1.0 INTRODUCTION

2 **1.1** Purpose

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

1.2 Background

- 8 With the passage of the Green Energy and Green Economy Act, 2009 ("GEA"), Ontario
- 9 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

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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.

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- On March 31, 2010, the Minister issued a directive to the OEB, instructing it to establish
- 26 mandatory CDM Targets for LDCs to achieve reductions in electricity consumption and
- 27 reductions in peak provincial electricity demand over a four year period beginning January 1,
- 28 2011 (the "CDM Targets"). That directive specified that the total of the CDM Targets
- 29 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
- 31 ("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
- 34 OPA, focusing on three opportunities to advance conservation:
 - 1. Strategic co-ordination of CDM programs with LDCs and the OEB;
- Energy efficiency and demand response programs involving First Nation and Métis
 communities;
 - 3. Support and funding of CDM research and innovation.

1 2 3 4	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:
5 6 7	Provide advice to the OEB, following consultation with LDCs, on the appropriate allocation of CDM Targets amongst LDCs.
8 9 10 11 12	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.
13 14 15 16 17 18 19 20	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.
21	2.0 CDM TARGET ALLOCATION ADVICE
22 23 24 25 26 27	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.
28	Individual LDC Energy Savings Targets
29	The OPA recommends that energy savings targets be allocated based on each LDC's share of

30 total annual energy consumption, by customer account type based on the most recent year of

31 available data.

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The OPA recommends using the most recent year of energy consumption data available. The

- 33 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 34
- September 2009. The OPA has used the 2008 OEB Yearbook data with an adjustment to the 35

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

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4	Recommended energy savings target allocation methodology
5	Individual LDC Energy Savings Target (MWh) = RE% * RE + NRE% * NRE
6	Where:
7 8	RE% = LDC Annual Energy Consumption for all Residential Customers ÷ Sum of Annual Energy Consumption for Residential Customers for all LDCs that have CDM Targets
9 10	RE = Total Projected Residential Sector Contribution to LDC Provincial Aggregate Energy Savings Target = 1150 GWh
11 12	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
13 14	NRE = Total Projected Non-Residential Sector Contribution to LDC Provincial Aggregate Energy Savings Target = 4850 GWh
15	Individual LDC Peak Demand Savings Targets
16 17	The OPA recommends that peak demand savings targets be allocated based on each LDC's relative contribution to system peak demand.
18 19 20 21	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:
22 23 24	Demand target allocation methodology developed by OPA and EDA in June 2009 (not recommended)
25 26 27	Demand Target Allocation Factor (Dem%) = (Dem%Yr1 + Dem%Yr2) ÷ 2 Where:
28 29 30	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)
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data of Hydro One Networks, Inc. (HONI) in the development of its CDM Target allocation

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advice.2

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.

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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)

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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.

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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.

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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.

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Recommended peak demand savings target allocation methodology

- 26 Individual LDC Peak Demand Savings Target (MW) = Dem% * LDC Provincial Aggregate Peak
- 27 Demand Savings Target of 1330 MW
- 28 Where:
- 29 Dem% = (Dem%Yr1 + Dem%Yr2) \div 2
- 30 | Dem%Yr1 = (Sum of LDC demand at top 10 system peak hours in Year 1) ÷ (Sum of demand of
- 31 | all LDCs that have CDM Targets at top 10 system peak hours in Year 1)
- 32 | 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)
- 34 The OPA recommends using an average of 2008 and 2009 demand data.
- 35 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,
- 37 Summer Peak and Average peak demand for their own systems, which does not necessarily
- 38 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
- 2 many LDCs have some or all of their delivery points within Hydro One Network's distribution
- 3 system. There are more than 60 fully or partially embedded LDCs within Hydro One's
- 4 distribution system. As a result, the OEB has obtained the appropriate information on LDC's
- 5 demand at the time that the system peak occurs, including those LDCs fully or partially
- 6 embedded within Hydro One's distribution system, and has provided that information to the
- 7 OPA. That data has been used to develop the recommended peak demand target allocation
- 8 factors.

3.0 CONSULTATION WITH LOCAL DISTRIBUTION COMPANIES

- 10 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.
- 13 As part of that collaboration, the MEI asked the OPA to develop advice as follows:
- 14 a) For the MEI, advice on establishing LDC Provincial Aggregate CDM Targets from January 1,
- 15 2011 December 31, 2014; and,
- 16 b) For the OEB, advice for an allocation methodology for determining individual LDC CDM
- 17 Targets based on the LDC Provincial Aggregate CDM Targets.
- 18 In response to the MEI's request, the OPA developed a consultation paper entitled, "The
- 19 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 LDCs³ in the province on April 1, 2010.
- with a request to provide written comments by April 12, 2010. The consultation paper is
- 24 attached to this document as Appendix A.
- 25 The OPA received eight responses representing a total of 27 LDCs as follows:
- 26 → London Hydro Inc.;

27 → Cornerstone Hydro Electric Concepts Association Inc, representing the following
 28 members: Centre Wellington Hydro; COLLUS Power; Innisfil Hydro Distribution

29 Systems; Lakefront Utilities; Lakeland Power Distribution; Midland Power Utility;

30 Orangeville Hydro; Parry Sound Power; Rideau St. Lawrence Distribution; Wasaga

Distribution; Wellington North Power; and, West Coast Huron Energy;

32 → Enersource Hydro Mississauga;

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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.;
- 6 → North Bay Hydro Distribution Ltd.;
- 7 → Northern Ontario Wires, Inc.;
- 8 → Oshawa PUC Networks Inc.; and,
- 9 → Hydro One Networks, Inc.
- 10 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
- 12 target setting and allocation methodology. While the OPA has developed a response to each of
- 13 the comments it received on the written consultation, the OPA considers the aggregate CDM
- 14 Targets specified in the Minister's directive (1330MW and 6000 GWh) to the OEB to be final.
- 15 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.
- 17 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	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.
consumption by Hydro One Networks, Inc.	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.

- 2 The complete set of the OPA's responses to comments received from LDCs on the consultation
- 3 paper are attached to this document as Appendix B. The letters that the OPA received from
- 4 LDCs are attached to this document as Appendix C.
- 5 The OPA is appreciative of the input received from LDCs, which has served to strengthen the
- 6 OPA's CDM Target allocation advice to the OEB.

APPENDICES 4.0

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April 1, 2010

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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.

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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.

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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,

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b) For the OEB, advice for an allocation methodology for determining individual LDC conservation targets based on the provincial aggregate LDC target.

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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.

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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.

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2. Overarching Principles

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

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

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

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- **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 threestep 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.

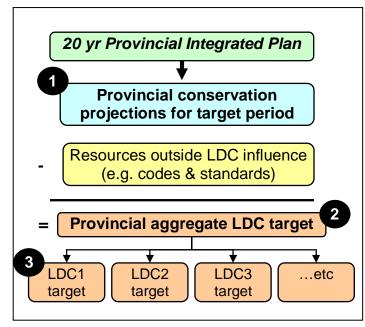


Figure 1 Provincial target setting & LDC allocation process

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 standardsCustomer-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.

⁴In 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 enduser (in line with Principle 5 above).

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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.

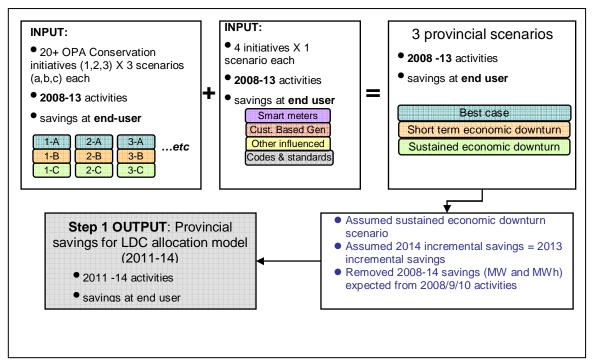
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Figure 2 provides a detailed illustration of Step 1. The output of Step 1 was shared with the Electricity Distributor's Association (CDM Caucus and CDM Committee of the Board) in May 2009. Updated projections, based on updated estimates for savings 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

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

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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 1 and 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.

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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

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Allocation based on:	PROS	CONS
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)

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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.

5 6 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.

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Table 2 LDC Individual Target Allocation - preferred methodology

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

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10 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)

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4. Request for Feedback

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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.

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Comments should be submitted by Monday April 12th to:

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

27 28 2. Mail to: **Ontario Power Authority**

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

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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
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?	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.	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 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

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	Comment/Question	OPA Response
A	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 (WMMP).	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.	Target allocation advice.
	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. bottomup 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.	
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 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
	The first concern is not using the latest information (i.e. 2009) to set the peak target. In light of the recent	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.	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.
	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 will be helpful to stakeholders.	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 ton
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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. 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. 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	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. Please refer to the OPA's response to North Bay Hydro Distribution Ltd. comment #6.
	been recognised as beyond the control of LDCs. The impacts associated with the TOU rates should be removed from the LDC target.	

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

April 9, 2010

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



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

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.



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April 12, 2010

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

Attention: Heidi Parish

Dear Ms. Parish:

Re: LDC Target Setting and Allocation Methodology

Oshawa PDC 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 e have the following suggestions for your consideration:

- 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 apportunity to comment on this proposal.

Yours truly

Phil Martin

VP Finance & Regulatory Compliance

Dalivering operational excellence to our obstamers, through a safe, profit oriented, regulated distribution system



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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

April 13, 2010



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www.enersource.com

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.

483 Bay St.
Nouth Tower, 14th Floor
Toronto, Ontario M5G 2P5
www.HydroOne.com

Tel: (416) 345 6035 Fax: (416) 345 5911

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.

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 (WMP) 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.



Page 2

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.

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,

Giuliana Rossini

Director, Strategy and Conservation Officer

Hydro One Networks Inc.

Co. Karsini

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:

- 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 singlemonth contribution or as proposed could be debated, however the two-year multi-month approach does permit some smoothing and minimizes a single unforceseen 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





Cornerstone Hydro Electric Concepts Association Inc.

