by a shareholder incentive for distribution rate-funded CDM would be separate from (i.e. over and above) the LDC's distribution revenue requirement.

4.3 Program Evaluation

Background

Effective monitoring and evaluation of CDM programs is critical to ensure that activities are cost effective and provide real savings to consumers. Evaluation also provides LDCs with the opportunity to identify ways in which a program can be changed or refined for greater efficiency in delivery and cost effectiveness.

The evaluation of CDM activities is important to support the Board's review and approval of LRAM claims made by LDCs. Evaluation of the energy savings of a program is needed to determine impact on an LDC's revenues as a result of reduced throughput.

CDM Activities Funded by the OPA

Analysis

The OPA has responsibility for managing the evaluation, measurement and verification ("EM&V") of results associated with the programs it funds. In its 2007 expenditure and revenue review application to the Board, the OPA reports that in 2007, it intends to produce a standardized process for evaluating and reporting on all CDM programs. The OPA reports that its responsibilities in EM&V will be to set protocols, undertake compliance reviews, and enforce requirements. The OPA will use a TRC test to screen CDM programs implemented in 2007, with the exception of educational programs. This TRC test will build on the Board's current TRC model. The OPA also reports in its

application that it has developed a set of EM&V principles to guide its development of EM&V requirements.

Given the ratemaking implications of program evaluations, intervenors and ratepayers need to be confident that evaluations are an accurate reflection of actual program results. The practice in the gas sector is that independent audits are carried out on the results claimed by a utility. This promotes greater confidence in the results.

The Board could accept OPA program evaluations, without audit, and use the results of those evaluations for the purposes of assessing LDCs' LRAM claims. However, it may not be possible or feasible for the Board to thoroughly verify the results reported. This concern could be alleviated if an LDC arranged to have an independent audit carried out on its results prior to filing its LRAM claim to the Board.

Another way to promote greater confidence in results would be to require LDCs to file results that have been audited by, or on behalf of, the OPA, to support their LRAM claims. Regardless of whether the OPA or the LDC provides the results to support an LRAM claim, staff believes it is important that evaluations and audits be conducted by separate parties.

A requirement for audited results is consistent with current requirements for natural gas distributors, as set out in the Board's August 25, 2006 decision in the natural gas demand side management generic issues proceeding (EB-2006-0021). As agreed to by parties in the process, and accepted by the Board, the role of the auditor is to provide an opinion on proposed recovery amounts; verify financial results in the evaluation; review the reasonableness of input assumptions; and recommend future evaluation work.

Staff Proposal

Staff recommends that LDCs be required to provide audited evaluation results when filing LRAM claims with the Board, and that the audit scope should be limited to confirming that the participation level in the LDC service area is accurate and that the energy savings assumptions used in the calculation of the lost revenue amount are the current ones used by the OPA. An audit will provide all parties with a greater level of confidence as to the accuracy of results.

CDM Activities Funded Through Distribution Rates

Analysis

For CDM activities currently funded through distribution rates, LDCs are responsible for evaluating program results, and for providing regular reporting to the Board of the results of these evaluations. Evaluations are also required for the purposes of LRAM and SSM claims.

Staff Proposal

A requirement for audited evaluation results for CDM activities funded through rates would be appropriate for the same reasons set out above in relation to OPA-funded activities.

Staff recommends that LDCs undertake program evaluations, and provide audited results to the Board. In this case, the audit would include the scope identified above as well as the cost effectiveness results as determined by a TRC test analysis. Since this audit is specific to the LDC's unique program, it can also include suggestions for improvements in the program.

4.4 Program Reporting Requirements

Background

Reporting on the progress and success of CDM programs is critical to maintaining accountability and transparency.

CDM Activities Funded by the OPA

Analysis

The OPA has not yet issued its reporting requirements for LDCs that use the LDC CDM Fund.

