ONTARIO POWER AUTHORITY

June 21, 2010

Advice to the Ontario Energy Board: CDM Target Allocation for Ontario LDCs

ONTARIO POWER AUTHORITY

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1.0 INTRODUCTION

1.1 Purpose

This document is provided in response to the directive issued by the Minister of Energy and Infrastructure ("the Minister"), requiring the Ontario Power Authority ("OPA") to provide advice to the Ontario Energy Board ("OEB") on the appropriate allocation of conservation and demand management ("CDM") targets among Ontario's electricity distributors.

1.2 Background

With the passage of the Green Energy and Green Economy Act, 2009 ("GEA"), Ontario distributors have been given new responsibilities with regard to the design and delivery of CDM programs. Specifically, section 27.2 of the Ontario Energy Board Act was amended to include the following:

> ***Directives re conservation and demand management targets***
>
> ***27.2*** *(1) The Minister may issue, and the Board shall implement, directives that have been approved by the Lieutenant Governor in Council that require the Board to take steps specified in the directive to establish conservation and demand management targets to be met by distributors and other licensees. 2009, c. 12, Sched. D, s. 7.*
>
> ***Directives, specified targets***
>
> *(2) To promote conservation and demand management, a directive may require the Board to specify, as a condition of a licence, the conservation targets associated with those specified in the directive, and the targets shall be apportioned by the Board between distributors and other licensees in accordance with the directive. 2009, c. 12, Sched. D, s. 7.*

On March 31, 2010, the Minister issued a directive to the OEB, instructing it to establish mandatory CDM Targets for LDCs to achieve reductions in electricity consumption and reductions in peak provincial electricity demand over a four year period beginning January 1, 2011 (the "CDM Targets"). That directive specified that the total of the CDM Targets established for all LDCs be equal to 1,330 megawatts (MW) of provincial peak electricity demand and 6,000 gigawatt hours (GWh) of electricity consumption over that four-year period ("LDC Provincial Aggregate Targets").

Recognizing the key role to be played by the OPA in coordinating and facilitating the successful implementation of CDM, on April 23, 2010, the Minister issued a corresponding directive to the OPA, focussing on three opportunities to advance conservation:

1. *Strategic co-ordination of CDM programs with LDCs and the OEB;*
2. *Energy efficiency and demand response programs involving First Nation and Métis communities;*
3. *Support and funding of CDM research and innovation.*

The directive to the OPA specified three initiatives with regard to strategic coordination with LDCs and the OEB. This document represents the OPA's response to the first of these initiatives, as follows:

> *Provide advice to the OEB, following consultation with LDCs, on the appropriate allocation of CDM Targets amongst LDCs.*

In developing its CDM Target allocation advice, the OPA worked closely with the Ministry of Energy and Infrastructure ("MEI"), the OEB and the Electricity Distributors Association CDM Caucus and the CDM Committee of the Board ("EDA"). These parties met regularly throughout 2009 and the beginning of 2010 to develop an implementation framework for the conservation elements of the GEA.

The OPA also sought input from all Local Distribution Companies ("LDCs") via a written consultation process. Section 3 of this document summarizes the consultation process undertaken by the OPA. The OPA's consultation paper entitled, "The Establishment of LDC Conservation Targets under the Green Energy Act – Target setting and allocation methodology advice from the OPA" that was distributed to all LDCs is attached to this document as Appendix A ("the consultation paper"). The OPA's responses to comments received from LDCs on the consultation paper are attached to this document as Appendix B. The letters that the OPA received from LDCs are attached to this document as Appendix C.

2.0 CDM TARGET ALLOCATION ADVICE

The OPA's recommendations to the OEB on allocating the LDC provincial peak demand savings target of 1,330 MW and the LDC provincial energy savings target of 6,000 GWh to each distributor whose license will be amended by the OEB to add a condition requiring the distributor to achieve reductions in electricity consumption and reductions in peak provincial electricity demand are specified in Appendix D. The OPA's recommendations are described further below.

Individual LDC Energy Savings Targets

The OPA recommends that energy savings targets be allocated based on each LDC's share of total annual energy consumption, by customer account type based on the most recent year of available data.

The OPA recommends using the most recent year of energy consumption data available. The OPA notes that as of time of writing, the most recent publically available data on annual energy consumption of Ontario's LDCs is the 2008 OEB Yearbook of Distributors published in September 2009.[1] The OPA has used the 2008 OEB Yearbook data with an adjustment to the

[1] Ontario Energy Board. 2008 Yearbook of Electricity Distributors. Pages 83-96. September 10, 2009.

data of Hydro One Networks, Inc. (HONI) in the development of its CDM Target allocation advice.[2]

Recommended energy savings target allocation methodology

Individual LDC Energy Savings Target (MWh) = RE% * RE + NRE% * NRE

Where:

RE% = LDC Annual Energy Consumption for all Residential Customers ÷ Sum of Annual Energy Consumption for Residential Customers for all LDCs that have CDM Targets

RE = Total Projected Residential Sector Contribution to LDC Provincial Aggregate Energy Savings Target = 1150 GWh

NRE% = LDC Annual Energy Consumption for all Non-Residential Customers ÷ Sum of Annual Energy Consumption for Non-Residential Customers for all LDCs that have CDM Targets

NRE = Total Projected Non-Residential Sector Contribution to LDC Provincial Aggregate Energy Savings Target = 4850 GWh

Individual LDC Peak Demand Savings Targets

The OPA recommends that peak demand savings targets be allocated based on each LDC's relative contribution to system peak demand.

In June 2009, the OPA and EDA jointly identified a methodology for estimating LDCs' relative contributions to the system peak, based on their contribution to summer monthly system peaks over two years as follows:

Demand target allocation methodology developed by OPA and EDA in June 2009 (not recommended)

Demand Target Allocation Factor (Dem%) = (Dem%Yr1 + Dem%Yr2) ÷ 2
Where:

Dem%Yr1 = (Sum of LDC demand at system monthly peak hours for June-September 2007) ÷ (Sum of demand of all LDCs that have CDM targets at system monthly peak hours for June-September 2007)

[2] The OPA made an adjustment to HONI's data in the OEB Yearbook to address HONI's submission via the CDM Target advice consultation. In particular, the OPA adjusted energy consumption data from the OEB Yearbook to exclude embedded non-wholesale market participants and include wholesale market participants in HONI's service territory.

Dem%Yr2 = (Sum of LDC demand at system monthly peak hours for June-September 2008) ÷ (Sum of demand of all LDCs that have CDM targets at system monthly peak hours for June-September 2008)

This estimation methodology was included and identified as the preferred option in the discussion paper "The Establishment of LDC Conservation Targets under the Green Energy Act – Target setting and allocation methodology advice from the OPA" that was distributed to all LDCs in April 2010 as part of consultation process for this advice.

Based on submissions received from LDCs, the OPA has modified its recommended peak demand target allocation factors, in order to better align with the OPA's EM&V methodology and protocol for estimating peak demand impacts from CDM resources and to use the latest data to reflect current economic downturn conditions. The OPA estimates the summer coincident peak demand savings from its conservation programs based on "CF2" coincidence factors that are based on the top 10 system peak hours. The alignment is important since the EM&V methodology and protocol, as modified by the OPA from time to time, will be used to assess the MW and MWh savings achieved from Tier 1, Tier 2 and Tier 3 programs and consequently achievement of LDC CDM Targets.

As such, the OPA recommends using a peak demand target allocation factor which is based on each LDC's average contribution to the top 10 system peak hours, over the most recent two years of available data, as shown below.

Recommended peak demand savings target allocation methodology

Individual LDC Peak Demand Savings Target (MW) = Dem% * LDC Provincial Aggregate Peak Demand Savings Target of 1330 MW

Where:

Dem% = (Dem%Yr1 + Dem%Yr2) ÷ 2

Dem%Yr1 = (Sum of LDC demand at top 10 system peak hours in Year 1) ÷ (Sum of demand of all LDCs that have CDM Targets at top 10 system peak hours in Year 1)

Dem%Yr2 = (Sum of LDC demand at top 10 system peak hours in Year 2) ÷ (Sum of demand of all LDCs that have CDM Targets at top 10 system peak hours in Year 2)

The OPA recommends using an average of 2008 and 2009 demand data.

The OPA notes that there is currently no publicly available information on each LDC's demand at the time that the system peak occurs. The OEB Yearbook includes each LDC's Winter Peak, Summer Peak and Average peak demand *for their own system*s, which does not necessarily align with the peak demand for the Ontario system as a whole. The IESO has hourly demand

data for all LDCs delivery points connected to the IESO controlled transmission grid, however many LDCs have some or all of their delivery points within Hydro One Network's distribution system. There are more than 60 fully or partially embedded LDCs within Hydro One's distribution system. As a result, the OEB has obtained the appropriate information on LDC's demand at the time that the system peak occurs, including those LDCs fully or partially embedded within Hydro One's distribution system, and has provided that information to the OPA. That data has been used to develop the recommended peak demand target allocation factors.

3.0 CONSULTATION WITH LOCAL DISTRIBUTION COMPANIES

In developing its CDM Target allocation advice, the OPA worked closely with the MEI, the OEB and the EDA. These parties met regularly throughout 2009 and the beginning of 2010 to develop an implementation framework for the conservation elements of the GEA.

As part of that collaboration, the MEI asked the OPA to develop advice as follows:

a) For the MEI, advice on establishing LDC Provincial Aggregate CDM Targets from January 1, 2011 - December 31, 2014; and,

b) For the OEB, advice for an allocation methodology for determining individual LDC CDM Targets based on the LDC Provincial Aggregate CDM Targets.

In response to the MEI's request, the OPA developed a consultation paper entitled, "The Establishment of LDC Conservation Targets under the Green Energy Act – Target setting and allocation methodology advice from the OPA", which described the methodological framework that the OPA employed in the development of its advice.

That consultation paper was distributed by email to all LDCs[3] in the province on April 1, 2010, with a request to provide written comments by April 12, 2010. The consultation paper is attached to this document as Appendix A.

The OPA received eight responses representing a total of 27 LDCs as follows:

- → London Hydro Inc.;
- → Cornerstone Hydro Electric Concepts Association Inc, representing the following members: Centre Wellington Hydro; COLLUS Power; Innisfil Hydro Distribution Systems; Lakefront Utilities; Lakeland Power Distribution; Midland Power Utility; Orangeville Hydro; Parry Sound Power; Rideau St. Lawrence Distribution; Wasaga Distribution; Wellington North Power; and, West Coast Huron Energy;
- → Enersource Hydro Mississauga;

[3] Emails were sent to all LDC Chief Executive Officers and LDC Conservation Officers as registered with the OPA.

- → the Niagara Erie Power Alliance group of utilities representing the following members: Algoma Power Inc.; Brant County Power Inc.; Canadian Niagara Power Inc.; Grimsby Power Inc.; Haldimand County Hydro Inc.; Niagara-on-the-Lake Hydro Inc.; Niagara Peninsula Energy Inc.; Welland Hydro Electric System Corp.; and, Westario Power Inc.;
- → North Bay Hydro Distribution Ltd.;
- → Northern Ontario Wires, Inc.;
- → Oshawa PUC Networks Inc.; and,
- → Hydro One Networks, Inc.