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. CHEC Chief Operating Officer 43 King St. West Brockville ON K6V 3P7 613-342-3984 chec@ripnet.com

Member LDCs:

Centre Wellington Hydro	COLLUS Power
Innisfil Hydro Distribution Systems	Lakefront Utilities
Lakeland Power Distribution	Midland Power Utility
	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:

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
Util-Assist Inc.
17705 Leslie Street Suite 103
Newmarket, ON L3Y 3E3
tel. 905.967.0770 x207/fax. 905.830.9861

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Appendix D: The OPA's CDM Target Advice

2 Energy Savings Target

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

7

1

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment) Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%) Factors (Per 2008 OEB Total 2008 Non- Residential Energy Consumption by all LDCs that have CDM Targets (%)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
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		0.22%	0.11%	8	0.13%

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment) Portion of Portion of		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	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		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		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	0.21%	0.25%	15	0.25%
F 7	Corporation			F2	0 000/
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
59	PUC Distribution Inc.
60	Parry Sound Power Corporation
	Peterborough Distribution
61	Incorporated
62	PowerStream Inc.
63	Renfrew Hydro Inc.
64	Rideau St. Lawrence Distribution
	Inc.
65	Sioux Lookout Hydro Inc.
66	St. Thomas Energy Inc.
67	Thunder Bay Hydro Electricity Distribution Inc.
68	Tillsonburg Hydro Inc.
00	Toronto Hydro-Electric System
69	Limited
70	Veridian Connections Inc.
71	Wasaga Distribution Inc.
72	Waterloo North Hydro Inc.
73	Waterloo North Hydro Inc. Welland Hydro-Electric System
	Corp.
74	Wellington North Power Inc.
75	West Coast Huron Energy Inc.
76	West Perth Power Inc.
77	Westario Power Inc.
78	Whitby Hydro Electric Corporation
79 T =1	Woodstock Hydro Services Inc.
Total	aı

Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment) Portion of Total 2008 Residential Portion of Total 2008 Residential			
Energy	Residential		
Consumption	Energy		
by all LDCs	Consumption		
that have	by all LDCs		
CDM	that have CDM		
Targets (%)	Targets (%)		
0.85%	0.43%		
0.08%	0.45%		
0.71%	0.64%		
6.46%	6.92%		
0.08%	0.08%		
0.11%	0.08%		
0.08%	0.05%		
0.30%	0.27%		
0.87%	0.78%		
0.13%	0.20%		
12.84%	24.11%		
2.32%	1.87%		
0.19%	0.05%		
1.00%	1.16%		
0.39%	0.37%		
0.06%	0.08%		
0.07%	0.15%		
0.04%	0.06%		
0.52%	0.31%		
0.85%	0.61%		
0.27%	0.36%		
100%	100%		

2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
31	0.52%
4	0.07%
39	0.65%
410	6.84%
5 5	0.08%
5	0.08%
3	0.05%
16	0.27%
48	0.80%
11	0.18%
1,317	21.97%
117	1.95%
4	0.07%
68	1.13%
22	0.37%
5	0.08%
8	0.13%
3	0.05%
21	0.35%
39	0.65%
21	0.35%
6,000	100%

Demand Savings Target

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

2
3

1

#	Local Distribution Company	Demand Target	
	. ,	Allocation Factor	
		Average Contribution	2014 Summer Peak
		to Top 10 System	Demand Savings
		Peak Hours, Based	Target (MW)
		on 2008 and 2009 (%)	
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 2
43	Lakeland Power Distribution Ltd.	0.17%	
44	London Hydro Inc.	3.11%	41

#	Local Distribution Company
45	Middlesex Power Distribution Corporation
46	Midland Power Utility Corporation
47	Milton Hydro Distribution Inc.
48	Newmarket - Tay Power Distribution Ltd.
49	Niagara Peninsula Energy Inc.
50	Niagara-on-the-Lake Hydro Inc.
51	Norfolk Power Distribution Inc.
52	North Bay Hydro Distribution Limited
53	Northern Ontario Wires Inc.
54	Oakville Hydro Electricity Distribution Inc.
55	Orangeville Hydro Limited
56	Orillia Power Distribution Corporation
57	Oshawa PUC Networks Inc.
58	Ottawa River Power Corporation
59	PUC Distribution Inc. Parry Sound Power Corporation
60	Parry Sound Power Corporation Peterborough Distribution Incorporated
61	Peterborough Distribution incorporated PowerStream Inc.
63	Renfrew Hydro Inc.
64	Rideau St. Lawrence Distribution Inc.
65	Sioux Lookout Hydro Inc.
66	
67	St. Thomas Energy Inc. Thunder Bay Hydro Electricity Distribution Inc.
68	Tillsonburg Hydro Inc
69	Toronto Hydro-Electric System Limited
70	Veridian Connections Inc.
71	Wasaga Distribution Inc.
72	Waterloo North Hydro Inc.
73	Welland Hydro-Electric System Corp.
74	Wellington North Power Inc.
75	West Coast Huron Energy Inc.
76	West Perth Power Inc.
77	Westario Power Inc.
78	Whitby Hydro Electric Corporation
79	Woodstock Hydro Services Inc.
Tota	1

Demand Target Allocation Factor	
Average Contribution to Top 10 System Peak Hours, Based on 2008 and 2009 (%)	2014 Summer Peak Demand Savings Target (MW)
0.18%	2
0.18%	2
0.60%	8
0.66%	9
1.16%	15
0.18%	2
0.34%	5
0.38%	5
0.08%	1
1.56%	21
0.21%	3
0.23%	3
0.94%	13
0.12%	2
0.42%	6
0.06%	1
0.66%	9
7.19%	96
0.08%	1
0.09%	1
0.04%	1
0.30%	4
0.64%	8
0.17%	2
21.51%	286
2.19%	29
0.10%	1
1.20%	16
0.42%	6
0.07%	1
0.07%	1
0.05%	1
0.32%	4
0.82%	11
0.34%	4
100%	1,330

APPENDIX Z

Filed: May 19, 2010 EB-2010-0002 Exhibit A-7-3 Appendix A Page 1 of 10

THIS AGREEMENT made in duplicate this 1st day of January, 2010 (the "Effective Date").

BETWEEN:

HYDRO ONE INC. (the "Services Provider")

- and -

HYDRO ONE REMOTE COMMUNITIES INC., HYDRO ONE NETWORKS INC., HYDRO ONE TELECOM INC. and HYDRO ONE BRAMPTON NETWORKS INC. (individually, the "Services Recipient" and collectively, the "Services Recipients")

1.0 PREFACE

This Agreement is intended to identify the services that are to be provided to each of the Services Recipients by the Services Provider in accordance with the terms and conditions herein. Except as otherwise specified, the term of this Agreement shall be for a period of lyear commencing on the Effective Date.

2.0 SERVICES

The Services Provider shall provide to each of the Services Recipients (as may be required by each of them respectively from time to time during the term of this Agreement) the following services (the "Services"), which Services are more particularly described in Schedule "A" attached hereto:

- General Counsel & Secretary (including Corporate Executive Office) services
- President / CEO / Chairman services
- Chief Financial Office services (including Strategic Financial services)
- Use of certain assets by Hydro One Networks Inc.

3.0 FEES PAYABLE

(a) The price for the performance of the Services for each of the Services Recipients shall be as identified in Schedule "A" attached hereto, exclusive of any sales and use taxes, as may be applicable. The relevant price for the Services shall be paid by each of the Services Recipients to the Services Provider by means of monthly electronic journal transfers which shall be reflected in the applicable books and records of each party. Each electronic journal transfer amount shall include GST (as this term is defined in clause 4.0(a)(iv) below) calculated at the rate applicable at the time such journal transfer is recorded in the books of the Services Provider. In addition, each Services Recipient shall pay for any material costs which the Services Provider, acting reasonably, incurs as a result of resources, services and products that the Services Provider must purchase and that are in addition to the Services Provider's existing resources, services and products, in

order to provide the said Services Recipient with specific services it requires and requests.

(b) If at any time during the performance of the Services, a Services Recipient is of the opinion that there are deficiencies in the Services provided to it and/or that the price payable is in any way inaccurate, the said Services Recipient shall pay the entire relevant price payable by it in full and its sole remedy shall be to follow the dispute resolution procedures outlined in Section 6.0 herein to determine what amount, if any, shall be refunded to the said Services Recipient and/or what Services, if any, shall be rectified or redone by the Services Provider.

4.0 REPRESENTATIONS AND WARRANTIES

- (a) The Services Provider represents and warrants that:
 - (i) it has all the necessary authority and capacity to enter into this Agreement and to perform its obligations hereunder;
 - (ii) the execution of this Agreement and compliance with and performance of the terms, conditions, and covenants contemplated herein have been duly authorized by all necessary corporate action on the part of the Services Provider;
 - (iii) all staff employed in the performance of the Services shall have the qualifications, expertise and experience which could reasonably be expected of staff of a services provider performing work similar to the Services; and
 - (iv) it is a GST registrant in good standing under the *Excise Tax Act* (Canada), and that its GST registration number is 869994731RT0001. For the purposes of this Agreement, GST means the federal Goods and Services Tax chargeable in accordance with Part IX of the *Excise Tax Act* (Canada), as amended, or any similar value-added tax that may be applicable during the term of this Agreement to the Services to be provided hereunder.
- (b) Each Services Recipient represents and warrants that:
 - (i) it has all the necessary authority and capacity to enter into this Agreement and to perform its obligations hereunder; and
 - (ii) the execution of this Agreement and compliance with and performance of the terms, conditions, and covenants contemplated herein have been duly authorized by all necessary corporate action on the part of the Services Recipient.

5.0 PERFORMANCE OF THE SERVICES

(a) <u>Compliance with Standards and Applicable Law:</u> The Services Provider shall perform the Services in a diligent and professional manner and shall comply with the Services Recipient's computer data management and data access protocols contained in the Services Recipient's documents entitled "Corporate Security Standard 600-3 – Information Security Policy" and "Corporate Security Policy 600 – Information Security Policy", both of which are dated January 17, 2000" and any amendments thereto which may be made from time to time by the Services Recipient. The Services Provider shall comply at all times with the statutes, regulations, by-laws, standards and codes, as amended, as may be applicable to the Services Provider in respect of the Services and the performance of its obligations hereunder and it shall, at its own expense, obtain and maintain in good standing all permits and licences required by any authorities having jurisdiction to perform the Services.

- (b) <u>Safety and Security Measures</u>: When any part of the Services is to be performed at any of the Services Recipients' premises, all of the Services Provider's staff engaged in the performance of the Services at the said premises shall comply with the safety and security requirements and measures in effect at the said premises.
- (c) <u>Meetings</u>: Each of the Services Recipient and the Services Provider shall, after the Effective Date, meet at least twice during the term of this Agreement to review performance, quality and timeliness of the Services provided by the Services Provider pursuant to this Agreement.

6.0 DISPUTE RESOLUTION PROCEDURES

Any controversy, dispute, difference, question or claim arising between any of the parties in connection with the interpretation, performance, construction or implementation of this Agreement that cannot be resolved by a director or manager from each of the said parties (collectively "Dispute") shall be settled in accordance with this Section. The aggrieved party shall send the other affected party(ies) written notice identifying the Dispute, the amount involved, if any, and the remedy sought, and invoking the procedures of this Section. The Presidents of each affected party shall confer in an effort to resolve the Dispute. If the Presidents are unable to resolve the Dispute within 5 business days after receipt of the written notice of the Dispute, then the affected parties shall submit the Dispute to the President of Hydro One Inc. for resolution.

7.0 CONFIDENTIALITY AND INTELLECTUAL PROPERTY

(a) Confidentiality:

Each party (the "Receiving Party") shall maintain in strict confidence this Agreement and the existence and contents thereof and all information, analysis, conclusions, drawings, reports, specifications or other information, proprietary or otherwise, whether transmitted orally, electronically or in written form, and received in furtherance of this Agreement from any of the other parties (the "Disclosing Party") or any of the Disclosing Party's directors, officers, employees, consultants, agents or legal and other advisors (the "Disclosing Party Representatives") (collectively the "Confidential Information"). Except as permitted herein, the Receiving Party shall not publish, reproduce, or disclose, either directly or indirectly, the said Confidential Information to any third party and shall not use the said Confidential Information for any purpose other than for purposes of this Agreement without the prior written consent of the Disclosing Party. The Receiving Party may disclose the Confidential Information only to its shareholder, directors, officers, employees, consultants, agents or professional advisors (the "Receiving Party Representatives") having a need to know same and who have undertaken a like obligation to maintain its confidentiality.

For greater certainty, Confidential Information includes any and all personal information (as that term is defined in the *Freedom of Information and Protection of Privacy Act* (Ontario) and the *Personal Information Protection and Electronic Documents Act* (Canada), as they may be amended, and any and all information regarding a consumer, retailer, wholesale buyer, wholesale supplier, or a generator, provided by the Disclosing Party to the Receiving Party for purposes of this Agreement, whether or not such information was initially provided prior to the Effective Date.

The Receiving Party undertakes to protect and safeguard all Confidential Information in its possession or under its control and received by the Disclosing Party, in the manner described in Schedule "B" attached hereto. The Disclosing Party may, on reasonable notice, and during regular business hours, audit the information management practices of the Receiving Party to confirm compliance with the terms and conditions of this Section 7.0 and all applicable statutes, regulations, by-laws, standards and codes, as amended.

