



# Lost revenue due to changes in electricity consumption

Alternative mechanisms.



# Context

- The Government of Ontario has committed to building a “culture of conservation” and has undertaken a coordinated effort involving different levels of government, distributors, the Board, the OPA, the IESO, 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 directives to the OPA regarding specific initiatives to assist with achieving those targets.



# Context

- 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 initiatives undertaken by all market participants (including distributors), as well as changes to codes, standards and regulations, will contribute towards achievement of these objectives.



# Introduction

- This consultation will consider alternative mechanisms to the current “LRAM” to address lost revenue due to changes in electricity consumption, including those resulting from all forms of conservation.
- This presentation summarizes and briefly evaluates some options.
- Alternatives to the current shared savings mechanism, and incentives or disincentives created by IRM options and whether separate incentives needed to address loss ↓ and fuel switching to also be considered in context of all IR mechanisms.



# Overview

- Alternatives to LRAM
  - 1 - A Revenue Stabilization Adjustment Mechanism
  - 2 - “CDM” factor in an Index Based Price Adjustment
  - 3 – Multi-year CDM Planning & Funding
  
- Criteria for Evaluating Alternatives
  
- Appendix: Background on Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond



# 1 - A Revenue Stabilization Adjustment Mechanism

- Comprehensive revenue stabilization adjustment mechanism (“RSAM”) that uses the variance between forecast and actual consumption as the basis for a lost revenue adjustment.
- Would eliminate the impact of all variances from forecast in electricity demand:
  - impact from all CDM programs, regardless of whether implemented by the distributor; and
  - any other factors that might affect electricity demand (e.g. the economy, weather and customer growth).

For details on the Board’s November, 2006 consultation on this mechanism, please visit [http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects\\_cdm\\_revenuestabilization.htm](http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects_cdm_revenuestabilization.htm)



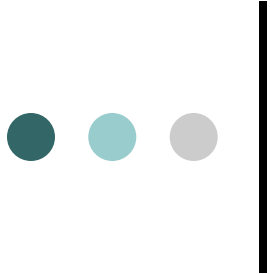
# 1 - A Revenue Stabilization Adjustment Mechanism

## Pros

- would remove the risk associated with revenue variances – revenue neutrality

## Cons

- change in risk profile may need to be reflected in capital structure or allowed ROE
- burden on distributors to produce required load forecasts
- “after the fact “adjustments to actual results, e.g. weather normalization, to calculate variances for the purpose of establishing true ups to revenues
- revenue neutrality is contrary to the concept of incentive regulation



## 2 – “CDM” factor in an Index Based Price Adjustment

- Adjustment factor based on the targets set by Government and/or OPA that could be included with incentive regulation formulae to reduce the impact of lower revenues due to reduced per capita consumption.
- Conservation targets used to forecast “CDM” factor could include:
  - Provincial targets disaggregated by demand; or
  - Rate-funded CDM; and
  - Distributor-specific targets as per contractual agreement with OPA.

This model was proposed by Hydro One Networks in the Board's November, 2006 consultation on the EDA's Proposed RSAM. Further details available: [http://www.oeb.gov.on.ca/documents/cases/RP-2004-0203/2006-11-submissions/h1n\\_211106.pdf](http://www.oeb.gov.on.ca/documents/cases/RP-2004-0203/2006-11-submissions/h1n_211106.pdf)

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## 2 – “CDM” factor in an Index Based Price Adjustment

- Annual adjustments that reflect both changes in provincial targets and provincial actual CDM results would ensure that any changes to the expected CDM programs are captured in a going forward manner.



## 2 – “CDM” factor in an Index Based Price Adjustment

### Pros

- Clearly supports government conservation targets
- Consistent with the nature of the adjustment mechanisms which relies on the use of forecast indices

### Cons

- Inflates revenues based on targets that may or may not be achieved
- Difficult to disaggregate conservation targets across the 85+ distributors (easier to allocate if distributor specific).



## 3 – Multi-year CDM Planning & Funding

Highlights of approach in Ontario's gas sector:

- A three-year term for the first DSM plan.
- Processes for adjustments during the term of the plan.
- Formulaic approaches for DSM targets, budgets, and utility incentives.
- Determination of how costs should be allocated to rate classes.
- A framework for determining savings.
- A framework and process for evaluation and audit.