The OPA has reviewed all the comments received from LDCs regarding the OPA's CDM Target allocation advice to the OEB. The OPA received comments from LDCs both with respect to target setting and allocation methodology. While the OPA has developed a response to each of the comments it received on the written consultation, the OPA considers the aggregate CDM Targets specified in the Minister's directive (1330MW and 6000 GWh) to the OEB to be final. Thus, any comments received regarding modification to aggregate CDM Targets for LDCs are assumed to be outside of the scope of the OPA's advice to the OEB on CDM Target allocation.

The following is a summary of key comments that the OPA received on CDM Target allocation along with the OPA's response to those comments.

Comment/Question	**OPA Response**
How will previous CDM activities be reflected in LDC's CDM Targets?	Previously implemented CDM activities are not reflected in the LDC Aggregate Provincial CDM Targets (1330MW, 6000 GWh) as these targets are based on activities to be implemented within the 2011-2014 period. The OPA expects that MW savings from DR under contracts entered into prior to 2011, that are expiring during the 2011 – 2014 period and are renewed in that period and that continue under contract at the end of that period, will be counted toward the CDM Target. Previously implemented CDM measures may affect an individual LDC's CDM Targets as a result of their impact on target allocation factors. Since recommended allocation factors for peak demand savings and energy savings are based on historic LDC-specific contributions to provincial peak demand and provincial energy consumption, previously implemented conservation activities which have reduced an LDC's energy consumption or peak demand will

Comment/Question	OPA Response
	be taken into account.
It would be more appropriate to use 2009 data.	The OPA supports the principle that the best available information should be used to inform its CDM Target allocation advice and has developed its advice in a manner consistent with that principle. With respect to development of energy savings target allocation factors, the OPA notes that as of time of writing, the most recent publically available data on annual energy consumption of Ontario's LDCs is the 2008 OEB Yearbook of Distributors published in September 2009. The OPA regards the Yearbook as the best available information for use in allocation individual LDC energy targets. However, the OPA is recommending the use of 2008 and 2009 data for application in the development of peak demand savings target allocation factors. This will also recognize the impact of recent economic downturn on the demand for electricity.
It would be more appropriate to adjust energy consumption data from the OEB Yearbook to exclude embedded non-wholesale market participants and include wholesale market participants, in order to better reflect the energy consumption by Hydro One Networks, Inc.	The OPA supports the principle that the best available information should be used to inform its CDM Target allocation advice and has developed its advice in a manner consistent with that principle. The OPA was not made aware of this particular concern with respect to the OEB Yearbook data as published prior to the OPA and the EDA CDM Caucus agreeing upon a preferred CDM Target allocation methodology. The OPA supports the proposed adjustment to energy consumption numbers as shown in the OEB Yearbook. The OPA has applied the necessary adjustment to the data of Hydro One Networks, Inc. in the development of its CDM Target allocation advice.
Provide clarification on what constitutes the system peak in the context of peak demand savings targets.	Based on feedback received through the written consultation, the OPA has modified its CDM Target allocation methodology advice with respect to the development of the LDCs' peak demand target allocation factors in order to better align with the OPA's EM&V methodology and protocol, as modified by the OPA from time to time, for estimating peak demand impacts from CDM resources. Rather than use each LDC's average contribution to the system 1-hour monthly peak over the

Comment/Question	OPA Response
	June – September period, as originally agreed to with the EDA and as proposed in the consultation paper, the OPA recommends that demand allocation factors be developed on the basis of each LDC's average contribution to the top 10 system peak hours.
On what basis will winter peaking distributors be allocated peak demand savings targets given that the coincident system peak demand occurs in the summer?	The OPA's peak demand allocation methodology advice is based on each LDC's historical average contribution to the provincial system peak and is not based on each LDC's own individual peak. That methodology is able to account for a winter-peaking LDC's load shape within the context of provincial peak demand, which occurs during the summer in Ontario.

The complete set of the OPA's responses to comments received from LDCs on the consultation paper are attached to this document as Appendix B. The letters that the OPA received from LDCs are attached to this document as Appendix C.

The OPA is appreciative of the input received from LDCs, which has served to strengthen the OPA's CDM Target allocation advice to the OEB.

4.0 APPENDICES

Appendix A: The OPA's Consultation Paper

April 1, 2010

Establishment of LDC Conservation Targets under the Green Energy Act
- Target setting and allocation methodology advice from the OPA -

1. Introduction

The Green Energy and Green Economy Act (GEA, 2009) introduced significant changes to the way conservation will be implemented in Ontario. A fundamental change is that Ontario's more than 70 Local Distribution Companies (LDCs) will be given mandatory electricity conservation targets as part of their licence condition from the Ontario Energy Board.

Over the past 15 months, the Ontario Power Authority (OPA) has been working closely with the Ministry of Energy and Infrastructure (MEI), the Ontario Energy Board (OEB), the Electricity Distributors Association (Conservation and Demand Management (CDM) Caucus and the CDM Committee of the Board) to develop an implementation framework for the conservation elements of the GEA.

As part of this work, the MEI asked the OPA to develop advice as follows:

a) For the MEI, advice on establishing a **provincial aggregate LDC conservation target** for peak demand savings and energy savings to be achieved by all LDCs from January 1, 2011 - December 31, 2014; and,
b) For the OEB, advice for an **allocation methodology for determining individual LDC conservation targets** based on the provincial aggregate LDC target.

This paper describes how the OPA developed that advice. In particular, it describes the principles and methodological framework that the OPA used. Actual targets are not specified within this document.

The OPA is seeking input from LDCs on the target setting and allocation advice described in this document. LDCs are requested to provide input in writing to the OPA by **Monday April 12th.** It is anticipated that all input received will be made available to the LDC community, the EDA, the OEB and the MEI.

2. Overarching Principles

The OPA was guided by the following principles in the development of its target setting and allocation advice:

- **Principle 1 - Plan based.** LDC conservation targets and underlying data should support implementation of the Provincial Integrated Power System Plan.

- **Principle 2 - Consistency/transparency/accessibility.** There should be a consistent and transparent methodological framework for target setting and allocation across all LDCs.

- **Principle 3 - Multi-year.** LDCs should have multi-year conservation targets which align with multi-year portfolio planning and budget approvals.

- **Principle 4 - Peak demand and energy savings.** LDC conservation targets should be two part - consisting of system peak demand (MW) savings and energy (MWh) savings.

- **Principle 5 - Alignment with areas of LDC influence and target period**
  - Targets *should* reflect savings from activities starting in the first year of the target period onwards (i.e. should not include persistent savings from activities implemented before the target period);
  - Targets *should not* include conservation resources from activities outside of LDC influence (e.g. codes and standards, federal/provincial programs, gas LDC programs, NGO programs, transmission connected industrial programs); and
  - Targets *should* be set at the end-user/customer level (i.e., exclude avoided transmission and distribution losses as they are a function of distribution system infrastructure).

3. Development of Conservation Target Setting and Allocation Methodology Advice

As illustrated in Figure 1, the OPA developed its advice through a three-step process:

1. Identify savings projections from Provincial Integrated System Plan for activities implemented in the target period (January 2011 - December 2014)
2. Subtract resources and activity projections for which LDCs are not accountable, in order to determine the Provincial LDC Aggregate Target
3. Allocate aggregate target among individual LDCs using allocation methodology

Each step is described in further detail below.

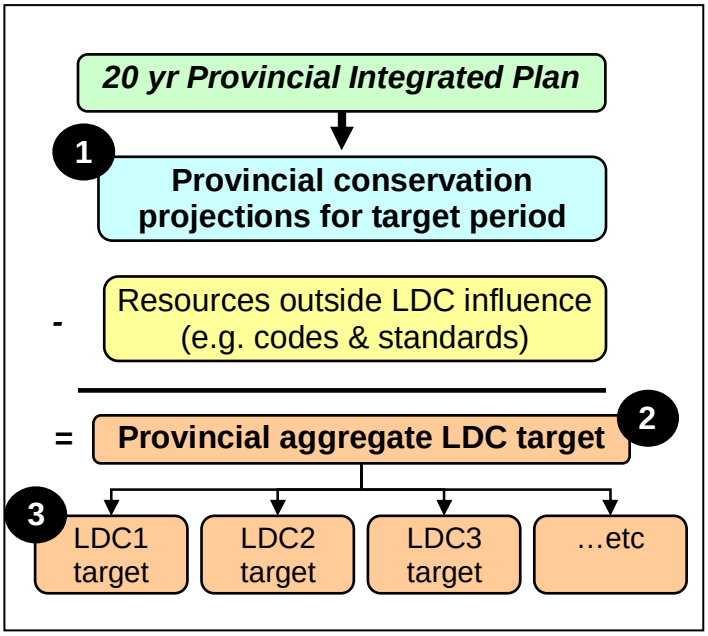

Figure 1 Provincial target setting & LDC allocation process

STEP 1: Identify provincial conservation resource projections for activities implemented during target period (2011-2014)

In line with Principle 1 (Plan Based) above, the starting point for the development of target setting and allocation advice was the provincial Integrated Power System Plan (IPSP). In August

2007, the OPA submitted a 20-year IPSP to the OEB for approval, which included conservation resource projections for the 2008-2027 plan period. Conservation projections for the first three years of the plan were developed based on forecast savings from a planned portfolio of more than 20 conservation programs to be funded by the OPA, as well as forecast savings from non-OPA conservation activities including deployment of smart meters/time-of-use (TOU) pricing, codes and standards and provincial/federal government conservation programs.

On September 17, 2008 the Minister of Energy and Infrastructure issued a directive asking the OPA to review the viability of accelerating the achievement of stated conservation targets. On October 2, 2008, the IPSP hearing at the OEB was adjourned until further notice.

In late 2008 through early 2009, the OPA revised its near-term (2008-2013) provincial conservation projections, as set out in the IPSP, in response to the Minister's Directive. The revision process included the following steps:

a) **OPA-funded energy efficiency & demand response programs**. Projections for the planned portfolio of OPA-funded energy efficiency and demand response programs were updated based on three scenarios for the 2008-2013 period: Best Case, Short-term Economic Downturn and Sustained Economic Downturn.

   All three scenarios took into account the following factors:
   - The performance to date for programs which had already launched by 2008 year-end;
   - The anticipated near-term restraints on conservation opportunities from the economic downturn which began in mid-2008; and
   - The delayed launch of several conservation programs in 2008 and 2009.