The Receiving Party undertakes to notify the Disclosing Party immediately upon discovery of any unauthorized use and/or disclosure of any of the Disclosing Party's Confidential Information, to cooperate with the Disclosing Party to help regain possession of such Confidential Information, and to prevent its further unauthorized use and/or disclosure.

The foregoing obligations with respect to confidentiality, use, reproduction, dissemination, publication and non-disclosure herein shall not apply to any information that:

- (i) is previously known to or lawfully in the possession of the Receiving Party prior to the date of disclosure as evidenced by the Receiving Party's written record;
- (ii) is independently known to or discovered by the Receiving Party, without any reference to the information or material;
- (iii) is obtained by the Receiving Party from an arm's length third party having a bona fide right to disclose same and who was not otherwise under an obligation of confidence or fiduciary duty to the Disclosing Party or the Disclosing Party Representatives;
- (iv) is or becomes public knowledge through no fault or omission of, or breach of this Agreement by the Receiving Party or the Receiving Party Representatives; or
- (v) is required to be disclosed pursuant to a final judicial or governmental order or other legal process.

Confidential Information (other than this Agreement which shall be jointly owned by the parties) shall remain the sole and exclusive property of the Disclosing Party that has disclosed the Confidential Information, and the Disclosing Party shall retain all right, title and interest in and to the said Confidential Information.

The Receiving Party shall keep a record of written Confidential Information furnished to it by the Disclosing Party in a location separate from those locations where the Receiving Party has stored information in respect of other third parties for which it performs work and it shall advise the Disclosing Party of such location.

All Confidential Information furnished by the Disclosing Party (other than this Agreement), including that portion of the Confidential Information which is contained in analyses, compilations, studies or other documents prepared by the Receiving Party or by the Receiving Party Representatives, is the Disclosing Party's property and will be returned immediately to the Disclosing Party upon its request.

(b) Intellectual Property:

Each of the Services Recipients shall obtain all rights, title and interests, including copyright ownership, to any reports and any other deliverable that is to be produced and delivered to it by the Services Provider and, subject to applicable legislation and notwithstanding clause 7.0(a) above, the said Services Recipient may use, disclose or modify such reports or deliverable in any manner it

deems appropriate. The Services Provider shall not do any act which may compromise or diminish the said Services Recipient's interest as aforesaid.

(c) Survival of Obligations:

This Section 7.0 shall forever survive the termination or expiration of this Agreement.

8.0 LIABILITY

The Services Provider shall indemnify each of the Services Recipients and the Services Recipient's respective successors and assigns, directors, officers, employees, contractors and agents from and against all costs or damages attributable to the Services Provider's performance and/or non-performance of its obligations under this Agreement and any amendments thereto, whether arising from or based upon breach of contract, tort, negligence, strict liability or otherwise. Each Services Recipient shall indemnify the Services Provider and the Services Provider's successors and assigns, directors, officers, employees, contractors and agents from and against all costs or damages attributable to the said Services Recipient's performance and/or non-performance of its obligations under this Agreement and any amendments thereto, whether arising from or based upon breach of contract, tort, negligence, strict liability or otherwise. Notwithstanding any other provision of this Agreement, no party hereto shall be liable for any economic loss, loss of goodwill, loss of profit or for any special, indirect or consequential damages, where the said losses or damages are incurred by the other parties or any of them or by any third party claiming through or under the other parties or any of them.

This Section 8.0 shall forever survive the termination or expiration of this Agreement.

9.0 AUTHORIZED REPRESENTATIVES

The authorized representatives of the parties hereto for purposes of this Agreement are the following:

HYDRO ONE TELECOM INC.

65 Kelfield Street, Rexdale, Ontario M9W 5A3

Attention:

Cliff Truax

Telephone:

416-240-6713

Telecopier:

416-240-6802

HYDRO ONE REMOTE COMMUNITIES INC.

483 Bay Street,

Toronto, Ontario M5G 2P5

Attention:

Una O'Reilly

TCT8

Telephone:

416-345-6698

Telecopier:

416-345-6356

HYDRO ONE NETWORKS INC.

483 Bay Street,

Toronto, Ontario M5G 2P5

Attention:

Marc Villett

TCT 8

Telephone:

416-345-6849

Telecopier:

416-345-6833

HYDRO ONE INC.

483 Bay Street,

Toronto, Ontario M5G 2P5

Attention:

Sandy Struthers

TCT15

Telephone:

416-345-6140

Telecopier:

416-345-5695

HYDRO ONE BRAMPTON NETWORKS INC.

175 Sandalwood Parkway West, Brampton, Ontario L7A 1E8

Attention:

James Gribbon

Telephone:

(905) 840-6300 ext. 205

Telecopier:

(905) 840-0967

All correspondence, reports, documents and/or other communication concerning this Agreement and the Schedule attached hereto shall be directed to the attention of the authorized representatives noted above and shall be deemed to be sufficiently given if delivered personally, mailed or transmitted by fax to the attention of the authorized representatives at the addresses above, and any notice so given shall be deemed to have been made and received on the date of delivery or on the 5th business day following the day of mailing of same or on the day of transmission if transmitted during normal business hours, otherwise on the next business day, as the case may be.

10.0 CHANGE OF CONTROL

In the event of a change of control of any of the Services Recipients, this Agreement shall immediately terminate as between the said Services Recipient and the Services Provider only. A change of control shall mean, as applicable, a purchase of more than fifty (50) percent of the outstanding capital by a non-affiliate third party.

11.0 ASSIGNMENT

Neither this Agreement nor any rights and obligations shall be assigned by any of the Services Recipients without the prior written consent of the Services Provider and by the Services Provider without the prior written consent of the affected Services Recipient, in either case which consent shall not be unreasonably withheld. Subject to the foregoing, this Agreement shall enure to the benefit of the parties hereto and their respective successors and permitted assigns.

12.0 SCHEDULES

Schedules "A" and "B" attached hereto are to be read with and form part of this Agreement.

13.0 COUNTERPARTS

This Agreement may be executed in counterparts and the counterparts together shall constitute an original.

IN WITNESS THEREOF the parties hereto have caused this Agreement to be executed by their respective representatives duly authorized in that behalf.

HYDRO ONE TELECOM INC.

Name: Deborah Hardy

Title: Manager, Supply Chain Management

I have authority to bind the corporation.

HYDRO ONE REMOTE COMMUNITIES INC.

Name: Myles D'Arcey

Title: President and CEO

I have authority to bind the corporation.

HYDRO ONE NETWORKS INC.

Name: Maureen Wareham

Title: Secretary

I have authority to bind the corporation.

HYDRO ONE INC.

Name: Sandy Struthers

Title: Chief Financial Officer

I have authority to bind the corporation.

HYDRO ONE BRAMPTON NETWORKS INC.

Name: Roger A. Albert

Title: President and CEO

I have authority to bind the corporation.

Schedule "A"

The annual cost for the performance of the Services to be delivered is summarized as follows:

	SERVICES TO BE PROVIDED BY HYDRO ONE INC. TO (in \$Thousands)			
Services	Hydro One Networks Inc.	Hydro One Remote Communities Inc.	Hydro One Telecom Inc.	Hydro One Brampton Networks Inc.
General Counsel & Secretary (including Corporate Executive Office)	910	25	10	20
President / CEO / Chairman Services	3,077	17	25	33
Chief Financial Office Services (including Strategic Financial services)	819	7	29	38
Totals	4,806	49	64	91

DESCRIPTION OF SERVICES:

General Counsel and Secretary

The Services Provider shall provide the Services Recipient with professional legal advice and input. This advice shall include, but shall not be limited to, interpretation and analysis of legislation and regulations, advice concerning corporate structure and governance, development of regulatory instruments (licences), contracts, and environmental and health and safety issues. The Services Provider will also provide guidance on business ethics and support in the form of a business code of conduct.

President / CEO / Chairman services

The Services Provider shall provide the Services Recipient with strategic direction and management in an attempt to ensure that the Services Recipient's corporate goals are achieved.

Chief Financial Office services (including Strategic Financial services)

The Services Provider shall provide the Services Recipient with strategic direction and management in an attempt to ensure that the Services Recipient's corporate financial goals are achieved.

The Services Provider shall provide the Services Recipient with strategic approval with respect to investment decisions. Services relating to the review of policies and procedures, treasury operations and tax planning, financial control and reporting will also be provided by the Services Provider to the Services Recipient as required by the Services Recipient.

Schedule "B"

Receiving Party Security Safeguards Regarding Confidential Information Received from the Disclosing Party

The Receiving Party shall protect the Confidential Information by security safeguards appropriate to the sensitivity of the information.

- 1) The Receiving Party shall protect the Confidential Information against such risks as loss or theft, unauthorized access, disclosure, copying, use, modification or destruction, through appropriate security measures, regardless of the format in which it is held.
- 2) All of the Receiving Party's Representatives with access to the Confidential Information shall be contractually required to respect the confidentiality of that information.
- 3) The Receiving Party acknowledges and agrees that the nature of the safeguards will vary depending on the sensitivity, amount, distribution and format of the information, and the method of storage. The Receiving Party shall ensure that more sensitive information will be safeguarded by a higher level of protection.
- 4) The Receiving Party shall ensure that methods of protection will include:
 - (a) physical measures, for example, locked filing cabinets and restricted access to offices;
 - (b) organizational measures, for example, controlling entry to data centers and limiting access to information on a "need-to-know" basis;
 - (c) technological measures, for example, the use of passwords and encryption; and
 - (d) investigative measures, in cases where the Receiving Party has reasonable grounds to believe that the Confidential Information is being inappropriately collected, used or disclosed by anyone whom in law the Receiving Party is responsible.

Filed: May 19, 2010 EB-2010-0002 Exhibit A-7-3 Appendix B Page1 of 10

THIS AGREEMENT made in duplicate this 1st day of January, 2010 (the "Effective Date").

BETWEEN:

HYDRO ONE NETWORKS INC. (the "Services Provider")

- and -

HYDRO ONE REMOTE COMMUNITIES INC, HYDRO ONE INC. HYDRO ONE TELECOM INC., and HYDRO ONE BRAMPTON NETWORKS INC.

(individually, the "Services Recipient" and collectively, the "Services Recipients")

1.0 PREFACE

This Agreement is intended to identify the services that are to be provided to each of the Services Recipients by the Services Provider in accordance with the terms and conditions herein. Except as otherwise specified, the term of this Agreement shall be for a period of 1 year commencing on the Effective Date.

2.0 SERVICES

The Services Provider shall provide to each of the Services Recipients (as may be required by each of them respectively from time to time during the term of this Agreement) the following services (the "Services"), which Services are more particularly described in Schedule "A" attached hereto:

- General Counsel and Secretary services
- Financial services
- Corporate services
- Telecommunications Services
- Other services

3.0 FEES PAYABLE

(a) The price for the performance of the Services for each of the Services Recipients shall be as identified in Schedule "A" attached hereto, exclusive of any sales and use taxes, as may be applicable. The relevant price for the Services shall be paid by each of the Services Recipients to the Services Provider by means of monthly electronic journal transfers which shall be reflected in the applicable books and records of each party. In addition, each Services Recipient shall pay for any material costs which the Services Provider, acting reasonably, incurs as a result of resources, services and products that the Services Provider must purchase and that are in addition to the

Services Provider's existing resources, services and products, in order to provide the said Services Recipient with specific services it requires and requests.