## 3 – Multi-year CDM Planning & Funding

Current approach in electricity sector similar:

- Annual application for CDM funding.
- Processes for adjustments during the term of the plan.
- Formulaic approaches for CDM targets, budgets, and distributor incentives.
- Determination of how costs should be allocated to rate classes.
- A framework for determining savings.
- A framework and process for evaluation and audit.



## 3 – Multi-year CDM Planning & Funding

### Pros

- Consistent with approach in gas sector
- Builds on existing regulatory framework

### Cons

- Regulatory burden associated with preparation, review and approval of 85+ multi-year CDM plans
- Benefits to maintaining separation from other IR processes uncertain???



To ensure alignment of the 3<sup>rd</sup> Generation IR framework with the Board's statutory responsibilities and objectives, the framework should be designed on the basis of the following principles:

1. Protect customers in relation to prices.
2. Better align the financial interests of distributors with consumer interests and government policy objectives.
3. Provide a sustainable regulatory framework that is predictable and at the same time responsive to changing circumstances.
4. Promote economic efficiency by providing the appropriate pricing signals and a system of incentives for distributors to maintain an appropriate level of reliability and quality of service.
5. Provide for prudent investment necessary to maintain an appropriate level of reliability and quality of service.
6. The rate-setting methodology should be predictable, understood by all participants, and capable of implementation through a regulatory process that is efficient while at the same time addresses the concerns of interested parties and ensures openness and transparency.



## Appendix: The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond

### Highlights of the Framework

For details on the Board's on-going work in relation to Conservation and Demand Management, please visit [http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects\\_distconservation.htm](http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects_distconservation.htm))



# The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond /1

In designing framework, Board guided by the following principles:

1. Implementation of government policy should be facilitated.
2. Regulatory certainty and predictability should be provided.
3. Confusion in the CDM marketplace should be minimized.
4. Administrative efficiency should be attained to minimize the regulatory burden to distributors, and costs to ratepayers, while maintaining transparency and thoroughness in regulatory processes.

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## The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond /2

### ○ CDM Funding

- By application until such time as OPA funding for these programs becomes available. As funding from the OPA becomes available for all other types of programs, the Board expects that distributors will apply to the OPA for funding; and
- Board will continue to receive applications for funding through distribution rates for programs designed to address local reliability or system improvement situations.



## The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond /3

- Revenue Protection
  - The current form of lost revenue adjustment mechanism (LRAM) will be available to distributors to address revenue erosion resulting from distributor CDM activities, regardless of whether the programs are funded by the OPA or through distribution rates.
  - Consideration of alternative mechanisms to address lost revenue due to changes in electricity consumption, including those resulting from all forms of conservation, should be considered as part of the process to develop 3<sup>rd</sup> Generation IRM and/or during the Board's review of options for the fundamental redesign of electricity distribution rates.



## The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond /4

- Incentive Mechanisms
  - Board does not provide a shareholder incentive mechanism for CDM activities funded by the OPA.
  - Incentive mechanism for CDM activities funded through distribution rates will continue to be available to distributors, and that this mechanism will be consistent with the shared savings mechanism (SSM) model currently in place.
  - Board expressed view that a review of incentive mechanisms should be considered as part of the Board's process to develop 3<sup>rd</sup> Generation IRM and/or during the Board's review of options for the fundamental redesign of electricity distribution rates.



## The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond /5

- Cost Allocation
  - distributors must use a fully allocated costing methodology for all distributor-delivered CDM activities.
- Revenue Allocation
  - Consistent with the Board's position on the treatment of costs associated with OPA-funded CDM activities, the Board has determined that revenues earned from OPA CDM contracts be kept separate from the distributor's distribution revenue requirement.



## The Current Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond /6

- Program Evaluation
  - OPA-funded: Distributors expected to provide an independent third party evaluation of program results when filing LRAM claims with the Board, and that the scope of the evaluation should be limited to confirming that the participation level in the distributor service area is accurate and that the energy savings assumptions used in the calculation of the lost revenue amount are consistent with those used by the OPA.
  - Rate-funded: Distributors expected to undertake program evaluations, and to provide results to the Board that have been reviewed by a third party.