   Conservation projections of peak demand and energy savings were developed in a "bottom-up" manner *by program* and aggregated into provincial projections. Projections were not developed in a bottom-up manner by LDC or geographical region.

b) **Other conservation activities**[4]**.** The OPA developed one set of resource savings projections associated with the following resources:
   - Smart meters/time-of-use (TOU) rates
   - "Other influenced" conservation programs (e.g. federal/provincial programs, gas LDC programs, NGO programs)
   - Codes and standards
   - Customer-based generation

Given the prevailing economic outlook, the OPA used the Sustained Economic Downturn scenario as basis for updated provincial projections and for advice to MEI for setting Provincial Aggregate LDC Conservation Target. Subsequently, program level projections were developed for the year 2014 by assuming the same incremental increase in resources in 2014 as that projected for 2013.

[4]In Fall 2009, conservation projections were refined based on a revised forecast of expected resource savings from smart meters/TOU and changes in the treatment of customer-based generation resources to exclude FIT and micro-FIT resources from conservation (i.e., resources must be installed behind meter and reduce customers' own demand to be considered as conservation).

Once provincial projections were determined, any applicable avoided upstream distribution and transmission losses were then removed to determine provincial resource savings projections at the end-user (in line with Principle 5 above).

Finally, expected resource savings (peak demand and energy) from conservation activities implemented in 2008, 2009 and 2010 were removed to arrive at resource savings for the 2011-2014 target period. It should be noted that the removal of conservation resources implemented before 2011 impacted resource savings projections during the 2011-2014 period due to the persistence of resource savings associated with the removed measures. For example, if a high efficiency furnace is installed in 2010, it will lead to energy savings for more than 15 years. In line with Principle 5 above, the persisting impacts of conservation activities which were implemented before 2011 were not included in the LDC Aggregate Target.

Figure 2 provides a detailed illustration of Step 1. The output of Step 1 was shared with the Electricity Distributor's Association (CDM Caucus and CDM Committee of the Board) in May 2009. Updated projections, based on updated estimates for savings from smart meters/TOU rates and changes in treatment of customer based generation as conservation resources, were shared with the EDA (CDM Caucus and CDM Committee of the Board) in November 2009

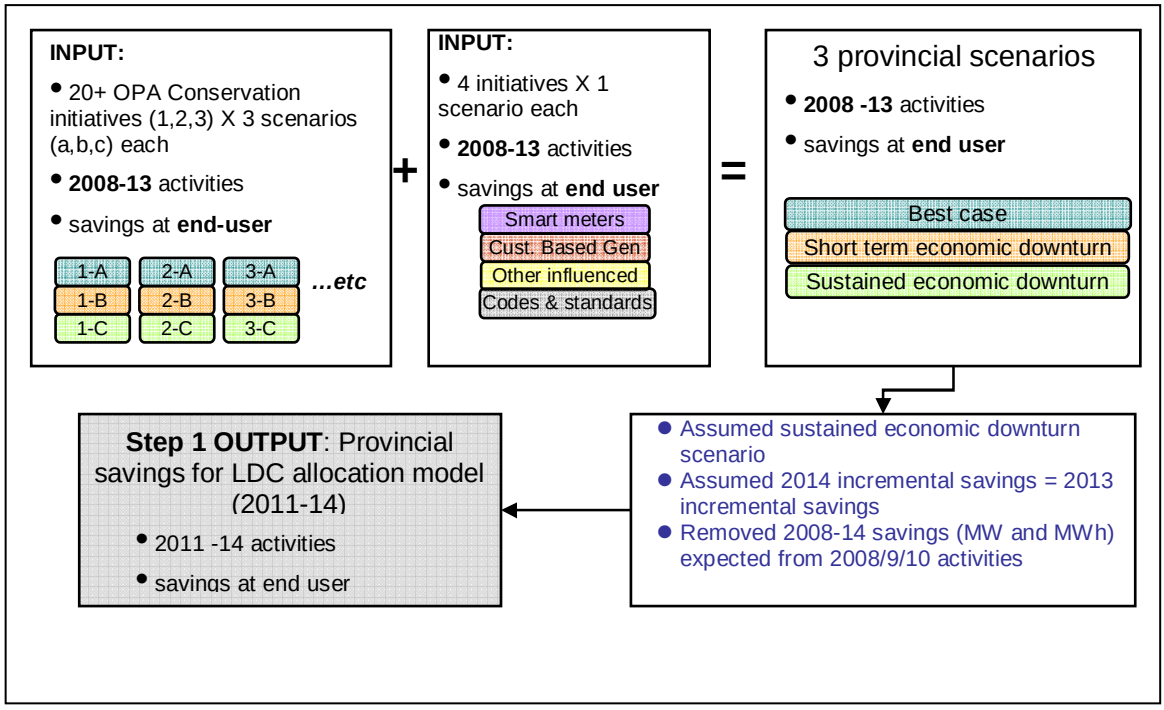

Figure 2 Development of provincial conservation projections from 2011-2014 activities

Step 2: Subtract resource savings projections outside of LDC influence to determine aggregate LDC targets

The following resources were subtracted from the provincial projections from Step 1and excluded from the LDC aggregate target advice as these resources were assumed to be outside of the direct control or influence of LDCs:

- Savings from planned changes to Codes and Standards
- Savings from conservation programs for Transmission-connected industrial facilities (including energy efficiency, customer based generation and demand response)
- Savings from "Other influenced" conservation (provincial and federal government-led conservation programs, gas distributors' programs, NGO programs)
- Savings from OPA-funded Aboriginal Conservation Program

All other conservation resources included in the provincial projections have been included in the advice to the MEI regarding the Provincial Aggregate LDC Conservation Target. Specifically, the following resources have been included:

- Residential energy efficiency
- Commercial energy efficiency
- Residential demand response
- Small commercial demand response
- Smart meters/TOU rates
- Fuel switching
- LDC connected industrial energy efficiency
- LDC connected commercial demand response
- LDC connected Industrial demand response

The output of Step 2 was initially shared with the Electricity Distributor's Association (CDM Caucus and CDM Committee of the Board) in May 2009. Updated projections, based on updated estimates for savings from smart meters/TOU rates and changes in treatment of customer based generation as conservation resources, were shared with the EDA (CDM Caucus and CDM Committee of the Board) in November 2009.

Step 3: Allocate LDC aggregate targets among individual LDCs using allocation methodology

The OPA identified and considered five potential scenarios for allocating LDC's individual share of the provincial aggregate LDC target, based on readily available LDC-specific data in the OEB Yearbook of Electricity Distributors (Table 1 below). All scenarios assume that conservation potential and load growth is the same across all LDCs.

Based on an assessment of the pros and cons of each option, in consultation with the MEI, the OPA identified Scenario 5 as the preferred allocation methodology based on readily available data in the OEB Yearbook.

Table 1 LDC target allocation methodology scenarios considered

Allocation based on:	PROS	CONS
1. share of provincial population	• simple – single variable multiplied by provincial aggregate LDC target	• assumes all LDCs have same split of industrial/ residential/commercial customers • assumes all LDCs have same energy intensity (kWh/customer)
2. share of provincial number of electricity customer accounts	• simple – single variable multiplied by provincial aggregate LDC target	• assumes all LDCs have same split of industrial/ residential/commercial customers • assumes all LDCs have same energy intensity (kWh/customer)
3. share of provincial energy consumption (kWh) per year	• simple – single variable multiplied by provincial aggregate LDC target • accounts for differences in energy intensity (i.e. kWh/ customer) between LDCs	• assumes all LDCs have same split of industrial/ residential/commercial customers
4. share of provincial electricity accounts, by customer account type (i.e. residential vs. general service)	• accounts for differences in proportion of residential versus non-residential customers between LDC	• assumes all LDCs have same energy intensity (kWh/customer) • assumes all LDC have same breakdown within non-residential customers (i.e. industrial, commercial and institutional) • more complex - need to apply two allocation variables
5. share of provincial energy consumption, by customer account type (preferred option)	• accounts for differences in proportion of residential versus non-residential customers between LDC • accounts for differences in energy intensity (i.e. kWh/ customer) between LDCs	• assumes all LDC have same breakdown within non-residential customers (i.e. industrial, commercial and institutional) • more complex - need to apply two allocation variables

All five scenarios and the identified preferred option were shared with the EDA (CDM Caucus and CDM Committee of the Board) in May 2009. Feedback was received from the EDA endorsing Scenario #5 as the preferred allocation methodology for the *energy component* of the Provincial LDC Aggregate Conservation Target, however concern was expressed regarding the use of an energy-based factor for allocating the *peak demand* component of the provincial target.

The OPA acknowledged and agreed with the EDA's concerns regarding the use of energy consumption data to allocate a demand savings target, however the OPA also noted that information on the relative contribution of each LDC toward Ontario's system peak was not readily available in the public domain.

The OPA and EDA jointly identified the following preferred alternative methodology for allocating individual system peak demand savings targets to LDCs:

> **Demand Target Allocation Factor (Dem%)** = LDC's average contribution to the system 1-hr monthly peak, based on 8 months (June - Sept, 2007 and 2008)

The ability to calculate these allocation factors and use this methodology is contingent upon the OPA or OEB receiving the required historical demand data for all LDCs in the province.

The table below provides a summary of the preferred methodology for allocating individual LDC energy and demand savings targets based on a share of the province LDC Aggregate Target, which OPA has prepared as advice for the OEB's consideration in setting LDC targets.

Table 2 LDC Individual Target Allocation - preferred methodology

	Cumulative demand (MW) savings (2014)	Cumulative energy (MWh) savings (2011-14)
Residential	A	D
Commercial/ Institutional	B	E
Industrial	C	F
LDC Prov. Aggregate Target	**A+B+C**	**D+E+F**
LDC Individual Target*	**= (Dem%)*(A+B+C)**	**= (ResEnergy%)*(D) + (NonResEnergy%) *(E+F)**

Where:

- (ResEnergy%) = LDC share (%) of prov. Residential Energy Use (2008 OEB Yearbook)
- (NonResEnergy%) = LDC share (%) of prov. Non-Res. Energy Use (2008 OEB Yearbook)
- (Dem%) = LDC avg contribution to system 1-hr monthly peak, based on 8 months (June – Sept, 2007 and 2008)

4. Request for Feedback

The OPA is seeking input from LDCs on the target setting and allocation advice described in this document. LDCs are requested to provide input in writing to the OPA by Monday April 12th.
It is anticipated that all input received will be made available to the LDC community, the EDA, the OEB and the MEI.

Comments should be submitted by **Monday April 12th to**:

1. Email to submissions@powerauthority.on.ca. In the subject line, please specify "LDC Target Setting and Allocation Methodology", or
2. Mail to:

Ontario Power Authority
Attention: Heidi Parish
120 Adelaide Street West,
Suite 1600 Toronto, Ontario M5H 1T1

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1 **Appendix B: Comments Received from LDCs on the OPA's Consultation Paper and the OPA's Responses to Those Comments**

Commenting Party	Comment/Question	OPA Response
London Hydro Inc.	1. There has been sufficient input for a final approach to be taken on this issue. The proposal as provided in its current form is acceptable to London Hydro.	The OPA acknowledges the comments received from London Hydro.
London Hydro Inc.	2. The five over-arching principles as stated provide clear and supportive direction on the approach. Although there will always be differences of opinion among stakeholders, these principles do provide a clear, fair, consistent and defensible approach. Some could argue that past/previous activity should influence LDC assigned levels. However the question would be on what basis? Using measured results for the appropriate time period is a much easier quantity to defend. Moreover those LDCs that have been more active in the previous few years will/should be more predisposed to positively view these mandatory targets as an opportunity to succeed.	
London Hydro Inc.	3. The methodology makes the assumption that "all scenarios assume that conservation potential and load growth is the same for all LDCs." Although that is a very subjective and erroneous assumption, the question again becomes one of what basis would be more appropriate and defensible. As there are many variables involved once you try to move off the standard uniform assumption, defending an alternative approach would get lost in the details.	