- (b) If at any time during the performance of the Services, a Services Recipient is of the opinion that there are deficiencies in the Services provided to it and/or that the price payable is in any way inaccurate, the said Services Recipient shall pay the entire relevant price payable by it in full and its sole remedy shall be to follow the dispute resolution procedures outlined in Section 6.0 herein to determine what amount, if any, shall be refunded to the said Services Recipient and/or what Services, if any, shall be rectified or redone by the Services Provider.
- (c) The parties acknowledge and agree that, with the exception of Hydro One Inc., they qualify as specified members of a closely related group under subsection 156(1) of the Excise Tax Act (Canada), as amended (the "Act") and have jointly executed a Form GST25, to make an election under subsection 156(2) of the Act to deem the purchase and sale of the Services to be made for nil consideration for Goods and Services Tax purposes.

4.0 REPRESENTATIONS AND WARRANTIES

- (a) The Services Provider represents and warrants that:
 - (i) it has all the necessary authority and capacity to enter into this Agreement and to perform its obligations hereunder;
 - (ii) the execution of this Agreement and compliance with and performance of the terms, conditions, and covenants contemplated herein have been duly authorized by all necessary corporate action on the part of the Services Provider; and
 - (iii) all staff employed in the performance of the Services shall have the qualifications, expertise and experience which could reasonably be expected of staff of a services provider performing work similar to the Services.
- (b) Each Services Recipient represents and warrants that:
 - (i) it has all the necessary authority and capacity to enter into this Agreement and to perform its obligations hereunder; and
 - (ii) the execution of this Agreement and compliance with and performance of the terms, conditions, and covenants contemplated herein have been duly authorized by all necessary corporate action on the part of the Services Recipient.

5.0 PERFORMANCE OF THE SERVICES

(a) <u>Compliance with Standards and Applicable Law:</u> The Services Provider shall perform the Services in a diligent and professional manner and shall comply with the Services Recipient's computer data management and data access protocols contained in the Services Recipient's documents entitled "Corporate Security Standard 600-3 – Information Security Policy" and "Corporate Security Policy 600 – Information Security Policy", both of which are dated January 17, 2000 and any amendments thereto which may be made from time to time by the Services Recipient. The Services Provider shall comply at all times with the statutes, regulations, by-laws, standards and codes, as amended, as may be applicable to the Services Provider in respect of the Services and the performance of its obligations hereunder and it shall, at its own expense, obtain and maintain in good standing all permits and licences required by any authorities having jurisdiction to perform the Services.

- (b) <u>Safety and Security Measures</u>: When any part of the Services is to be performed at any of the Services Recipients' premises, all of the Services Provider's staff engaged in the performance of the Services at the said premises shall comply with the safety and security requirements and measures in effect at the said premises.
- (c) <u>Meetings</u>: Each of the Services Recipient and the Services Provider shall, after the Effective Date, meet at least twice during the term of this Agreement to review performance, quality and timeliness of the Services provided by the Services Provider pursuant to this Agreement.

6.0 DISPUTE RESOLUTION PROCEDURES

Any controversy, dispute, difference, question or claim arising between any of the parties in connection with the interpretation, performance, construction or implementation of this Agreement that cannot be resolved by a director or manager from each of the said parties (collectively "Dispute") shall be settled in accordance with this Section. The aggrieved party shall send the other affected party(ies) written notice identifying the Dispute, the amount involved, if any, and the remedy sought, and invoking the procedures of this Section. The Presidents of each affected party shall confer in an effort to resolve the Dispute. If the Presidents are unable to resolve the Dispute within 5 business days after receipt of the written notice of the Dispute, then the affected parties shall submit the Dispute to the President of Hydro One Inc. for resolution.

7.0 CONFIDENTIALITY AND INTELLECTUAL PROPERTY

(a) Confidentiality:

Each party (the "Receiving Party") shall maintain in strict confidence this Agreement and the existence and contents thereof and all information, analysis, conclusions, drawings, reports, specifications or other information, proprietary or otherwise, whether transmitted orally, electronically or in written form, and received in furtherance of this Agreement from any of the other parties (the "Disclosing Party") or any of the Disclosing Party's directors, officers, employees, consultants, agents or legal and other advisors (the "Disclosing Party Representatives") (collectively the "Confidential Information"). Except as permitted herein, the Receiving Party shall not publish, reproduce, or disclose, either directly or indirectly, the said Confidential Information to any third party and shall not use the said Confidential Information for any purpose other than for purposes of this Agreement without the prior written consent of the Disclosing Party. The Receiving Party may disclose the Confidential Information only to its shareholder, directors, officers, employees, consultants, agents or professional advisors (the "Receiving Party Representatives") having a need to know same and who have undertaken a like obligation to maintain its confidentiality.

For greater certainty, Confidential Information includes any and all personal information (as that term is defined in the *Freedom of Information and Protection of Privacy Act* (Ontario) and the *Personal Information Protection and Electronic Documents Act* (Canada), as they may be amended, and any and all information regarding a consumer, retailer, wholesale buyer, wholesale supplier, or a generator provided by the Disclosing Party to the Receiving Party for purposes of this Agreement, whether or not such information was initially provided prior to the Effective Date.

The Receiving Party undertakes to protect and safeguard all Confidential Information in its possession or under its control and received by the Disclosing Party, in the manner described in Schedule "B" attached hereto. The Disclosing Party may, on reasonable notice, and during regular business hours, audit the information management practices of the Receiving Party to confirm compliance with the terms and

conditions of this Section 7.0 and all applicable statutes, regulations, by-laws, standards and codes, as amended.

The Receiving Party undertakes to notify the Disclosing Party immediately upon discovery of any unauthorized use and/or disclosure of any of the Disclosing Party's Confidential Information, to co-operate with the Disclosing Party to help regain possession of such Confidential Information, and to prevent its further unauthorized use and/or disclosure.

The foregoing obligations with respect to confidentiality, use, reproduction, dissemination, publication and non-disclosure herein shall not apply to any information that:

- (i) is previously known to or lawfully in the possession of the Receiving Party prior to the date of disclosure as evidenced by the Receiving Party's written record;
- (ii) is independently known to or discovered by the Receiving Party, without any reference to the information or material;
- (iii) is obtained by the Receiving Party from an arm's length third party having a bona fide right to disclose same and who was not otherwise under an obligation of confidence or fiduciary duty to the Disclosing Party or the Disclosing Party Representatives;
- (iv) is or becomes public knowledge through no fault or omission of, or breach of this Agreement by the Receiving Party or the Receiving Party Representatives; or
- (v) is required to be disclosed pursuant to a final judicial or governmental order or other legal process.

Confidential Information (other than this Agreement which shall be jointly owned by the parties) shall remain the sole and exclusive property of the Disclosing Party that has disclosed the Confidential Information, and the Disclosing Party shall retain all right, title and interest in and to the said Confidential Information.

The Receiving Party shall keep a record of written Confidential Information furnished to it by the Disclosing Party in a location separate from those locations where the Receiving Party has stored information in respect of other third parties for which it performs work and it shall advise the Disclosing Party of such location.

All Confidential Information furnished by the Disclosing Party (other than this Agreement), including that portion of the Confidential Information which is contained in analyses, compilations, studies or other documents prepared by the Receiving Party or by the Receiving Party Representatives, is the Disclosing Party's property and will be returned immediately to the Disclosing Party upon its request.

(b) Intellectual Property:

Each of the Services Recipients shall obtain all rights, title and interests, including copyright ownership, to any reports and any other deliverable that is to be produced and delivered to it by the Services Provider and, subject to applicable legislation and notwithstanding clause 7.0(a) above, the said Services Recipient may use, disclose or modify such reports or deliverable in any manner it deems appropriate. The Services Provider shall not do any act which may compromise or diminish the said Services Recipient's interest as aforesaid.

(c) Survival of Obligations:

The obligations in this Section 7.0 shall forever survive the termination or expiration of this Agreement.

8.0 LIABILITY

The Services Provider shall indemnify each of the Services Recipients and the Services Recipient's respective successors and assigns, directors, officers, employees, contractors and agents from and against all costs or damages attributable to the Services Provider's performance and/or non-performance of its obligations under this Agreement and any amendments thereto, whether arising from or based upon breach of contract, tort, negligence, strict liability or otherwise. Each Services Recipient shall indemnify the Services Provider and the Services Provider's successors and assigns, directors, officers, employees, contractors and agents from and against all costs or damages attributable to the said Services Recipient's performance and/or non-performance of its obligations under this Agreement and any amendments thereto, whether arising from or based upon breach of contract, tort, negligence, strict liability or otherwise. Notwithstanding any other provision of this Agreement, no party hereto shall be liable for any economic loss, loss of goodwill, loss of profit or for any special, indirect or consequential damages, where the said losses or damages are incurred by the other parties or any of them or by any third party claiming through or under the other parties or any of them.

This Section 8.0 shall forever survive the termination or expiration of this Agreement.

9.0 AUTHORIZED REPRESENTATIVES

The authorized representatives of the parties hereto for purposes of this Agreement are the following:

HYDRO ONE TELECOM INC.

65 Kelfield Street, Rexdale, Ontario M9W 5A3

Attention:

Cliff Truax

Telephone:

416-240-6713

Telecopier:

416-240-6802

HYDRO ONE REMOTE COMMUNITIES INC.

483 Bay Street, Toronto, Ontario M5G 2P5

Attention:

Una O'Reilly

TCT 8

Telephone:

416-345-6698

Telecopier:

416-345-6356

HYDRO ONE NETWORKS INC.

483 Bay Street, Toronto, Ontario M5G 2P5

Attention:

Marc Villett

TCT 8

Telephone:

416-345-6849

Telecopier:

416-345-6833

HYDRO ONE INC.

483 Bay Street, Toronto, Ontario M5G 2P5

Attention:

Sandy Struthers

TCT 15

Telephone:

416-345-6140

Telecopier:

416-345-5695

HYDRO ONE BRAMPTON NETWORKS INC.

175 Sandalwood Parkway West, Brampton, Ontario L7A 1E8

Attention:

James Gribbon

Telephone:

(905) 840-6300 ext. 205

Telecopier:

(905) 840-0967

All correspondence, reports, documents and/or other communication concerning this Agreement and the Schedule attached hereto shall be directed to the attention of the authorized representatives noted above and shall be deemed to be sufficiently given if delivered personally, mailed or transmitted by fax to the attention of the authorized representatives at the addresses above, and any notice so given shall be deemed to have been made and received on the date of delivery or on the 5th business day following the day of mailing of same or on the day of transmission if transmitted during normal business hours, otherwise on the next business day, as the case may be.

10.0 CHANGE OF CONTROL

In the event of a change of control of the Services Provider, this Agreement shall immediately terminate as between each of the Services Recipients and the Services Provider. A change of control shall mean, as applicable, a purchase of more than fifty (50) percent of the outstanding capital by a non-affiliate third party.

11.0 ASSIGNMENT

Neither this Agreement nor any rights and obligations shall be assigned by any of the Services Recipients without the prior written consent of the Services Provider and by the Services Provider without the prior written consent of the affected Services Recipient, in either case which consent shall not be unreasonably withheld. Subject to the foregoing, this Agreement shall enure to the benefit of the parties hereto and their respective successors and permitted assigns.

12.0 SCHEDULES

Schedules "A" and "B" attached hereto are to be read with and form part of this Agreement.

13.0 COUNTERPARTS

This Agreement may be executed in counterparts and the counterparts together shall constitute an original.

IN WITNESS THEREOF the parties hereto have caused this Agreement to be executed by their respective representatives duly authorized in that behalf.

HYDRO ONE TELECOM INC.

HYDRO ONE REMOTE COMMUNITIES INC.