Reporting requirements should require appropriate information to be collected, without creating an administrative burden for LDCs. That is, the need for and use of the information provided should justify the cost of collecting the data and preparing reports. Given the involvement of LDCs, the OPA and the Board in CDM, there is a need to establish clear guidelines and requirements for reporting to reduce duplication of efforts and minimize the administrative burden for all parties.

Ideally, one set of data and reporting requirements should serve the needs of all; however, this may not be reasonable or realistic. For example: LDCs will need information to assess opportunities for improvement in program administration and execution; the OPA will need information to assess overall effectiveness of programs to deliver results, including information that will demonstrate achievement of supply mix targets and help determine contract incentive awards for the LDCs; and the Board will need information to support its review and approval of LRAM claims made by LDCs.

The Board could try to establish comprehensive reporting requirements to serve all of these needs, regardless of the funding source. If the Board made such reports public, this would ensure transparency to the public on LDC achievements for all types of programs. However, for programs funded by the OPA, LDCs are accountable to the OPA for results, so Board reporting requirements may cause confusion as to the

accountability relationships. Further, the OPA may have special information requirements beyond any that may be required by the Board. This may cause undue administrative burden on LDCs, if they are required to prepare separate reports for the Board and the OPA in relation to CDM activities funded by the OPA.

Alternatively, the Board could act as a gathering point for information for the OPA. In this model, the OPA would set its reporting requirements, and the Board would allow use of its existing Reporting and Record-Keeping Requirement (“RRR”) infrastructure for gathering the information. This could include Board staff following up with late filers, and making the information available to interested parties. This option may not, however, be consistent with the principle of facilitating implementation of the OPA’s responsibility for managing CDM. This responsibility suggests that the OPA develop its own processes to manage its information needs. While the Board could collect information about LDCs, it does not have the mandate to collect information about non-LDCs, such as energy service providers which may also be delivering OPA-funded CDM programs. This means that even if the Board were to collect information about LDCs on behalf of the OPA, the OPA would still need to develop its own parallel processes for non-LDCs.

Staff Proposal

Board staff recommends that the Board limit its reporting requirements for CDM programs funded by the OPA to only the information that the Board needs to assess an LRAM claim, and that the information only be required when such a claim is filed.

CDM Activities Funded Through Distribution Rates

Analysis

LDCs are currently required to provide quarterly and annual reports to the Board on their CDM initiatives funded through third tranche funding. Annual reports are also required in relation to 2006 incremental funding, but not quarterly reports.

In the quarterly reports, LDCs must report on the progress of any initiatives within their CDM plan. In the annual plan, LDCs must provide an evaluation of the effectiveness of the LDC’s CDM plan, including a cost-benefit analysis. LDCs must also report on any lessons learned over the course of the year with the aim of improving the efficiency and cost effectiveness of future program delivery, and to provide information for other LDCs with respect to CDM programs.

As part of their RRR filings on deferral/variance account balances, LDCs are also required to report the costs, investment expenditures, and related revenues associated with CDM.

These reporting requirements continue to provide useful information to the Board and to parties interested in the performance of LDC CDM programs.

Staff Proposal

For CDM programs funded through distribution rates, Board staff recommends that the reporting requirements be based on the current annual reporting requirements for third tranche and 2006 funding. Staff note that on May 12, 2006 the Board initiated a process to review LDCs' 2005 annual reports, to test whether CDM activities undertaken by LDCs were in accordance with the LDCs' Board approved CDM Plans, and whether the Annual Reports conform to the Board's "Guideline for Annual Reporting of CDM Initiatives" and final orders on LDCs' CDM plans. The results of this review process, expected in early 2007, may identify opportunities for improvement in the Board's LDC CDM reporting requirements.

5.0 OTHER MATTERS

5.1 Integration with the Multi-Year Rate Plan

In its December 20, 2006 "Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors" (EB-2006-0088/EB-2006-0089), the Board stated that CDM related costs to be recovered through distribution rates (i.e. new spending on CDM, revenues from LRAM and SSM) will be dealt with separately from the 2nd Generation IR mechanism rate adjustment.