Commenting Party	Comment/Question	OPA Response
London Hydro Inc.	4. Allocation of demand targets on the basis of the average of the two summer 2007 - 2008 LDC contribution to system peak is a reasonable approach. LDCs share of the provincial MW target reduction should be based on their influence/contribution to the system summer peak – as the system does peak in the summer period. Whether the allocation be based on a single-year single-month contribution or as proposed could be debated, however the two-year multi-month approach does permit some smoothing and minimizes a single unforeseen event.	
London Hydro Inc.	5. Since these targets will become mandated as part of an LDCs license and will be regulated by the OEB, many LDCs, who have had limited involvement in the development of this approach, will not have a sense of what this approach will impose on them re multi-year commitments – i.e. how many MW and MWh reductions in the time period? Most LDCs have a reasonably good sense of what percentage of the system MWh's their LDC account for on an annual basis. It would be appropriate to provide the system-wide target numbers (MW and MWh) for total LDC allocation for the four-year period to allow each LDC to at least do their own rough assessment of what this approach will commit them to achieving.	
Cornerstone Hydro Electric Concepts	1. The first year of the program and the targets have been discounted accordingly. This approach is supported. Question: How will LDCs be informed of the discounting of their specific targets as a result to the persistence from	The OPA considers the CDM Targets specified in the Minister's directive to the OEB to be final and therefore CDM Targets will not be discounted or adjusted in any way.

Commenting Party	Comment/Question	OPA Response
Association Inc.	previously installed measures in their service territory?	Previously implemented CDM activities are not reflected in the LDC Aggregate Provincial CDM Targets (1330MW, 6000 GWh) as these targets are based on activities to be implemented within the 2011-2014 period. The OPA expects that MW savings from DR under contracts entered into prior to 2011, that are expiring during the 2011 – 2014 period and are renewed in that period and that continue under contract at the end of that period, will be counted toward the CDM Target. Previously implemented CDM measures may affect an individual LDC's CDM Targets as a result of their impact on target allocation factors. Since recommended allocation factors for peak demand savings and energy savings are based on historic LDC-specific contributions to provincial peak demand and provincial energy consumption, previously implemented conservation activities which have reduced an LDC's energy consumption or peak demand will be taken into account.
Cornerstone Hydro Electric Concepts Association Inc.	2. The second question follows from the first. Question: If an LDC has been very active and successful in CDM prior to 2011 how is the better than average performance taken into account? Is it through recognition of a higher level of persistence of the savings from the previous measures or another vehicle?	
Cornerstone Hydro Electric Concepts Association Inc.	3. The methodology notes that one of the resources available to LDCs to achieve their target is fuel switching. I believe from working group meetings "fuel switching" in this program is a focus on the use of renewable energy. Question: Please confirm the definition of fuel switching for the purpose of achieving conservation targets.	Fuel switching occurs when customers elect to use other energy sources in place of electricity.[5]

[5] Integrated Power System Plan D-4-1 p.2. Submitted by the Ontario Power Authority to the Ontario Energy Board August 29, 2007.

Commenting Party	Comment/Question	OPA Response
Cornerstone Hydro Electric Concepts Association Inc.	4. Once the targets for individual LDCs are identified using the methodology, LDCs may want to better understand their specific target. LDCs may also want to provide specific input based on local conditions and to make specific modifications to the targets. Question: What will the process be for allowing LDCs to review, comment and request modifications to the specific targets set for their LDC?	The OEB will determine the process for LDCs to comment on their CDM Targets.
Enersource Hydro Mississauga	1. EHM recognizes that Ontario's Integrated Power System Plan (IPSP) has not yet been approved by the Ontario Energy Board and that in 2008, the OPA revised the near term conservation projections in response to the Minster's Directive. EHM supports the selection of the "Sustained Economic Downturn" base case for the basis of the updated provincial projections and furthermore believes that there is value in examining the recent impact of economic activity in 2009 to refine the economic outlook and revise conservation projections as needed. We believe that utilizing the most recent available economic information would provide enhanced accuracy and transparency into the setting methodology of provincial conservation projections.	The OPA supports the principle that the best available information should be used to inform its CDM Target allocation advice and has developed its advice in a manner consistent with that principle. With respect to development of energy savings target allocation factors, the OPA notes that as of time of writing, the most recent publically available data on annual energy consumption of Ontario's LDCs is the 2008 OEB Yearbook of Distributors published in September 2009. The OPA regards the Yearbook as the best available information for use in allocation individual LDC energy targets. However, the OPA is recommending the use of 2008 and 2009 data for application in the development of peak demand savings target allocation factors. This will also recognize the impact of recent economic downturn on the demand for electricity.
Enersource Hydro Mississauga	2. EHM supports the methodology to subtract resource savings projections outside of LDC influence to determine aggregate LDC targets. In addition, we feel that greater definition and clarity is required in this step to ensure	As indicated on page five of the OPA's consultation paper, resource savings from conservation programs for Transmission-connected industrial facilities (including energy efficiency, customer-based generation and demand

Commenting Party	Comment/Question	OPA Response
	fairness and equality amongst all market participants. For clarity, the methodology outlines that savings from transmission connected industrial conservation programs be excluded from LDC aggregate targets but does not elaborate on the methodology used to distribute such conservation savings amongst transmission connect market participants. It is valuable to note that LDCs may have larger industrial customers either embedded or connected as retail customers and these customers must be treated similar to their network connected counterparts to ensure equity, fair treatment and shared benefits. We believe that there is value in clarifying the methodology in allocating targets outside of LDC influence thus providing transparency and fairness in allocation of energy conservation targets to all market participants and stakeholders.	response) were excluded from the LDC aggregate CDM Target advice. CDM Targets will not be allocated to individual transmission-connected market participants.
Enersource Hydro Mississauga	3. EHM supports OPA's proposed methodology scenario for allocating the share of the provincial LDC aggregate target utilizing the most recent information available. In order to accurately identify the system changes due to activities undertaken in 2009, it is requested that LDC data from 2007 and 2008 be updated to include total energy and peak demand data from 2009. In such, the updated data for at least the last three years will more correctly reflect the impact of the economic changes, weather and system developments. Utilizing the 2009 LDC data will also ensure that the same time frame is used to the update the provincial assumptions underlying the revised provincial	Please refer to the OPA's response to Enersource Hydro Mississauga comment #1.

Commenting Party	Comment/Question	OPA Response
	conservation projections proposed.	
Niagara Erie Power Alliance group of utilities	1. The NEPA member utilities have been reviewing the "LDC Target Setting and Allocation Methodology Request for Written Comments" document released on April 1, 2010 and are working to complete their review to understand the impact of the targets on their respective LDC. Until this review is complete, the NEPA utilities cannot sign off of the methodology but intent to work diligently with the OPA to achieve this understanding. This due diligence is of the utmost importance to the utilities and the intent is to work collaboratively with the OPA to ensure that we understand the target settings and allocation methodology in use so that we can achieve the established targets and fulfill our role in contributing to the success of this initiative and also in achieving our conditions of license.	The OPA acknowledges the comments received from NEPA.
North Bay Hydro Distribution Ltd.	1. NBHDL has a winter peak and does not have the summer loads or electricity uses that drives peak demand that is typical of southern Ontario. NBHDL's average winter demand and energy consumption peaks in January from heating loads and is approximately 165% of any of the summer months May through September. Actual peak demand values would have a much larger spread. NBHDL's winter system peak does not contribute to the provincial summer peak therefore on what basis should NBHDL be assigned targets aimed at summer demand reduction caused by southern Ontario air conditioning loads?	The OPA's peak demand allocation methodology advice is based on each LDC's historical average contribution to the provincial system peak and is not based on each LDC's own individual peak. That methodology is able to account for a winter-peaking LDC's load shape within the context of provincial peak demand, which occurs during the summer in Ontario.

Commenting Party	Comment/Question	OPA Response
North Bay Hydro Distribution Ltd.	2. NBHDL is part of northeastern Ontario generation and transmission grid. This area is a net exporter of clean hydraulic generation to southern Ontario. NBHDL customers are much less dependent on expensive imports or peaking generation than those in southern Ontario. NBHDL customers do not have the loads or require the generation supply that CDM programs are targeted at mitigating. A much more effective means of sending proper pricing signals to customers would be to implement Locational Marginal Pricing. Let the pricing signal dictate appropriate actions to be taken by customers.	Locational Marginal Pricing is outside of the scope of the OPA's CDM Target allocation advice.
North Bay Hydro Distribution Ltd.	3. NBHDL would have difficulty targeting peak summer electricity kw and kwh reduction through CDM programs given limited summer electricity consumption. NBHDL feels that it might be possible to shift peak kw requirements to the off peak through such technologies as water heater load control and water reservoir filling at night. This shifting does not result in overall reduced kwh consumption however can shift kw demand to non critical time periods. NBHDL believes that if targets must be assigned to northern LDC's for some reason, there should be greater emphasis on kw shifting/reduction as opposed to energy reduction. This would also help to alleviate the province's surplus baseload generation problem. Load shifting, for residential, commercial, institutional and	The definition of conservation resources includes demand management, which occurs when customers reduce their electricity demand during peak use hours (peak clipping) or shift some of their demand to off-peak hours (peak shifting).[6]

[6] Ibid.

Commenting Party	Comment/Question	OPA Response
	industrial customers must be defined and accepted as a conservation resource as long as the metering is in place to quantify results.	
North Bay Hydro Distribution Ltd.	4. Step 3, page 5 indicates that "All scenarios assume that conservation potential and load growth is the same across all LDC's" The ally network involving skilled and knowledgeable distributors, engineers and contractors is critical for achieving CDM results. The ally network is less developed the greater the physical distance from major southern Ontario cities. To know, understand and appreciate this industry structural issue one must live and work in the more remote parts of this province. This is a practicality experienced by many northern LDC's and cannot be ignored when establishing targets. NBHDL does not have access to an experienced and thoroughly capable ally network to assist with CDM program implementation.	The OPA views capability building as an essential approach in achieving long-term Conservation goals. The OPA and the EDA CDM Caucus are currently working collaboratively to design Province-wide Conservation Programs that will support LDCs to meet their CDM Targets. Programs in all sectors are being designed to enable participation from LDCs of different sizes and locations across the province and will include a number of capability building initiatives to facilitate program participation.
North Bay Hydro Distribution Ltd.	5. NBHDL's third tranche conservation programs completed in 2008 were very effective at reducing electrical demand and consumption. They delivered 11.5 Million kwh of annual energy reduction and 92.6 Million kwh over the life of the measure. Winter peak reduction was 2.4 MW and summer peak reduction was 1.4MW. The delivery of these programs was just completed in 2008 and would not have been fully accounted for when targets were developed out of the PISP process. NBHDL feels that it has already made	Please refer to the OPA's response to Cornerstone Hydro Electric Concepts Association Inc. comment # 1 and 2.