Name: Deborah Hardy

Title: Manager, Supply Chain Management I have authority to bind the corporation

Name: Myles B'Arcey Title: President and CEO

have authority to bind the corporation.

HYDRO ONE NETWORKS INC.

Name: Maureen Wareham

Title: Secretary

I have authority to bind the corporation.

HYDRO ONE INC.

Name: Sandy Struthers

Title: Chief Financial Officer

I have authority to bind the corporation.

HYDRO ONE BRAMPTON NETWORKS INC.

Name: Roger A. Albert

Title: President and CEO

I have authority to bind the corporation.

Schedule "A"

The annual cost for the performance of the Services to be delivered is summarized as follows:

	SERVICES TO BE PROVIDED BY HYDRO ONE NETWORKS INC. TO: (in \$Thousands)			
SERVICES	Hydro One Inc.	Hydro One Remote Communities Inc.	Hydro One Telecom Inc.	Hydro One Brampton Networks Inc.
General Counsel and Secretary Services	90	311	90	180
Financial Services	18	316	327	462
Corporate Services		247	402	32
Telecommunication Services	-	132	277	-
Other Services	-	610	1,995	-
Totals	108	1,616	3,091	674

DESCRIPTION OF SERVICES:

The following provides a generic description of all Services to be provided by the Services Provider.

GENERAL COUNSEL AND SECRETARY SERVICES

The Services Provider shall provide the Services Recipient with professional legal advice and input which shall include, but not be limited to, interpretation and analysis of legislation and regulations, advice concerning corporate structure and governance, development of regulatory instruments (licenses), contracts, and environmental and health and safety issues.

FINANCIAL SERVICES

The Services Provider shall provide financial services support to the Services Recipient by providing timely and reliable financial information. The Services Provider will also provide services relating to business planning, budgeting and financial reporting. As required, services relating to

treasury/pension/investor relations, taxation, internal audit and risk management, insurance, financial systems and services, cost and inventory accounting and decision support will also be provided. Other financial services such as transaction processing (accounts payable and receivable), and fixed asset and general accounting will also be provided.

CORPORATE SERVICES

The Services Provider shall provide corporate services in five main areas:

- Human Resources / Labour Relations provision of human resource policy, strategy and standards to meet legal and other requirements. This includes staff planning, leadership development, succession planning and change management as well as labour relations services, pay equity, diversity, health services and performance management, compensation, health and benefits programs and administration of payroll, benefit plans and incentive plans.
- Business Architecture provision of information systems support for Cornerstone Phase 1 and 2 as well as the management of legacy tools to support real time operations.
- Information Management provision of computer and applications management support, internal telecommunications management, IT capital projects and IT strategy management and Inergi applications support management.
- Corporate Security provision of advice, guidance and investigative support services to ensure the protection of assets and optimize the reliable delivery of electricity.
- First Nations & Métis Relations provision of leadership and consultation support to address issues with First Nations & Métis communities.
- Corporate Communications provision of strategy, program and support for corporate communications, public affairs and media relations, as well as corporate and shareholder relations and strategy programs related to internal communications.

TELECOMMUNICATIONS SERVICES

The Services Provider shall provide the Services Recipient with various telecommunications-related services including field and engineering, logistics, corporate, construction, telecommunication and information technology services.

OTHER SERVICES

The Services Provider shall provide the Services Recipient with:

- Supply Procurement provision of demand planning, management and procurement, vendor and inventory management, process development, data management, warehousing, waste management and investment recovery.
- Customer Services Operation provision of bill production and dispatch and settlements service, as well as data services related to field-based service orders.
- Information Management provision of infrastructure operations, including a variety of activities such as system testing and integration, Internet and database management services, as well as services related to mainframe infrastructure operations, end user and desk-top support.

Schedule "B"

Receiving Party Security Safeguards Regarding Confidential Information Received from the Disclosing Party

The Receiving Party shall protect the Confidential Information by security safeguards appropriate to the sensitivity of the information.

- 1) The Receiving Party shall protect the Confidential Information against such risks as loss or theft, unauthorized access, disclosure, copying, use, modification or destruction, through appropriate security measures, regardless of the format in which it is held.
- 2) All of the Receiving Party's Representatives with access to the Confidential Information shall be contractually required to respect the confidentiality of that information.
- 3) The Receiving Party acknowledges and agrees that the nature of the safeguards will vary depending on the sensitivity, amount, distribution and format of the information, and the method of storage. The Receiving Party shall ensure that more sensitive information will be safeguarded by a higher level of protection.
- 4) The Receiving Party shall ensure that methods of protection will include:
 - (a) physical measures, for example, locked filing cabinets and restricted access to offices;
 - (b) organizational measures, for example, controlling entry to data centers and limiting access to information on a "need-to-know" basis;
 - (c) technological measures, for example, the use of passwords and encryption; and
 - (d) investigative measures, in cases where the Receiving Party has reasonable grounds to believe that the Confidential Information is being inappropriately collected, used or disclosed by anyone whom in law the Receiving Party is responsible.

Filed: May 19, 2010 EB-2010-0002 Exhibit A-7-3 Appendix J Page 1 of 19

CDM SERVICES AGREEMENT

THIS AGREEMENT made in duplicate this 1st day of February, 2010 (the "Effective Date").

BETWEEN:

HYDRO ONE BRAMPTON NETWORKS INC., a corporation incorporated pursuant to the laws of the Province of Ontario and having an office at 175 Sandalwood Parkway West, Brampton, Ontario L7A 1E8 (hereinafter "the LDC")

OF THE FIRST PART.

- and -

HYDRO ONE NETWORKS INC., a corporation incorporated pursuant to the laws of the Province of Ontario and having an office at 483 Bay St., North Tower, 14th Floor, Toronto, Ontario M5G 2P5 (hereinafter "HONI")

OF THE SECOND PART.

WHEREAS the Ontario Power Authority ("OPA") received a directive (the "Directive"), dated July 13, 2006, from the Minister of Energy to coordinate and fund the delivery of electricity conservation and demand management ("CDM") programs by local distribution companies in Ontario in accordance with the guidelines set out in the Directive;

AND WHEREAS the OPA has established an Initial Portfolio for calendar year 2008 which, in part, draws upon existing experience of LDCs on conservation and demand management initiatives, for the purpose of establishing province-wide programs for delivery under the Directive;

AND WHEREAS the OPA has, in accordance with the Directive, established additional CDM Programs for 2008 to 2010;

AND WHEREAS the LDC and the OPA have executed an Amended and Restated Master CDM Program Agreement that sets out the parties' respective rights and obligations under which the LDC can deliver specific CDM Programs for 2008 to 2010 with funding provided by the OPA (the "Master Agreement");

AND WHEREAS one of the CDM Programs which the LDC wishes to implement is the Residential and Small Commercial Demand Response Program (the "Peaksaver Program");

AND WHEREAS the LDC wishes to retain HONI to assist the LDC in implementing the Peaksaver Program by providing certain services and HONI has agreed to provide said services to the LDC in accordance with and subject to the terms and conditions of this Agreement.

NOW THEREFORE in consideration of the mutual covenants, terms and conditions contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby irrevocably acknowledged, the parties hereto agree as follows:

1.0 **DEFINITIONS**

In this Agreement, including the recitals and the Schedules hereto, in addition to terms defined elsewhere in this Agreement, unless there is something in the subject matter or context inconsistent therewith, the following words shall have the following meanings and all other capitalized words or expressions shall have the meaning given to them in the Master Agreement:

- 1.1 "Affiliate" has the meaning ascribed to it in the Ontario Business Corporations Act, as amended.
- 1.2 "Agreement" means this CDM Services Agreement between the LDC and HONI as it may be amended from time to time, including the Schedule attached hereto and made a part hereof by reference hereto and any amendments to the Schedule or to the body of this Agreement.
- 1.3 "Business Day" means a day other than a Saturday, Sunday, or statutory holiday in the Province of Ontario.
- "Customers" means those Residential Customers and Small Commercial Customers that have an active account with the LDC and whose electricity meters are read on at least a quarterly basis, but excludes those Residential Customers and Small Commercial Customers that are classified within the "recreational properties" rate class and the term "Customer" shall have the corresponding meaning.
- 1.5 **"DR Financial Incentive"** means the amount of \$25 that a Participant is entitled to receive if it has completed the Customer Enrolment Form and if the LDC has completed a Detailed Installation Report for it.
- 1.6 "Effective Date" means the date first written above.
- 1.7 **"Eligible Customer"** means a Customer that does not have a Load Control Device installed or otherwise located at its premises.
- 1.8 "Fixed Funding Amount" means the dollar amount which the LDC expects, during a given period, to become entitled to receive from the OPA based on the fixed costs of the LDC in relation to the Peaksaver Program pursuant to the Funding Formula.
- 1.9 "Goods and Services Tax" means the federal Goods and Services Tax chargeable in accordance with Part IX of the Excise Tax Act (Canada), as amended, or any similar value-added tax that may be applicable during the Term to the Services to be provided pursuant to this Agreement
- 1.10 "Governmental Authority" means any government, parliament, legislature or any regulatory authority, agency, commission or a board of any government, parliament or legislature, or any political subdivision thereof, or any court or, without limitation to the foregoing, any other law, regulation or rule making entity or any person acting under the authority of any of the foregoing or any other authority charged with the administration or enforcement of laws.
- 1.11 "Participant" means a Customer that has enrolled and that has installed or caused to be installed in its premises, as shown on its account with the LDC, a Load Control Device.
- 1.12 "Residential Customers" means an electricity distribution customer of the LDC (i) whose account with the LDC has the service classification "Residential" (or equivalent) pursuant to the

- rate order issued to the LDC by the OEB for the years in which the Peaksaver Program is implemented; or (ii) who is a residential customer on a farm;
- 1.13 "Small Commercial Customer" means an electricity distribution customer of the LDC whose account with the LDC has the service classification "General Service less than 50 kW" or the equivalent.
- 1.14 "Subcontract" means an agreement entered into by HONI and a third party whereby HONI has subcontracted all or part of the Services to the said third party. Any such third party shall hereinafter be referred to as a "Subcontractor".

2.0 CONDITION PRECEDENTS

- 2.1 The parties acknowledge and agree that this Agreement and the fulfillment of all terms and conditions hereunder are conditional upon the following occurring by no later than February 28, 2010:
 - (a) the LDC Registering for the Peaksaver Program to accept and agree to the 2010 Amended and Restated Schedule "D-2" at the Website and HONI receiving evidence of said registration from the LDC in a form acceptable to HONI; and
 - (b) HONI Registering for the OPA's Residential and Small Commercial Demand Response Program at the Website.
- 2.2 If the conditions specified in clause 2.1 above cannot be successfully completed or achieved on or before February 28, 2010 and a time extension cannot be agreed upon, the parties shall be under no legal obligation or have any liability of any nature whatsoever with respect to the matters described herein by virtue of this Agreement and neither party shall be liable for any penalty or damages as a result thereof.
- 2.3 The LDC acknowledges and agrees that HONI has subcontracted all or part of the Services to Goodcents International, ULC for the period of the Term up to and including March 31, 2010. The LDC further acknowledges and agrees that HONI may subcontract all or part of the Services to a third party for the provision of the Services after March 31, 2010.