As stated previously in the present Paper, staff's view is that alternatives to the current LRAM be considered in the Board's work to develop the 3rd Generation IRM or the Board's review of options for the fundamental redesign of electricity distribution rates.

5.2 Service Quality Regulation

Service quality regulation (SQR) is intended to establish some accountability for the quality of service being provided by LDCs that is being funded by ratepayers. LDCs are required to report on their performance on certain service quality indicators (SQIs), as set out in the 2006 Electricity Distribution Rate Handbook, in relation their activities, including CDM activities, funded through distribution rates. LDCs are expected to establish their operating performance at levels no less than the minimum standards, taking into consideration the needs and expectations of their customers.

While the effect of staff's recommended approach to cost and revenue allocation is to maintain a financial separation between CDM activities funded by the OPA, and activities funded through distribution rates, it is not clear to staff how LDCs might separately track service performance for each type of activity, especially where LDCs are sharing resources such as call centres between CDM activities and other activities undertaken by the LDC, and between CDM activities funded by the OPA and CDM activities funded through distribution rates.

Staff is therefore of the view that SQIs should be inclusive of all activities, regardless of whether they are CDM-related or for other distribution activities. In its December 20, 2006 Report in proceeding EB-2006-0088/EB-2006-0089, the Board indicated its intention to resume an SQR review that began in September 2003, with an aim to refine its SQR regime for electricity distributors. Board staff is of the view that consideration of LDCs' CDM activities should form part of the Board's SQR review.

5.3 Minimizing Customer Confusion

There may be a number of parties delivering CDM programs to electricity consumers in Ontario, which may cause confusion for customers who have generally been accustomed to receiving CDM services from the LDC licensed to deliver electricity in the service area where the customer lives, and/or has an account for electricity service. Customers have a high level of trust with their local LDC and may be concerned to discover that the service they are receiving is not from their LDC but is instead being provided by an unaffiliated third party.

Staff understands that the OPA plans to use the powerWISE brand, currently used cooperatively by the Ministry of Energy and several LDCs, as the "voice" of CDM in Ontario. Staff also understands that the OPA intends to develop brand standards and guidelines to ensure consistency in branding and messaging for users of the powerWISE brand, including LDCs.

6.0 SUMMARY

In summary, this Paper sets out the following views of Board staff:

- The framework that staff is proposing for the dual funding model implicitly encourages LDCs to seek funding from the OPA, and to rely on funding through distribution rates where OPA funding is not available or where funding through distribution rates is more appropriate.
- The Board should continue to make the current form of LRAM available to LDCs to address revenue erosion resulting from LDC CDM activities, regardless of whether the programs are funded by the OPA or through distribution rates. Consideration of alternate mechanisms to address lost revenue due to these changes in demand, including conservation, should form part of the process to develop 3rd Generation IRM or the Board's review of options for the fundamental redesign of electricity distribution rates.
- The Board should not provide a shareholder incentive mechanism for CDM activities funded by the OPA.
- The Board should continue to provide an incentive mechanism for CDM activities funded through distribution rates, and this mechanism should be consistent with the model currently in place.
- A fully allocated costing methodology should be applied to all LDC-delivered CDM activities.

- Revenues earned from OPA CDM contracts should be kept separate from the LDC's distribution revenue requirement.
- For CDM activities funded by the OPA, LDCs should be required to provide audited evaluation results when filing LRAM claims with the Board.
- For CDM activities funded through distribution rates, LDCs should undertake program evaluations, and provide audited results to the Board.
- The Board should limit its reporting requirements for CDM programs funded by the OPA to the information the Board needs to assess an LRAM claim, and the information should only be required when a claim is filed.
- The reporting requirements for CDM activities funded through distribution rates should be based on the current annual reporting requirements for third tranche and 2006 funding.
- Consideration of LDC CDM activities should form part of the Board's SQR review.