Commenting Party	Comment/Question	OPA Response
	significant contributions to this provincial initiative and this effort should be fully recognized and factored in when determining targets.	
North Bay Hydro Distribution Ltd.	6. In summary, NBHDL notes that the concept of target allocation has been discussed since early 2009. NBHDL does not support this "top down" approach to developing conservation targets outlined in the OPA's April 1, 2010 document. The approach is far too general and simplistic in its assumptions. NBHDL supports a "bottom up" approach of developing a comprehensive and integrated CDM plan that addresses all variables and does not consider one variable (target setting) in isolation. Each LDC should develop a plan including programs, spending, targets, and a MV&E approach and submit to the OEB for approval. This would result in an overall plan that we understand, support, and can implement with a reasonable chance of achieving targets.	The OPA considers the CDM Targets specified in the directive to the OEB to be final. Thus, any comments received regarding modification to aggregate CDM Targets for LDCs are assumed to be outside of the scope of the OPA's advice to the OEB on CDM Target allocation.
Northern Ontario Wires, Inc.	1. We do however want to highlight that conservation programs in this province to date, have targeted summer peak demand. We, in northern Ontario want to play our part in the provincial conservation targets, however nothing has been done to address our situation where our peak demand occurs in the winter. It is acknowledged that all customers can take measures to reduce demand even during the winter season, however we believe it both prudent and critical that when targets	Please refer to the OPA's response to North Bay Hydro comment #1.

Commenting Party	Comment/Question	OPA Response
	are set, this is factored in our determinations rather than looking at summer reductions which are so different between the northern and southern portions of the province. We include for your perusal the total consumption (in kWh) of our LDC comparing our winter months of December through March versus our summer demands of June through September for the years of 2006 to 2009. We would also draw attention that in light of the unusually mild winter in 2010, our average consumption this year is almost equal to that of the winter 2007-08. Considering that targets set will have a direct impact on our licensing requirements, a "one-fit solution" for peak demand reduction respectfully cannot be applied between areas of summer and winter peak. Again, we endorse fully the need to reduce, however we must also properly set targets the season in which peak demand occurs.	
Oshawa PUC Networks Inc.	1. The methodology for allocating the targets is based on total consumption and peak demand activity for 2007 and 2008, and does not take into account the number of customers within the LDC's jurisdiction. In addition, the targets do not consider fluctuations in LDC's customer base since that time. We would like to suggest that targets be expressed in terms of conservation per customer rather than per customer class or per LDC. We believe that this will make it more equitable for those LDCs experiencing	The OPA and the EDA CDM Caucus assessed multiple allocation methodology scenarios including one that considered the share of provincial number of electricity customer accounts (allocation scenario # 2 on page 6 of the consultation paper) and determined that the preferred methodology was superior based on the considerations outlined in the consultation paper.

Commenting Party	Comment/Question	OPA Response
	larger than average fluctuations in their customer base.	
Oshawa PUC Networks Inc.	2. OPUC would also like to suggest that the OPA consider establishing minimum per customer consumption or peak demand "thresholds" in their calculations. LDCs who are managing to these minimum thresholds would be exempt from further allocations. We believe that at some point extracting incremental savings beyond minimum thresholds becomes difficult for LDCs who have been successful in promoting conservation within their service areas. Since these targets will be Conditions of License it would be inappropriate to penalize any LDcs who are in this position. Lower targets for these LDCs may be impractical and facilitate higher targets for LDCs who have more room to conserve.	Please refer to the OPA's response to Cornerstone Hydro Electric Concepts Association Inc. comment # 1 and 2.
Hydro One Networks, Inc.	1. Hydro One supports the proposed methodology for using the residential and general service splits in setting the energy target for LDCs. However, we have an issue on using the total energy consumption reported in the 2008 OEB yearbook. The OPA may want to consult with the OEB to see whether it is appropriate to use information in the yearbook for this purpose. The electricity consumption data reported in the yearbook is limited since it pertains to energy purchased by the LDCs for customers who are Non-Wholesale Market Participants (NWMP) and does not capture the energy distributed by LDCs to customers who are Wholesale Market Participants (WMP).	The OPA supports the principle that the best available information should be used to inform its CDM Target allocation advice and has developed its advice in a manner consistent with that principle. The OPA was not made aware of this particular concern with respect to the OEB Yearbook data as published prior to the OPA and the EDA CDM Caucus agreeing upon a preferred CDM Target allocation methodology. The OPA supports the proposed adjustment to energy consumption numbers as shown in the OEB Yearbook. The OPA has applied the necessary adjustment to the data of Hydro One Networks, Inc. in the development of its CDM

Commenting Party	Comment/Question	OPA Response
	In the case of Hydro One, the electricity consumption data reported in the yearbook captures our residential and general service customers as well as our embedded LDCs and large industrial customers who are NWMP, but does not capture our LDCs and large industrial customers who are WMP. If the information in the yearbook was used for target allocation, it would inappropriately include our embedded NWMP LDC customers and exclude our WMP customers in the target. This error would likely apply to other LDCs with Wholesale Market Participants (WMP) customers. It would likely also affect the split between residential and general service customers. The most appropriate methodology for setting LDC targets would be based on end-use potential analysis (e.g. bottom-up analysis of customer and equipment) by LDC. Since this information is not currently available from the OPA, the use of this top-down allocation methodology proposed by the OPA is acceptable on an interim basis.	Target allocation advice.
Hydro One Networks, Inc.	2. The OPA paper proposes to use the average one-hour peak of 8 months between June and September for 2007 and 2008 to set the peak target for LDCs. Hydro One has 2 concerns with the proposal. The first concern is not using the latest information (i.e. 2009) to set the peak target. In light of the recent	The OPA supports the principle that the best available information should be used to inform its CDM Target allocation advice and has developed its advice in a manner consistent with that principle. With respect to development of energy savings target allocation factors, the OPA notes that as of time of writing, the most recent publically available data on annual energy consumption of Ontario's

Commenting Party	Comment/Question	OPA Response
	recession, using 2007 and 2008 information will likely not capture the lower electricity demand and energy levels resulting from the recession and therefore this methodology will penalize LDCs with commercial and industrial customers who are severely affected by the recession. In setting the CDM target for 2011-2014, the latest economic information (i.e. 2009) should be considered. Another concern is using the month of September in setting the peak target (i.e. the summer peak target) because September is not considered as a summer month. Using September in setting the peak target would increase or decrease the peak target of some LDCs. It should be noted that in EM&V calculation, the OPA recommends using the top 10 system peak hours for determining the system peak. Clarification on what constitutes the (summer) system peak will be helpful to stakeholders.	LDCs is the 2008 OEB Yearbook of Distributors published in September 2009. The OPA regards the Yearbook as the best available information for use in allocation individual LDC energy targets. However, the OPA is recommending the use of 2008 and 2009 data for application in the development of peak demand savings target allocation factors. This will also recognize the impact of recent economic downturn on the demand for electricity. Based on feedback received through the written consultation, the OPA has modified its CDM Target allocation methodology advice with respect to the development of the LDCs' peak demand target allocation factors in order to better align with the OPA's EM&V methodology and protocol, as modified by the OPA from time to time, for estimating peak demand impacts from CDM resources. Rather than use each LDC's average contribution to the system 1-hour monthly peak over the June – September period, as originally agreed to with the EDA and as proposed in the consultation paper, the OPA recommends that demand allocation factors be developed on the basis of each LDC's average contribution to the top

Commenting Party	Comment/Question	OPA Response
		10 system peak hours. It is also noted that the seasonal period definition for summer that the OPA applies in the development of cost effectiveness tests is June through September.[7]
Hydro One Networks, Inc.	3. In setting the aggregate LDC CDM target, the OPA paper mentioned on page 5 that savings from OPA-funded Aboriginal conservation program will be excluded. However, there is no mention in the allocation methodology that the load pertaining to First Nation (FN) customers will be excluded for LDCs. Hydro One has more than 20,000 FN customers and is concerned that we could not get credit for savings attributed to our FN customers. Electricity consumption associated with FN customers should be removed from the LDC target.	The OPA does not support the adjustment of Hydro One's target allocation factors to remove First Nations customers since 20,000 customers constitute approximately 1% of Hydro One's total customer base and the resulting impact of such an adjustment on Hydro One's target allocation factors is likely to be immaterial.
Hydro One Networks, Inc.	3. (continued) Again on page 5, smart meters/TOU rates are now included in the CDM target for LDCs. Setting TOU rates is the responsibility of the OEB and as such has always been recognised as beyond the control of LDCs. The impacts associated with the TOU rates should be removed from the LDC target.	Please refer to the OPA's response to North Bay Hydro Distribution Ltd. comment #6.

[7] Integrated Power System Plan D-4-1 Attachment 3 p.6. Submitted by the Ontario Power Authority to the Ontario Energy Board August 29, 2007.

Appendix C: Letters of Comments Received from LDCs on the Consultation Paper

Cochrane Office: (705) 272-6669
NOW Inc. Toll Free: (800) 619-6722
customercare@puc.net

Northern Ontario WIRES inc.

153 Sixth Avenue - 153 Sixième Rue
P.O. Box 640 - C.P. 640
Cochrane, Ontario P0L 1C0

April 9, 2010

Ontario Power Authority
120 Adelaide St. W. Suite 1600
Toronto, ON M5H 1T1
Attention: Heidi Parish

Dear Ms. Parish:

Re: LDC Target Setting and Allocation Methodology

Northern Ontario Wires Inc. would like to submit comment as requested in the email received from the Power Authority regarding LDC Target Setting and Allocation Methodology. We, as a responsible LDC have endorsed conservation initiatives in our distribution sector to our customers and will continue to do so.

We do however want to highlight that conservation programs in this province to date, have targeted summer peak demand. We, in northern Ontario want to play our part in the provincial conservation targets, however nothing has been done to address our situation where our peak demand occurs in the winter.

It is acknowledged that all customers can take measures to reduce demand even during the winter season, however we believe it both prudent and critical that when targets are set, this is factored in our determinations rather than looking at summer reductions which are so different between the northern and southern portions of the province.

We include for your perusal the total consumption (in kWh) of our LDC comparing our winter months of December through March versus our summer demands of June through September for the years of 2006 to 2009. We would also draw attention that in light of the unusually mild winter in 2010, our average consumption this year is almost equal to that of the winter 2007-08.