3.0 TERM

3.1 Subject to the termination rights in this clause and except as otherwise specified, the term of this Agreement shall be for a period commencing on the Effective Date and terminating on December 31, 2011 inclusive (hereinafter referred to as the "Term"). If a Subcontract is terminated for convenience as permitted therein or if a notice of termination of a Subcontract is received by one party to the said Subcontract from the other party to the said Subcontract, HONI may terminate this Agreement by providing the LDC with as much termination notice as is provided under the said Subcontract and upon such termination of this Agreement, HONI shall be under no further obligation or have any further liability of any nature whatsoever with respect to the matters described herein by virtue of this Agreement except as outlined in Section 9.0 Liability and Indemnification. If a Subcontract is terminated by virtue of one party to the said Subcontract exercising a right of termination due to an event of default by the other party to the said Subcontract or if a notice of termination of a Subcontract is received by one party to the said Subcontract from the other party to the said Subcontract due to an event of default under the said

Subcontract, HONI may terminate this Agreement by providing the LDC with as much termination notice as is provided under the said Subcontract and upon such termination of this Agreement, HONI shall be under no further obligation or have any further liability of any nature whatsoever with respect to the matters described herein by virtue of this Agreement except as outlined in Section 9.0 Liability and Indemnification. In addition, HONI may terminate this Agreement at any time effective after March 31, 2010 if it is unable to, or if HONI anticipates that it will be unable to, negotiate and execute an agreement with a third party for the provision of all or part of the Services for the period after March 31, 2010 and upon such termination of this Agreement, HONI shall be under no further obligation or have any further liability of any nature whatsoever with respect to the matters described herein by virtue of this Agreement except as outlined in Section 9.0 Liability and Indemnification. The provisions of this clause 3.1 with respect to liability shall survive the termination or expiry of this Agreement.

4.0 REPRESENTATIONS AND WARRANTIES

- 4.1 HONI represents and warrants that:
 - (a) <u>Corporate Status</u>. HONI is a corporation duly constituted, validly existing and in good corporate standing under the laws of its incorporating jurisdiction;
 - (b) <u>Authority</u>. HONI has the necessary corporate power, authority and capacity and good and sufficient right to enter into this Agreement on the terms and conditions herein set forth, and has, and, subject to the terms and conditions herein, covenants to maintain during the Term of this Agreement, the financial and other ability and authority to fulfill its obligations hereunder; and
 - (c) <u>Valid, Binding and Enforceable</u>. This Agreement constitutes a valid and binding obligation of HONI enforceable against it in accordance with its terms and conditions.
- 4.2 The LDC represents and warrants that:
 - (a) <u>Corporate Status.</u> The LDC is a corporation duly constituted, validly existing and in good corporate standing under the laws of its incorporating jurisdiction;
 - (b) Authority. The LDC has the necessary corporate power, authority and capacity and good and sufficient right to enter into this Agreement on the terms and conditions herein set forth, and has, and, subject to the terms and conditions herein, covenants to maintain during the Term of this Agreement, the financial and other ability and authority to fulfill its obligations hereunder; and
 - (c) <u>Valid, Binding and Enforceable</u>. This Agreement constitutes a valid and binding obligation of the LDC enforceable against it in accordance with its terms and conditions.
- 4.3 HONI makes no representation or warranty, and HONI shall not be deemed to have made any representation or warranty, express, implied, statutory or otherwise, as to the accuracy or completeness of any information furnished to the LDC for purposes of the LDC's Application to the OPA for the Peaksaver Program and the LDC's obligations under Schedule "D" of the Master Agreement, whether said information was furnished prior to the Effective Date of this Agreement

or during the Term of this Agreement. HONI shall have no liability to the LDC resulting from its use of the said information, unless such liability is created under some further contractual obligation between the parties. The LDC agrees that it shall assume full responsibility for its use of, and all conclusions it derives from, the said information, and neither HONI nor any of its directors, officers, employees and consultants shall have any liability with respect thereto. This clause 4.3 shall survive the expiry or termination of this Agreement.

4.4 Except as otherwise specified herein, HONI makes no representation or warranty, and HONI shall not be deemed to have made any representation or warranty, express, implied, statutory or otherwise, with respect to the Services or any part thereof including the Load Control Devices and the installations thereof. The parties acknowledge and agree that as between them, HONI does not own nor will it own the Load Control Devices and title to the Load Control Devices shall at all times be and remain with the LDC. Nothing in this Agreement or otherwise shall have the effect of passing title to the Local Control Devices unto HONI. This clause 4.4 shall forever survive the termination or expiry of this Agreement.

5.0 THE SERVICES

- 5.1 HONI shall perform, or shall cause to be performed, the Services as more particularly described in this Section commencing on the first Business Day after all of the conditions specified in clause 2.1 have been met or have occurred in accordance with the terms and conditions of this Agreement.
- 5.2 HONI agrees that it shall perform the work activities specified in Schedule "A" attached hereto which collectively constitute the Services. The LDC shall carry out its obligations specified in Schedule "A" attached hereto.
- 5.3 Both parties acknowledge and agree that the description of the Services to be performed by HONI as outlined in clause 5.2 is subject to revision, amendment or addition as required and as may be agreed to between the parties' respective primary contact person, both of which are identified in clause 5.4 below.
- 5.4 HONI hereby appoints Masoud Almassi as the primary contact, who will be responsible for the administration and co-ordination of the Services, including supervision of HONI staff and resource management. The LDC hereby appoints Ralph Williams as the primary contact who will be the primary interface with HONI on a daily basis. Each of the parties may change their primary contact by providing notice thereof to the other party.
- The LDC shall cooperate and provide any required input as might be requested by HONI, on a timely basis, to facilitate the performance of the Services by HONI. In addition, the LDC shall disclose to HONI on a timely basis any information within the LDC's possession or control which, in HONI's opinion, may reasonably affect the ability of HONI to meet its obligations under this Agreement.
- The parties acknowledge and agree that the Yukon® "head end" server and software and the inventory management system referred to in Schedule "A" attached hereto are owned by HONI and nothing in this Agreement shall have the effect of transferring title thereto to the LDC. This clause 5.6 shall survive the expiry or termination of this Agreement.

6.0 FEES PAYABLE

- 6.1 In addition to any other amounts specified in this Agreement, the LDC shall pay to HONI:
 - (a) the aggregate of \$25 per Load Control Device installed by HONI, plus Goods and Services Tax, for the Load Control Devices installed by HONI during 2010; this aggregate amount shall appear as an amount owing by the LDC to HONI on the first invoice issued by HONI to the LDC in 2011 pursuant to clause 6.2 below; and
 - (b) a one-time lump-sum amount of \$20,000, which amount represents the costs of 266 service visits that may be provided by HONI during the Term in respect of the Load Control Devices that will be installed hereunder; this lump-sum amount shall appear as an amount owing by the LDC to HONI on the first invoice issued by HONI to the LDC pursuant to clause 6.2 below.
- 6.2 HONI shall issue a quarterly invoice to the LDC within fifteen (15) days of the last day of each calendar quarter during the Term (with the first invoice being issued by no later than April 15, 2010) for the costs incurred by HONI in performing the Services for the LDC in the three months of the said quarter (including, where applicable, those based upon the unit costs attached hereto as Schedule "C"). Each such quarterly invoice will also include an amount equal to 13% of the total of the said costs (excluding the aggregate amount payable pursuant to clause 6.1(a) above), which amount constitutes HONI's overhead costs. Goods and Services Tax shall be charged by HONI on each such quarterly invoice issued to the LDC. Each such quarterly invoice shall be paid by the LDC to HONI within 30 days of the date of the invoice and said payment obligations shall survive the termination or expiry of this Agreement.
- With respect to the costs of the actual Load Control Devices and the actual Load Control Device add-on wires, the parties acknowledge and agree that the costs are identified in Schedule "C" in US dollars. The said costs will be reflected on HONI's applicable invoices in Canadian dollars using an exchange rate of 1 Canadian Dollar = \$0.83 US Dollar. The parties further acknowledge and agree that the exchange rate reflected on HONI's applicable invoices as described above is subject to adjustments as a result of daily fluctuations to the exchange rate. The parties further acknowledge and agree that the adjustments made in respect of the exchange rate shall be made after adjustments are made in respect of the said costs in any Subcontract and any such adjustments shall be reflected on HONI's relevant invoices as a credit or amount owing by the LDC to HONI, as may be applicable.
- With respect to the lump-sum amount payable by the LDC pursuant to clause 6.1 above, the parties acknowledge and agree that in the event that fewer than 266 service visits are made by HONI hereunder during the Term, HONI shall refund to the LDC an amount equal to the following: \$20,000 (the number of service visits actually made by HONI x \$75.00) (hereinafter the "Service Visit Difference"). HONI shall refund the Service Visit Difference to the LDC within 30 Business Days after the termination or expiry of this Agreement. The provision of the immediately foregoing sentence of this clause 6.4 shall survive the termination or expiry of this Agreement. In the event that more than 266 service visits are made by HONI hereunder during the Term, the LDC shall pay to HONI the applicable fee per service visit as specified in Schedule "C" attached hereto, which total amounts shall be identified in each applicable invoice issued by HONI to the LDC pursuant to clause 6.2 above.

7.0 DISPUTE RESOLUTION PROCEDURES

7.1 In the event of any controversy, dispute, difference, question or claim arising between the parties in connection with the interpretation, performance, construction or implementation of this Agreement (collectively, a "Dispute"), the primary contact from each party as identified in clause 5.4 above shall confer in an effort to resolve the Dispute. The aggrieved party shall send the other party written notice identifying the Dispute, the amount involved, if any, and the remedy sought. If the Dispute cannot be resolved in accordance with this clause, the parties are free to exercise any right or remedy available to it in law or equity.

8.0 CONFIDENTIALITY AND INTELLECTUAL PROPERTY

(a) Confidentiality:

Each party (the "Receiving Party") shall maintain in strict confidence this Agreement and the existence and contents thereof and all information, analysis, conclusions, drawings, reports, specifications or other information, proprietary or otherwise, whether transmitted orally, electronically or in written form, and received in furtherance of this Agreement from the other party (the "Disclosing Party") or any of the Disclosing Party's directors, officers, employees, contractors, subcontractors, consultants, agents or legal and other advisors (the "Disclosing Party Representatives") (collectively the "Confidential Information"). Except as permitted herein, the Receiving Party shall not publish, reproduce or disclose, either directly or indirectly, the said Confidential Information to any third party and shall not use the said Confidential Information for any purpose other than for purposes of this Agreement without the prior written consent of the Disclosing Party. The Receiving Party may disclose the Confidential Information only to its shareholder, directors, officers, employees, consultants, contractors, subcontractors, agents and professional advisors (the "Receiving Party Representatives") having a need to know same and who have undertaken a like obligation to maintain its confidentiality.

For greater certainty, Confidential Information includes any and all personal information (as that term is defined in the *Freedom of Information and Protection of Privacy Act* (Ontario) and the *Personal Information Protection and Electronic Documents Act* (Canada), as they may be amended) and any and all information regarding a consumer, retailer, wholesale buyer, wholesale supplier, or a generator provided by the Disclosing Party to the Receiving Party for purposes of this Agreement, whether or not such information was initially provided prior to the Effective Date.

The Receiving Party undertakes to protect and safeguard all Confidential Information in its possession or under its control and received by the Disclosing Party, in the manner described in Schedule "B" attached hereto. The Disclosing Party may, on reasonable notice, and during regular business hours, audit the information management practices of the Receiving Party to confirm compliance with the terms and conditions of this Section 8.0 and all applicable statutes, regulations, by-laws, standards and codes, as amended.

The Receiving Party undertakes to notify the Disclosing Party immediately upon discovery of any unauthorized use and/or disclosure of any of the Disclosing Party's Confidential Information, to cooperate with the Disclosing Party to help regain possession of such Confidential Information, and to prevent its further unauthorized use and/or disclosure.

The foregoing obligations with respect to confidentiality, use, reproduction, dissemination, publication and non-disclosure herein shall not apply to any information that:

- (i) is previously known to or lawfully in the possession of the Receiving Party prior to the date of disclosure as evidenced by the Receiving Party's written record;
- (ii) is independently known to or discovered by the Receiving Party, without any reference to the information or material;
- (iii) is obtained by the Receiving Party from an arm's length third party having a bona fide right to disclose same and who was not otherwise under an obligation of confidence or fiduciary duty to the Disclosing Party or the Disclosing Party Representatives;
- (iv) is or becomes public knowledge through no fault or omission of, or breach of this Agreement by the Receiving Party or the Receiving Party Representatives; or
- (v) is required to be disclosed pursuant to a final judicial or governmental order or other legal process.

Confidential Information (other than this Agreement which shall be jointly owned by the parties) shall remain the sole and exclusive property of the Disclosing Party that has disclosed the Confidential Information, and the Disclosing Party shall retain all right, title and interest in and to the said Confidential Information.

The Receiving Party shall keep a record of written Confidential Information furnished to it by the Disclosing Party in a location separate from those locations where the Receiving Party has stored information in respect of other third parties for which it performs work and it shall advise the Disclosing Party of such location.

All Confidential Information furnished by the Disclosing Party (other than this Agreement), including that portion of the Confidential Information which is contained in analyses, compilations, studies or other documents prepared by the Receiving Party or by the Receiving Party Representatives, is the Disclosing Party's property and will be returned immediately to the Disclosing Party upon its request.

(b) Intellectual Property:

The LDC agrees to include the "Hydro One and plug design" trademark in red and black (the "Trade-mark") on all written Peaksaver Program material, whether in print or electronic form. If the LDC's logo also appears in such material, the Trade-mark shall be displayed in equal size. The LDC shall not promote the Program except in such form and content as has received HONI's prior written approval. The LDC agrees that nothing in this Agreement shall be interpreted to grant the LDC any interest in the Trade-mark except as expressly set out in this paragraph.

(c) Survival of Obligations:

The obligations in this Section 8.0 shall forever survive the termination or expiration of this Agreement.

9.0 LIABILITY AND INDEMNIFICATION

9.1 (a) Except as provided in clause 9.1(b) below, the LDC shall be liable for, shall fully indemnify and save harmless and shall release HONI, its successors and assigns, its directors, officers, employees, agents, contractors, subcontractors and representatives of, from and against all damage, loss or injury to persons or property of any nature or kind whatsoever arising from or by reason of, in any way relating to, or based upon any information provided by HONI and/or any of its

Subcontractors to the LDC for purposes of the LDC completing and submitting its application to the OPA for the Peaksaver Program and any other documents required to be delivered by the LDC to the OPA in accordance with Schedule "D" of the Master Agreement, HONI's performance of, purported performance of, or non-performance of any of its obligations or covenants in this Agreement and/or otherwise in relation to or as a result of this Agreement, and any and all actions, manner of actions, causes of actions, suits, proceedings, claims, debts, obligations, expenses, demands, penalties, fines and costs arising therefrom and connected therewith.

- (b) HONI agrees to indemnify and hold harmless the LDC and its employees from and against all liability, claims, judgements or demands for loss, damage or injury including loss of life, to persons or property occasioned by the negligent or improper acts or omissions of a Subcontractor provided that the said Subcontractor has indemnified and held harmless HONI and its employees from and against all said liability, claims, judgements or demands. Notwithstanding the foregoing, HONI's liability hereunder shall be limited to \$5 million.
- 9.2 Notwithstanding anything to the contrary in this Agreement, HONI shall not be liable for any economic loss, loss of goodwill, loss of profit or for any special, indirect or consequential damages, where the said losses or damages are incurred by the LDC or by any third party whether the third party is claiming through or under the LDC or otherwise.
- 9.3 HONI shall, to the extent determined by HONI to be reasonable, assist the LDC in resolving disputes with any Subcontractor HONI in the case of failure of the said Subcontractor to perform any part of the Services which HONI has contracted out to the said Subcontractor.
- 9.4 The Parties acknowledge and agree that this Section 9.0 shall survive termination or expiry of this Agreement.

10.0 AUTHORIZED REPRESENTATIVES

10.1 The authorized representatives of the parties hereto for purposes of this Agreement are the following:

HYDRO ONE NETWORKS INC.

483 Bay St. North Tower, 14th Floor Toronto, Ontario M5G 2P5

Attention: Masoud Almassi Telephone: (416) 345-5174 Telecopier: (416) 345-5911

HYDRO ONE BRAMPTON NETWORKS INC

175 Sandalwood Parkway West Brampton, Ontario L7A 1E8

Attention: Ralph Williams
Telephone: (905) 452-5516
Telecopier: (905) 840-0967

Any notices, correspondence or other documents required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been properly given on the date of actual delivery if delivered by hand or by courier, five business days after dispatch by registered mail, and on the date faxed (unless it is faxed after the addressee's normal business hours, in which case it shall be deemed received on the addressee's next business day), addressed to the party to whom it was sent at the address, or fax number, of such party set forth below or at such other address or fax as the party shall subsequently designate to the other party by notice given in accordance with this clause.

11.0 FORCE MAJEURE

- 11.1 Except for the payment of any monies required hereunder, neither party shall be deemed to be in default of this Agreement where the failure to perform or the delay in performing any obligation is due to a cause beyond its reasonable control, including, but not limited to, an act of God, act of any federal, provincial or municipal government, or order of court or administrative or regulatory authority, civil commotion, strikes, lockouts and other labour disputes, fires, floods, sabotage, earthquakes, storms, ice storms and epidemics. As soon as a party anticipates that a force majeure event may occur which will delay or prevent it from performing any of its obligations under this Agreement, it shall promptly notify the other party and shall exercise all reasonable efforts to mitigate or limit the effect on the other party.
- Once a party becomes subject to such an event of force majeure, it shall promptly notify the other party of its inability to perform, or of any delay in performing, due to an event of force majeure and shall provide an estimate, as soon as practicable, as to when the obligation will be performed. The party subject to the force majeure event shall also continue to furnish timely reports to the other party with respect to the force majeure event during the continuation of the said event and the said party shall exercise all reasonable efforts to mitigate or limit damages to the other party. The party subject to the force majeure event shall use its best efforts to continue to perform its obligations under this Agreement and to correct or cure the event or condition excusing performance and when the said party is able to resume performance of its obligations thereunder, it shall give the other party written notice to that effect and shall promptly resume performance thereunder. The time for performing the obligation shall be extended for a period equal to the time during which the party was subject to the event of force majeure. The parties shall explore all reasonable avenues available to avoid or resolve events of force majeure in the shortest time possible.
- 11.3 Notwithstanding the two preceding paragraphs, the settlement of any strike, lockout, restrictive work practice or other labour disturbance constituting a force majeure event shall be within the sole discretion of the party involved in such strike, lockout, restrictive work practice or other labour disturbance and nothing in the two preceding paragraphs shall require the said party to mitigate or alleviate the effects of such strike, lockout, restrictive work practice or other labour disturbance.

12.0 ASSIGNMENT

12.1 Neither this Agreement nor the rights and obligations hereunder shall be assigned by either party hereto without the prior written consent of the other, which consent shall not be unreasonably withheld; provided however that HONI shall be entitled to assign any of its rights and obligations hereunder to any of its Affiliates without having to obtain the LDC's prior written consent. Subject

to the foregoing, this Agreement shall enure to the benefit of the parties hereto and their respective successors and permitted assigns.

13.0 AMENDMENTS

13.1 This Agreement may be amended only by mutual written agreement of the parties.

14.0 ENTIRE AGREEMENT

14.1 This Agreement, together with Schedules "A", "B" and "C" attached hereto, represents the entire agreement between the parties hereto respecting the subject matter hereto and supersedes all prior agreements, understandings, discussions, negotiations, representations and correspondence made by or between them respecting the subject matter hereto.

15.0 GOVERNING LAW

15.1 This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein, and the parties hereto irrevocably attorn to the exclusive jurisdiction of the courts of the Province of Ontario in the event of a dispute hereunder.

16.0 SCHEDULE

16.1 Schedules "A", "B" and "C" attached hereto are to be read with and form part of this Agreement.

17.0 RELATIONSHIP OF PARTIES

17.1 Nothing in this Agreement creates the relationship of principal and agent, employer and employee, partnership or joint venture between the parties. The parties agree that they are and will at all times remain independent and are not and shall not present themselves to be the agent, employee, partner or joint venturer of the other. No representations will be made or acts taken by either party which could establish any apparent relationship of agency, employment, joint venture or partnership and neither party shall be bound in any manner whatsoever by any agreements, warranties or representations made by the other party to any other person nor with respect to any other action of the other party.

18.0 WAIVER

18.1 The failure of either party to exercise any right, power or option or to enforce any remedy or to insist upon the strict compliance with the terms, conditions and covenants under this Agreement shall not constitute a waiver of the terms, conditions and covenants herein with respect to that or any other or subsequent breach thereof nor a waiver by the party at any time thereafter to require strict compliance with all terms, conditions and covenants hereof, including the terms, conditions and covenants with respect to which the party has failed to exercise such right, power or option.

Nothing shall be construed or have the effect of a waiver except an instrument in writing signed by the party which expressly waives a right, power or option under this Agreement.

19.0 SEVERABILITY

19.1 If any provision of this Agreement is found by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, such provision shall be deemed severed and shall not affect the validity, legality or enforceability of the remaining provisions of this Agreement, unless such invalidity or unenforceability renders the operation of this Agreement impossible.

20.0 COUNTERPARTS

20.1 This Agreement may be executed in counterparts and the counterparts together shall constitute an original.

IN WITNESS THEREOF the parties hereto have caused this Agreement to be executed by their respective representatives duly authorized in that behalf.

HYDRO ONE NETWORKS INC.

HYDRO ONE BRAMPTON NETWORKS INC.

Title: Diructor

I have authority to bind the corporation.

Name: ROGER N. ALBERT

Title: PRESIDENT & CEO I have authority to bind the corporation.

Schedule "A"

HONI OBLIGATIONS

HONI shall perform, or shall cause to be performed, only the following Services for the LDC in relation to the LDC's Peaksaver Program until December 31, 2010 (except as otherwise specified below) provided it receives from the LDC the items listed in paragraphs 1 and 5 below under "LDC Obligations".

(a) Marketing:

- Subject to the next sentence, provide the LDC with electronic copy of the promotional material
 promoting the Peaksaver Program with a content and format determined by HONI in consultation
 with the LDC; the promotional material shall consist of an electronic version of the brochure and
 bill insert; input provided by the LDC to HONI will be utilized where mutually acceptable,
 however where agreement cannot be reached, HONI shall make the final determination in its sole
 discretion as to the content and format of the promotional material; and
- provide the installers of the Load Control Devices with an instructional brochure explaining the
 operations of the Load Control Device that can be left behind with the Qualifying Participants for
 whom a Load Control Device has been installed.