Considering that targets set will have a direct impact on our licensing requirements, a "one-fit solution" for peak demand reduction respectfully cannot be applied between areas of summer and winter peak. Again, we endorse fully the need to reduce, however we must also properly set targets the season in which peak demand occurs.

We appreciate the opportunity to submit our comments in this matter and are available to clarify any concerns.

Respectfully submitted,

Doug Theobald
CEO

Cc: Board Members, NOW Inc.

Oshawa
PUC Networks Inc.
100 Simcoe Street South, Oshawa, Ontario L1H 7M7 • Tel. (905) 723-4623 • Fax (905) 723-7947 • E-mail contact@opuc.on.ca

April 12, 2010

Ontario Power Authority
120 Adelaide St. W., Suite 1600
Toronto, ON M5H 1T1

Attention: Heidi Parish

Dear Ms. Parish:

Re: LDC Target Setting and Allocation Methodology

Oshawa PUC Networks Inc. ("OPUC") appreciates the opportunity to comment on the draft methodology for setting provincial energy savings and peak demand reduction targets as well as the methodology for allocating those provincial targets to individual LDCs.

OPUC understands that the methodologies were developed with a view to making it practical and easy to administer and that the proposal was made after a great deal of discussion between market participants. With this in mind we have the following suggestions for your consideration:

1. The methodology for allocating the targets is based on total consumption and peak demand activity for 2007 and 2008, and does not take into account the number of customers within the LDC's jurisdiction. In addition, the targets do not consider fluctuations in the LDC's customer base since that time. We would like to suggest that targets be expressed in terms of conservation per customer rather than per customer class or per LDC. We believe that this will make it more equitable for those LDCs experiencing larger than average fluctuations in their customer base.

2. OPUC would also like to suggest that the OPA consider establishing minimum per customer consumption or peak demand "thresholds" in their calculations. LDCs who are managing to these minimum thresholds would be exempt from further allocations. We believe that at some point extracting incremental savings beyond minimum thresholds becomes difficult for LDCs who have been successful in promoting conservation within their service areas. Since these targets will be Conditions of Licence it would be inappropriate to penalize any LDCs who are in this position. Lower targets for these LDCs may be impractical and facilitate higher targets for LDCs who have more room to conserve

Thank you for the opportunity to comment on this proposal.

Yours truly,

Phil Martin
VP Finance & Regulatory Compliance

NORTH BAY HYDRO

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P1B 8Y5

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Fax: (705) 474-8579 Customer Services/Acc
Fax: (705) 474-4634 Operations

Ontario Power Authority
Attention: Heidi Parish
120 Adelaide Street West,
Suite 1600 Toronto, Ontario
M5H 1T1

April 8, 2010

Re: Establishment of LDC Conservation Targets under the Green Energy Act

North Bay Hydro Distribution Limited (NBHDL) would like to express its appreciation to the OPA for the opportunity to comment on the LDC conservation target allocation methodology. NBHDL is committed to working with our customers to help them reduce costs and minimize impacts on the environment they live and work in.

NBHDL notes that is difficult to make comments on this proposed allocation methodology in isolation of information on qualifying measures and technologies, how costs are to be recovered, the monitoring, reporting and verification protocol and financial incentives to achieve or over-achieve on this provincial initiative. With this context in mind NBHDL offers the following comments:

1. NBHDL has a winter peak and does not have the summer loads or electricity uses that drives peak demand that is typical of southern Ontario. NBHDL's average winter demand and energy consumption peaks in January from heating loads and is approximately 165% of any of the summer months May through September. Actual peak demand values would have a much larger spread. NBHDL's winter system peak does not contribute to the provincial summer peak therefore on what basis should NBHDL be assigned targets aimed at summer demand reduction caused by southern Ontario air conditioning loads?

2. NBHDL is part of northeastern Ontario generation system and transmission grid. This area is a net exporter of clean hydraulic generation to southern Ontario. NBHDL customers are much less dependent on expensive imports or peaking generation than those in southern Ontario. NBHDL customers do not have the loads or require the generation supply that CDM programs are targeted at mitigating. A much more effective means of sending proper pricing signals to customers would be to implement Locational Marginal Pricing. Let the pricing signal dictate appropriate actions to be taken by customers.

3. NBHDL would have difficulty targeting peak summer electricity kw and kwh reduction through CDM programs given limited summer electricity consumption. NBHDL feels that it might be possible to shift peak kw requirements to the off peak through such technologies as water heater load control and water reservoir filling at night.

This shifting does not result in overall reduced kwh consumption however can shift kw demand to non critical time periods. NBHDL believes that if targets must be assigned to northern LDC's for some reason, there should be greater emphasis on kw shifting/reduction as opposed to energy reduction. This would also help to alleviate the province's surplus baseload generation problem. Load shifting, for residential, commercial, institutional and industrial customers must be defined and accepted as a conservation resource as long as the metering is in place to quantify results.

4. Step 3, page 5 indicates that "All scenarios assume that conservation potential and load growth is the same across all LDC's."
The ally network involving skilled and knowledgeable distributors, engineers and contractors is critical for achieving CDM results. The ally network is less developed the greater the physical distance from major southern Ontario cities. To know, understand and appreciate this industry structural issue one must live and work in the more remote parts of this province. This is a practicality experienced by many northern LDC's and cannot be ignored when establishing targets. NBHDL does not have access to an experienced and thoroughly capable ally network to assist with CDM program implementation.

5. NBHDL's third tranche conservation programs completed in 2008 were very effective at reducing electrical demand and consumption. They delivered 11.5 Million kwh of annual energy reduction and 92.6 Million kwh over the life of the measure. Winter peak reduction was 2.4 MW and summer peak reduction was 1.4MW. The delivery of these programs was just completed in 2008 and would not have been fully accounted for when targets were developed out of the PISP process. NBHDL feels that it has already made significant contributions to this provincial initiative and this effort should be fully recognized and factored in when determining targets.

In summary, NBHDL notes that the concept of target allocation has been discussed since early 2009. NBHDL does not support this "top down" approach to developing conservation targets outlined in the OPA's April 1, 2010 document. The approach is far too general and simplistic in its assumptions. NBDHL supports a "bottom up" approach of developing a comprehensive and integrated CDM plan that addresses all variables and does not consider one variable (target setting) in isolation. Each LDC should develop a plan including programs, spending, targets, and a MV&E approach and submit to the OEB for approval. This would result in an overall plan that we understand, support, and can implement with a reasonable chance of achieving targets.

Yours truly,

Todd Wilcox
Chief Operating Officer

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Hydro Mississauga

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April 13, 2010

By E-mail to:
submissions@powerauthority.on.ca

By Courier to:
Ontario Power Authority
Attention: Heidi Parish
120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

Dear Ms. Parish,

RE: Establishment of LDC Conservation Targets Discussion

Enersource Hydro Mississauga Inc. (EHM) appreciates the opportunity to provide written comments on the draft discussion paper "Establishment of LDC Conservation Targets under the Green Energy Act" published by the OPA on April 1st, 2010. We have identified several areas to make the allocation methodology more fair and equitable to all stakeholders. We are committed in continuing to participate in discussions with the OPA in all future public consultation sessions on this matter.

Overarching principle: Ontario's Integrated Power System Plan (IPSP)

EHM recognizes that Ontario's Integrated Power System Plan (IPSP) has not yet been approved by the Ontario Energy Board and that in 2008, the OPA revised the near term conservation projections in response to the Minister's Directive. EHM supports the selection of the "Sustained Economic Downturn" base case for the basis of the updated provincial projections and furthermore believes that there is value in examining the recent impact of economic activity in 2009 to refine the economic outlook and revise conservation projections as needed. We believe that utilizing the most recent available economic information would provide enhanced accuracy and transparency into the setting methodology of provincial conservation projections.

Methodology of Provincial Conservation Targets Allocation

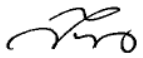
EHM supports the methodology to subtract resource savings projections outside of LDC influence to determine aggregate LDC targets. In addition, we feel that greater definition and clarity is required in this step to ensure fairness and equality amongst all market participants. For clarity, the methodology outlines that savings from transmission connected industrial conservation programs be excluded from LDC aggregate targets but does not elaborate on the methodology used to distribute such conservation savings amongst transmission connected market participants. It is valuable to note that LDCs may have larger industrial customers either embedded or connected as retail customers and these customers must be treated similar to their network connected counterparts to ensure equity, fair treatment and

shared benefits. We believe that there is value in clarifying the methodology in allocating targets outside of LDC influence thus providing transparency and fairness in allocation of energy conservation targets to all market participants and stakeholders.

Utilization of LDC's 2009 total energy and peak demand data

EHM supports OPA's proposed methodology scenario for allocating the share of the provincial LDC aggregate target utilizing the most recent information available. In order to accurately identify the system changes due to activities undertaken in 2009, it is requested that LDC data from 2007 and 2008 be updated to include total energy and peak demand data from 2009. In such, the updated data for at least the last three years will more correctly reflect the impact of the economic changes, weather and system developments. Utilizing the 2009 LDC data will also ensure that the same time frame is used to the update the provincial assumptions underlying the revised provincial conservation projections proposed.

Sincerely,



Tom Wasik, P.Eng.
Director, Strategic Projects
Enersource Hydro Mississauga Inc.

Hydro One Networks Inc.
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Giuliana Rossini
Director Strategy &
Conservation Officer

April 12, 2010

By E-mail to:
submissions@powerauthority.on.ca

By Courier to
Ontario Power Authority
120 Adelaide St W, Suite 1600
Suite 1600,
Toronto, Ontario M5H 1T1
Attention: Heidi Parish

LDC Target Setting and Allocation Methodology

Hydro One Networks Inc. and Hydro One Brampton Inc. are pleased to provide feedback on the CDM target setting and allocation methodology discussion paper released by the OPA on April 1, 2010. Hydro One supports the overall approach and methodology proposed by the OPA and EDA. We are pleased to see that our suggestions on the CDM target allocation methodology as presented to the EDA CDM Caucus in the summer of 2009 were adopted. However, we have a few issues related to implementation which we would like to raise for further discussion with and clarification by the OPA. We welcome the opportunity to discuss these and other pertinent issues with the OPA in any future public consultation sessions.

1. Allocation methodology for energy target

Hydro One supports the proposed methodology for using the residential and general service splits in setting the energy target for LDCs. However, we have an issue on using the total energy consumption reported in the 2008 OEB yearbook. The OPA may want to consult with the OEB to see whether it is appropriate to use information in the yearbook for this purpose. The electricity consumption data reported in the yearbook is limited since it pertains to energy purchased by LDCs for customers who are Non-Wholesale Market Participants (NWMP) and does not capture the energy distributed by LDCs to customers who are Wholesale Market Participants (WMP).

In the case of Hydro One, the electricity consumption data reported in the yearbook captures our residential and general service customers as well as our embedded LDCs and large industrial customers who are NWMP, but does not capture our LDCs and large industrial customers who are WMP. If the information in the yearbook was used for target allocation, it would inappropriately include our embedded NWMP LDC customers and exclude our WMP customers in the target.

This error would likely apply to other LDCs with Wholesale Market Participants (WMP) customers. It would likely also affect the split between residential and general service customers.

The most appropriate methodology for setting LDC targets would be based on end-use potential analysis (e.g. bottom-up analysis of customer and equipment) by LDC. Since this information is not currently available from the OPA, the use of this top-down allocation methodology proposed by the OPA is acceptable on an interim basis.

2. Allocation methodology for peak target

The OPA paper proposes to use the average one-hour peak of 8 months between June and September for 2007 and 2008 to set the peak target for LDCs. Hydro One has 2 concerns with the proposal.

The first concern is not using the latest information (i.e. 2009) to set the peak target. In light of the recent recession, using 2007 and 2008 information will likely not capture the lower electricity demand and energy levels resulting from the recession and therefore this methodology will penalize LDCs with commercial and industrial customers who are severely affected by the recession. In setting the CDM target for 2011-2014, the latest economic information (i.e. 2009) should be considered.

Another concern is using the month of September in setting the peak target (i.e. the summer peak target) because September is not considered as a summer month. Using September in setting the peak target would increase or decrease the peak target of some LDCs. It should be noted that in EM&V calculation, the OPA recommends using the top 10 system peak hours for determining the system peak. Clarification on what constitutes the (summer) system peak will be helpful to stakeholders.

3. Provincial aggregate LDC target

In setting the aggregate LDC CDM target, the OPA paper mentioned on page 5 that savings from OPA-funded Aboriginal conservation program will be excluded. However, there is no mention in the allocation methodology that the load pertaining to First Nation (FN) customers will be excluded for LDCs. Hydro One has more than 20,000 FN customers and is concerned that we could not get credit for savings attributed to our FN customers. Electricity consumption associated with FN customers should be removed from the LDC target.

Again on page 5, smart meters/TOU rates are now included in the CDM target for LDCs. Setting TOU rates is the responsibility of the OEB and as such has always been recognised as beyond the control of LDCs. The impacts associated with the TOU rates should be removed from the LDC target.

Yours truly,

G. Rossini

Giuliana Rossini
Director, Strategy and Conservation Officer
Hydro One Networks Inc.

cc: Scott Miller, Hydro One Brampton Inc.

Department: Energy Management
Attention: G.H. Rains
Telephone: 661-5800 Ext. 4870

April 12, 2010

Ontario Power Authority
120 Adelaide Street West
Suite 1600
Toronto, Ontario
M5H 1T1

E-mail: submissions@powerauthority.on.ca

Attention: Ms. Heidi Parish

Re: LDC Target Setting and Allocation Methodology

This letter is in response to the OPA's invitation to LDC's to provide input in writing to the OPA discussion paper entitled: "*Establishment of LDC Conservation Targets under the Green Energy Act – Target setting and allocation methodology advice from the OPA*", dated April 1, 2010.

London Hydro generally supports the draft proposed LDC target setting and allocation methodology as outlined by OPA. As an active member of the EDA's CDM Caucus, London Hydro has had an opportunity to provide input into the development of this proposal. The proposal has developed over the last year or so as industry stakeholders have influenced the approach. Our view is that the proposal has been strengthened by this influence. Over time additional input from stakeholders delivers a diminishing return on improvement. We are of the opinion that there has been sufficient input for a final approach to be taken on this issue. The proposal as provided in its current form is acceptable to London Hydro.

Having said that, there are a few points that we would like to make comment on, specifically:

1) The five over-arching principles as stated provide clear and supportive direction on the approach. Although there will always be differences of opinion among stakeholders, these principles do provide a clear, fair, consistent and defensible approach. Some could argue that past/previous activity should influence LDC assigned levels. However the question would be on what basis? Using measured results for the appropriate time period is a much easier quantity to defend. Moreover those LDCs that have been more active in the previous few years will/should be more predisposed to positively view these mandatory targets as an opportunity to succeed.
2) The methodology makes the assumption that "*all scenarios assume that conservation potential and load growth is the same for all LDCs*." Although that is a very subjective and erroneous assumption, the question again becomes

one of what basis would be more appropriate and defensible. As there are many variables involved once you try to move off the standard uniform assumption, defending an alternative approach would get lost in the details.

3) Allocation of demand targets on the basis of the average of the two summer 2007 - 2008 LDC contribution to system peak is a reasonable approach. LDCs share of the provincial MW target reduction should be based on their influence/contribution to the system summer peak – as the system does peak in the summer period. Whether the allocation be based on a single-year single-month contribution or as proposed could be debated, however the two-year multi-month approach does permit some smoothing and minimizes a single unforeseen event.

4) Since these targets will become mandated as part of an LDCs license and will be regulated by the OEB, many LDCs, who have had limited involvement in the development of this approach, will not have a sense of what this approach will impose on them re multi-year commitments – i.e. how many MW and MWh reductions in the time period? Most LDCs have a reasonably good sense of what percentage of the system MWh's their LDC account for on an annual basis. It would be appropriate to provide the system-wide target numbers (MW and MWh) for total LDC allocation for the four-year period to allow each LDC to at least do their own rough assessment of what this approach will commit them to achieving.

Yours truly,

LONDON HYDRO INC.

Gary Rains, P.Eng.
Director of Energy Management Programs

GHR/ghr

April 9, 2010

Ontario Power Authority

e-mail: submissions@powerauthority.on.ca

Attention: Heidi Parish

Re: LDC Target Setting and Allocation Methodology

The methodology paper provided by the OPA with respect to the setting of conservation targets was well received by the CHEC LDCs. The sharing of this information with LDCs is appreciated.

A Webex call was held to gather input and comments from CHEC members with respect to the methodology. Below please find the summary of the questions which exist at this time.

1. The methodology takes into account the persistence of measures installed before the first year of the program and the targets have been discounted accordingly. This approach is supported. **Question:** How will LDCs be informed of the discounting of their specific targets as a result to the persistence from previously installed measures in their service territory?

2. The second question follows from the first. **Question:** If an LDC has been very active and successful in CDM prior to 2011 how is the better than average performance taken into account? Is it through recognition of a higher level of persistence of the savings from the previous measures or another vehicle?

3. The methodology notes that one of the resources available to LDCs to achieve their target is fuel switching. I believe from working group meetings "fuel switching" in this program is a focus on the use of renewable energy. **Question:** Please confirm the definition of fuel switching for the purpose of achieving conservation targets.

4. Once the targets for individual LDCs are identified using the methodology, LDCs may want to better understand their specific target. LDCs may also want to provide specific input based on local conditions and to make specific modifications to the targets. **Question:** What will the process be for allowing LDCs to review, comment and request modifications to the specific targets set for their LDC?

CHEC appreciates the opportunity to review the methodology and to provide input.

We look forward in working with the OPA to set achievable targets for the LDCs.

Respectfully submitted

Gord Eamer

Gordon A. Eamer, P.Eng.
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Member LDCs:

Centre Wellington Hydro	COLLUS Power
Innisfil Hydro Distribution Systems	Lakefront Utilities
Lakeland Power Distribution	Midland Power Utility
Orangeville Hydro	Parry Sound Power
Rideau St. Lawrence Distribution	Wasaga Distribution
Wellington North Power	West Coast Huron Energy

Good Afternoon,

As requested by the OPA regarding CDM target setting and allocation methodology as outline in the discussion paper release on April 1, 2010, we would like to provide the following feedback on behalf of the Niagara Erie Power Alliance "NEPA" group of utilities. For your records, the members consist of the following utilities.

NEPA Member LDCs	Contacts	Customer Base
Brant County Power Inc.	Bruce Noble	9,300
Canadian Niagara Power Inc.	Doug Bradbury	28,100
Algoma Power Inc.	Doug Bradbury	11,372
Grimsby Power Incorporated	Sean Perry	9,600
Haldimand County Hydro Inc.	Jane Albert	20,551
Niagara-on-the-Lake Hydro Inc.	Victoria Gillett	7,650
Niagara Peninsula Energy Inc.	Sue Forcier	48,416
Welland Hydro Electric System Corp.	Jason Biesma	21,493
Westario Power Inc.	Lisa Milne	20,208
	Total	**176,690**

The NEPA members are providing the following feedback as requested by the OPA:

1. **Use of the NEPA member utility service territory's Hydro One data for the OPA study.**

   We are pleased to provide responses from six of the above nine noted utilities. We will be following up with Niagara Peninsula Energy Inc. over the next couple of days regarding their Authorization and Direction Release Form. Canadian Niagara Power, Algoma Power have already forwarded their release.

2. **Response to the "LDC Target Setting and Allocation Methodology" document released on April 1, 2010**

   The NEPA member utilities have been reviewing the "LDC Target Setting and Allocation Methodology Request for Written Comments" document released on April 1, 2010 and are working to complete their review to understand the impact of the targets on their respective LDC. Until this review is complete, the NEPA utilities cannot sign off of the methodology but intent to work diligently with the OPA to achieve this understanding. This due diligence is of the utmost importance to the utilities and the intent is to work collaboratively with the OPA to ensure that we understand the target settings and allocation methodology in use so that we can achieve the established targets and fulfill our role in contributing to the success of this initiative and also in achieving our conditions of license.

Should any additional information be required, please do not hesitate to contact James Douglas at 905.967.0770 or via email at jdouglas@util-assist.com

Have a great day,

Honor Wood
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Appendix D: The OPA's CDM Target Advice

Energy Savings Target

The projected residential sector contribution to LDC provincial aggregate energy savings target is 1,150 GWh. The projected non-residential sector contribution to LDC provincial aggregate energy savings target is 4,850 GWh. The 2011-2014 LDC provincial aggregate energy savings target is 6,000 GWh.

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	Portion of Total 2008 Non-Residential Energy Consumption by all LDCs that have CDM Targets (%)		
1	Algoma Power Inc.	0.22%	0.11%	8	0.13%
2	Atikokan Hydro Inc.	0.03%	0.02%	1	0.02%
3	Attawapiskat Power Corporation	0.01%	0.00%	0.1	0.00%
4	Bluewater Power Distribution Corporation	0.64%	1.00%	56	0.93%
5	Brant County Power Inc.	0.20%	0.24%	14	0.23%
6	Brantford Power Inc.	0.72%	0.88%	51	0.85%
7	Burlington Hydro Inc.	1.37%	1.41%	84	1.40%
8	COLLUS Power Corporation	0.28%	0.25%	15	0.25%
9	Cambridge and North Dumfries Hydro Inc.	0.95%	1.37%	77	1.28%
10	Canadian Niagara Power Inc.	0.50%	0.41%	25	0.42%
11	Centre Wellington Hydro Ltd.	0.11%	0.14%	8	0.13%
12	Chapleau Public Utilities Corporation	0.04%	0.02%	1	0.02%
13	Chatham-Kent Hydro Inc.	0.57%	0.70%	41	0.68%
14	Clinton Power Corporation	0.03%	0.02%	1	0.02%
15	Cooperative Hydro Embrun Inc.	0.05%	0.01%	1	0.02%
16	E.L.K. Energy Inc.	0.23%	0.19%	12	0.20%
17	ENWIN Utilities Ltd.	1.57%	2.19%	124	2.07%
18	Enersource Hydro Mississauga Inc.	3.91%	7.87%	427	7.12%
19	Erie Thames Powerlines Corporation	0.28%	0.34%	20	0.33%
20	Espanola Regional Hydro Distribution Corporation	0.08%	0.04%	3	0.05%
21	Essex Powerlines Corporation	0.64%	0.34%	24	0.40%
22	Festival Hydro Inc.	0.35%	0.55%	30	0.50%
23	Fort Albany Power Corporation	0.01%	0.00%	0.1	0.00%
24	Fort Frances Power Corporation	0.10%	0.05%	4	0.07%
25	Greater Sudbury Hydro Inc.	1.01%	0.67%	44	0.73%
26	Grimsby Power Inc.	0.22%	0.11%	8	0.13%

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	Portion of Total 2008 Non-Residential Energy Consumption by all LDCs that have CDM Targets (%)		
27	Guelph Hydro Electric Systems Inc.	0.90%	1.49%	83	1.38%
28	Haldimand County Hydro Inc.	0.42%	0.22%	15	0.25%
29	Halton Hills Hydro Inc.	0.54%	0.34%	23	0.38%
30	Hearst Power Distribution Company Limited	0.07%	0.07%	4	0.07%
31	Horizon Utilities Corporation	4.04%	5.25%	301	5.02%
32	Hydro 2000 Inc.	0.04%	0.01%	1	0.02%
33	Hydro Hawkesbury Inc.	0.14%	0.17%	10	0.17%
34	Hydro One Brampton Networks Inc.	2.80%	3.35%	194	3.24%
35	Hydro One Networks Inc.	30.54%	13.66%	1,014	16.91%
36	Hydro Ottawa Limited	5.48%	6.42%	374	6.24%
37	Innisfil Hydro Distribution Systems Limited	0.39%	0.10%	9	0.15%
38	Kashechewan Power Corporation	0.01%	0.00%	0.1	0.00%
39	Kenora Hydro Electric Corporation Ltd.	0.10%	0.08%	5	0.08%
40	Kingston Hydro Corporation	0.49%	0.65%	37	0.62%
41	Kitchener-Wilmot Hydro Inc.	1.62%	1.53%	93	1.55%
42	Lakefront Utilities Inc.	0.19%	0.25%	14	0.23%
43	Lakeland Power Distribution Ltd.	0.20%	0.17%	10	0.17%
44	London Hydro Inc.	2.76%	2.66%	161	2.69%
45	Middlesex Power Distribution Corporation	0.15%	0.17%	10	0.17%
46	Midland Power Utility Corporation	0.12%	0.20%	11	0.18%
47	Milton Hydro Distribution Inc.	0.56%	0.58%	34	0.57%
48	Newmarket - Tay Power Distribution Ltd.	0.66%	0.55%	34	0.57%
49	Niagara Peninsula Energy Inc.	0.99%	0.99%	59	0.98%
50	Niagara-on-the-Lake Hydro Inc.	0.16%	0.13%	8	0.13%
51	Norfolk Power Distribution Inc.	0.35%	0.28%	18	0.30%
52	North Bay Hydro Distribution Limited	0.53%	0.43%	27	0.45%
53	Northern Ontario Wires Inc.	0.10%	0.10%	6	0.10%
54	Oakville Hydro Electricity Distribution Inc.	1.45%	1.21%	75	1.25%
55	Orangeville Hydro Limited	0.21%	0.20%	12	0.20%
56	Orillia Power Distribution Corporation	0.27%	0.25%	15	0.25%
57	Oshawa PUC Networks Inc.	1.21%	0.81%	53	0.88%
58	Ottawa River Power Corporation	0.19%	0.14%	9	0.15%

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	Portion of Total 2008 Non-Residential Energy Consumption by all LDCs that have CDM Targets (%)		
59	PUC Distribution Inc.	0.85%	0.43%	31	0.52%
60	Parry Sound Power Corporation	0.08%	0.06%	4	0.07%
61	Peterborough Distribution Incorporated	0.71%	0.64%	39	0.65%
62	PowerStream Inc.	6.46%	6.92%	410	6.84%
63	Renfrew Hydro Inc.	0.08%	0.08%	5	0.08%
64	Rideau St. Lawrence Distribution Inc.	0.11%	0.08%	5	0.08%
65	Sioux Lookout Hydro Inc.	0.08%	0.05%	3	0.05%
66	St. Thomas Energy Inc.	0.30%	0.27%	16	0.27%
67	Thunder Bay Hydro Electricity Distribution Inc.	0.87%	0.78%	48	0.80%
68	Tillsonburg Hydro Inc.	0.13%	0.20%	11	0.18%
69	Toronto Hydro-Electric System Limited	12.84%	24.11%	1,317	21.97%
70	Veridian Connections Inc.	2.32%	1.87%	117	1.95%
71	Wasaga Distribution Inc.	0.19%	0.05%	4	0.07%
72	Waterloo North Hydro Inc.	1.00%	1.16%	68	1.13%
73	Welland Hydro-Electric System Corp.	0.39%	0.37%	22	0.37%
74	Wellington North Power Inc.	0.06%	0.08%	5	0.08%
75	West Coast Huron Energy Inc.	0.07%	0.15%	8	0.13%
76	West Perth Power Inc.	0.04%	0.06%	3	0.05%
77	Westario Power Inc.	0.52%	0.31%	21	0.35%
78	Whitby Hydro Electric Corporation	0.85%	0.61%	39	0.65%
79	Woodstock Hydro Services Inc.	0.27%	0.36%	21	0.35%
Total		**100%**	**100%**	**6,000**	**100%**

1
2

Demand Savings Target

The aggregate 2014 Summer Peak Demand Savings target is 1,330 MW.

#	Local Distribution Company	Demand Target Allocation Factor	
		Average Contribution to Top 10 System Peak Hours, Based on 2008 and 2009 (%)	2014 Summer Peak Demand Savings Target (MW)
1	Algoma Power Inc.	0.10%	1
2	Atikokan Hydro Inc.	0.01%	0.2
3	Attawapiskat Power Corporation	0.01%	0.1
4	Bluewater Power Distribution Corporation	0.80%	11
5	Brant County Power Inc.	0.26%	3
6	Brantford Power Inc.	0.86%	11
7	Burlington Hydro Inc.	1.65%	22
8	COLLUS Power Corporation	0.24%	3
9	Cambridge and North Dumfries Hydro Inc.	1.34%	18
10	Canadian Niagara Power Inc.	0.48%	6
11	Centre Wellington Hydro Ltd.	0.12%	2
12	Chapleau Public Utilities Corporation	0.01%	0.2
13	Chatham-Kent Hydro Inc.	0.73%	10
14	Clinton Power Corporation	0.02%	0.3
15	Cooperative Hydro Embrun Inc.	0.03%	0.3
16	E.L.K. Energy Inc.	0.25%	3
17	ENWIN Utilities Ltd.	2.02%	27
18	Enersource Hydro Mississauga Inc.	6.99%	93
19	Erie Thames Powerlines Corporation	0.33%	4
20	Espanola Regional Hydro Distribution Corporation	0.04%	1
21	Essex Powerlines Corporation	0.59%	8
22	Festival Hydro Inc.	0.47%	6
23	Fort Albany Power Corporation	0.00%	0.1
24	Fort Frances Power Corporation	0.05%	1
25	Greater Sudbury Hydro Inc.	0.62%	8
26	Grimsby Power Inc.	0.16%	2
27	Guelph Hydro Electric Systems Inc.	1.26%	17
28	Haldimand County Hydro Inc.	0.34%	5
29	Halton Hills Hydro Inc.	0.46%	6
30	Hearst Power Distribution Company Limited	0.05%	1
31	Horizon Utilities Corporation	4.54%	60
32	Hydro 2000 Inc.	0.01%	0.2
33	Hydro Hawkesbury Inc.	0.14%	2
34	Hydro One Brampton Networks Inc.	3.44%	46
35	Hydro One Networks Inc.	15.77%	210
36	Hydro Ottawa Limited	6.41%	85
37	Innisfil Hydro Distribution Systems Limited	0.19%	2
38	Kashechewan Power Corporation	0.01%	0.1
39	Kenora Hydro Electric Corporation Ltd.	0.06%	1
40	Kingston Hydro Corporation	0.50%	7
41	Kitchener-Wilmot Hydro Inc.	1.62%	22
42	Lakefront Utilities Inc.	0.21%	3
43	Lakeland Power Distribution Ltd.	0.17%	2
44	London Hydro Inc.	3.11%	41

#	Local Distribution Company	Demand Target Allocation Factor	
		Average Contribution to Top 10 System Peak Hours, Based on 2008 and 2009 (%)	2014 Summer Peak Demand Savings Target (MW)
45	Middlesex Power Distribution Corporation	0.18%	2
46	Midland Power Utility Corporation	0.18%	2
47	Milton Hydro Distribution Inc.	0.60%	8
48	Newmarket - Tay Power Distribution Ltd.	0.66%	9
49	Niagara Peninsula Energy Inc.	1.16%	15
50	Niagara-on-the-Lake Hydro Inc.	0.18%	2
51	Norfolk Power Distribution Inc.	0.34%	5
52	North Bay Hydro Distribution Limited	0.38%	5
53	Northern Ontario Wires Inc.	0.08%	1
54	Oakville Hydro Electricity Distribution Inc.	1.56%	21
55	Orangeville Hydro Limited	0.21%	3
56	Orillia Power Distribution Corporation	0.23%	3
57	Oshawa PUC Networks Inc.	0.94%	13
58	Ottawa River Power Corporation	0.12%	2
59	PUC Distribution Inc.	0.42%	6
60	Parry Sound Power Corporation	0.06%	1
61	Peterborough Distribution Incorporated	0.66%	9
62	PowerStream Inc.	7.19%	96
63	Renfrew Hydro Inc.	0.08%	1
64	Rideau St. Lawrence Distribution Inc.	0.09%	1
65	Sioux Lookout Hydro Inc.	0.04%	1
66	St. Thomas Energy Inc.	0.30%	4
67	Thunder Bay Hydro Electricity Distribution Inc.	0.64%	8
68	Tillsonburg Hydro Inc.	0.17%	2
69	Toronto Hydro-Electric System Limited	21.51%	286
70	Veridian Connections Inc.	2.19%	29
71	Wasaga Distribution Inc.	0.10%	1
72	Waterloo North Hydro Inc.	1.20%	16
73	Welland Hydro-Electric System Corp.	0.42%	6
74	Wellington North Power Inc.	0.07%	1
75	West Coast Huron Energy Inc.	0.07%	1
76	West Perth Power Inc.	0.05%	1
77	Westario Power Inc.	0.32%	4
78	Whitby Hydro Electric Corporation	0.82%	11
79	Woodstock Hydro Services Inc.	0.34%	4
Total		**100%**	**1,330**

1