(b) Enrollment:

- i. <u>Customer Call Centre</u> maintain a fully automated inbound telephone Call Center in Toronto, including an Interactive Voice Response ("IVR") system, and establish a "1-800" telephone number directed to the Call Center to support all inquiries and signup Participants generated from the LDC's marketing activities; if the OPA provides scripts for use on the IVR system, HONI may use such scripts on the IVR system at the Customer Call Centre;
- ii. <u>Processing of Participant Enrollment forms</u>- maintain a current database of eligible Participants provided the LDC provides HONI with each Participant's data file as specified in paragraph 5 under "LDC Obligations" below;
- iii. Handling customer complaints and inquiries respond directly to complaint and inquiry calls from Qualifying Participants and/or Participants received at the Call Center; the Call Center representative will attempt to resolve the problem over the telephone using a series of scripted responses; if a complaint or inquiry cannot be resolved by either HONI or its Subcontractor, HONI or its Subcontractor will redirect the complaint or inquiry, at the case may be, directly to the LDC for resolution;

(c) Installation of Load Control Devices:

- i. Installers hire, train in both technical and customer service aspects, have available and manage qualified installers for the Load Control Devices;
- ii. Work Order Management, Scheduling and Planning schedule installations and manage the installation process using the VisiTrack work order management system;
- iii. Installation of load control devices by no later than December 31, 2010 and subject to the conditions [(a)-(c) inclusive] listed below, install for a maximum number of Qualifying

Participants, a Load Control Device:

- (a) the Qualifying Participant is available;
- (b) the Qualifying Participant and HONI or its Subcontractor can agree upon a date for installation; and
- (c) in the case of a Qualifying Participant that is a tenant, HONI's Subcontractor has obtained the relevant owner's consent for the said installation(s);
- the maximum number of installations shall be determined by HONI in its sole discretion,; the Load Control Devices shall be in accordance with the Ontario Electrical Safety Authority safety standards;
- iv. Labeling and Documentation Should the LDC require it, apply labels to the Load Control Devices showing a 1-800 number for Participant support;
- v. Inventory management provide warehousing capability and an inventory control and tracking system that will track the availability of the Load Control Devices for installation;
- vi. Where requested by the Participant, demonstrate to the Participants how to program the Load Control Device and provide a simple programming guide to the Participant via e-mail or mail.

(d) Reporting:

- i. provide the LDC with the following information to enable the LDC to prepare and submit to the OPA, a Quarterly Report for every quarter following the Approval of the LDC's Application for the Peaksaver Program, by no later than the 15th day of the month following the end of the quarter except that the information for the final Quarterly Report shall be provided no later than January 21, 2011:
 - number of enrolments
 - number of on-site turndowns
 - number of on-site inspections/repairs for both residential and commercial customers
 - number of load control devices installations
 - number of Participants on wait list (# enrolled minus # installed as of the report date)
 - number of load control devices failures with reasons
 - number of replacements with reasons
 - type and number of Participant complaints
 - average number of days to respond to complaints
 - opening inventory, by device
 - closing inventory, by device
 - number of inbound inquiry calls with reasons
 - number of load control devices deactivation
 - number of load control devices removal
- ii. on a monthly basis, deliver to the LDC a report that specifies the installation date of each Load Control Device installed, the location of the installation and the associated Qualifying Participant's contact information including name, address and telephone number.

(e) Load Control events:

i. record the information HONI, acting reasonably, deems necessary into HONI's Yukon® "head end" server to enable the LDC to conduct load control events; the LDC's Qualifying Participants shall be included in any load control events initiated for HONI's Qualifying Participants unless the LDC opts out of such events and notifies HONI of same prior to HONI's intended date for the load control events;

(f) Maintenance:

- i. maintain a record of all Qualifying Participants for whom Load Control Devices have been installed; carry out the following after-installation services for purposes of maintaining the Load Control Devices as HONI deems necessary or as the LDC may require acting reasonably until December 31, 2011: removals, addition of additional devices, repair or reconnection of the Load Control Devices.
- ii. an issue related to service that occurs after the one year anniversary, HONI will schedule a service visit; a customer will receive no unpaid service visits if a thermostat fail after one year anniversary and he or she will be directed to a local HVAC service company;
- iii. closely track all service events by describing the maintenance services performed via telephone and actual truck rolls; and
- iv. maintain HONI's Yukon® "head end" server and software until December 31, 2011.

LDC OBLIGATIONS

- 1. The LDC shall provide HONI with the following information by no later than ten Business Days following the Effective Date:
 - (a) the Participant's LDC account name, address, daytime phone number, evening phone number and any other information reasonably required by HONI to perform the Services; and
 - (b) any information, surveys and other studies concerning its customers' needs and requirements that may be relevant to the Peaksaver Program.
- 2. The LDC shall handle and respond to all complaints, enquiries and any other communications with the Participants and Qualifying Participants that it receives directly and any complaints, enquiries and any other communications with the Participants and Qualifying Participants that HONI determines it or its Subcontractor cannot resolve.
- 3. The LDC shall be responsible for dealing with the DR Financial Incentives and ensuring that Qualifying Participants receive the DR Financial Incentive that they are entitled to receive under the LDC's Peaksaver Program.
- 4. The LDC may print and shall insert a copy of the promotional material provided to it electronically by HONI under Section 1(a) above with the bill for each Participant and mail them out both together to the said Participant.

5. The LDC shall provide HONI with the following record duly completed by the LDC for each Participant within 2 days after the Effective Date:

itle	Customer File						
escription		The Customer File contains a complete listing of all customers eligible for program participation.					
ile Type	Semi-colon delimited ASC						
rom	LDC Utility Client						
Ö		ontractor, whichever is applicable					
requency	To be determined						
ile Name	To be determined	To be determined					
ile Location	To be determined						
ile Structure							
	Field	Codes, notes					
		Required Fields					
	LDC Utility	LDC identifier					
	AccountNumber	Indicate whether account number or premise number is a unique identifier for a customer site					
	PremiseNumber						
	LastName						
	FirstName	May contain First Name or First Name and Middle Initial					
	HomePhone						
	AlternatePhone						
	ServiceAddress1	Should contain street number, directional indicator, street name, ar					
		type (e.g., DR, ST, AVE)					
	Seriv ceAddress2	Apartment Number, Suite Number, etc.					
	ServiceCity						
	ServiceProvince						
	SerivcePostalCode						
	MeterNumber						
	MailAddressCO	Mail to Care Of Name					
	MailAddress1	Should contain street number, directional indicator, street name, a					
		type (e.g., DR, ST, AVE)					
	MailAddress2	Apartment Number, Suite Number, etc.					
	MailCity						
	MailProvince						
	MailPostalCode						
	Substation						
	D. 1. 0. 3.	Optional Fields*					
	Rate Code	To assist in qualification					
	Zone	To assist in creating groupings for managing load control events					
	Region	Utility regions/offices					
	Substation						
	Employee	To indicate if customer is utility employee					
	AccountStatus	To assist in qualification					
	TenantCode	e.g. Owner, Renter					
	ServicePoIntNumber	Geographic identifier (for example, meter reading route sequence number.					
Optional fields show tain with installed		be added that help in qualification of customer, or that utility may want					
	pple (required fields only shown)					
- CO SCIUCLUM & CAGIS	OTOO LOUIS OF BUILDING ONLY SHOWIF	475134";"0";"123 N OAK ST";"SUITE 301";"CALEDON";"ON";"L7K					
616070301"""""							

SERVICE LEVELS:

HONI and the LDC agree to the following service levels:

Response time for customer complaints – For emergency calls, (customers without air conditioning or hot water), a service technician will be dispatched immediately (within twenty-four hours), while non-emergency services will be routed with new installations whenever possible. If a complaint cannot be resolved by HONI or its Subcontractor, the complaint or inquiry, as the case may be, shall be forwarded to the LDC for resolution.

Wait time for requests for installation – subject to the maximum number of installations as determined by HONI and the Qualifying Participant's availability and provided HONI or its Subcontractor and the Qualifying Participant can agree upon a date for installation, a Load Control Device shall be installed within 30 days after receiving a request for installation from a Qualifying Participant.

Schedule "B"

Receiving Party Security Safeguards Regarding Confidential Information Received from the Disclosing Party

The Receiving Party shall protect the Confidential Information by security safeguards appropriate to the sensitivity of the information.

- 1) The Receiving Party shall protect the Confidential Information against such risks as loss or theft, unauthorized access, disclosure, copying, use, modification or destruction, through appropriate security measures, regardless of the format in which it is held.
- 2) All of the Receiving Party Representatives with access to the Confidential Information shall be contractually required to respect the confidentiality of that information.
- 3) The Receiving Party acknowledges and agrees that the nature of the safeguards will vary depending on the sensitivity, amount, distribution and format of the information, and the method of storage. The Receiving Party shall ensure that more sensitive information will be safeguarded by a higher level of protection.
- 4) The Receiving Party shall ensure that methods of protection will include:
 - (a) physical measures, for example, locked filing cabinets and restricted access to offices;
 - (b) organizational measures, for example, controlling entry to data centers and limiting access to information on a "need-to-know" basis;
 - (c) technological measures, for example, the use of passwords and encryption; and
 - (d) investigative measures, in cases where the Receiving Party has reasonable grounds to believe that the Confidential Information is being inappropriately collected, used or disclosed by anyone whom in law the Receiving Party is responsible.

Schedule "C"

2010 Hydro One Brampton	Pricing for PeakSa	Ver The second
	2010 Unit Cost	Frequency
Project Management Fee	\$8000.00	per month
Residential Load Control Device Installation Charge	\$136.00	per install
Load Control Device (Thermostat) add-a- wire installation charge	\$15.00	per install
Service Visit	\$75.00	per visit
Load Control Device (Thermostat)	\$196.35 (US)	per Load Control Device
Load Control Device (Thermostat) add-a- wire	\$11.22 (US)	per Load Control Device add-a- wire

APPENDIX AA

2011 Smart Meter Rate Rider Application

Final Disposition Rider

Revenue Requirement: 2006 Rate Year Entitlement		Previously Filed 5,207
2007 Rate Year Entitlement	343,540	438,975
2007 Rate Year Entitlement	1,115,769	1,271,193
2009 Rate Year Entitlement	2,526,775	· · ·
2009 Nate Teal Entitlement	3,986,083	2,678,081 4,393,456
	3,980,083	4,393,430
Smart Rate Rider Billed:		
		(007.004)
2006 Rate Year Billed May 1/06 - April 30/07	-	(397,304)
2007 Rate Year Billed May 1/07 - April 30/08	(964,337)	(964,337)
2008 Rate Year Billed May 1/08 - April 30/09	(978,674)	(1,273,225)
2009 Rate Year Billed May 1/09 - Dec 31/09	(1,191,228)	(1,191,228)
	(3,134,239)	(3,826,094)
Smart Meter Costs for Recovery	851,845	567,362
Forecasted Number of Customers	132,427	132,427
Number of Months	12	12
Rate Rider	0.54	0.36
Ongoing Funder Rider		
Revenue Requirement:		
2010 Rate Year Entitlement	4 000 027	4 222 424
	4,088,037	4,233,124
2011 Rate Year Entitlement	918,431	918,431
2012 Rate Year Entitlement	1,064,778	1,064,778
2013 Rate Year Entitlement	1,025,523	1,025,523
2014 Rate Year Entitlement	986,855	986,855
	8,083,624	8,228,712
Smart Rate Rider Billed:		
2010 Rate Year Forecast Jan 1/10 - December 31/10	(1,595,953)	(1,595,953)
Smart Meter Costs for Recovery	6,487,671	6,632,759
Forecasted Number of Customers	133,888	133,888
Number of Months	48	48
Rate Adder	1.01	1.03

Hydro One Brampton Networks Inc. ÉB-2010-

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Revenue Requirement Calculations		
Average Fixed Asset Values	Actual 2006	Actual 2007
OH & UG Services	\$ -	\$ -
General Office	\$ -	\$ -
Building Renovations	\$ -	\$ -
Smart meters Computer Hardware	\$ - \$ -	\$ 2,079,360 \$ -
Computer Flandware Computer Software	\$ -	\$ -
Stores & Tools	\$ - \$ -	\$ - \$ 2,079,360
Working Capital		
Operation Expense	<mark>\$ -</mark> \$ - \$ -	\$ 4,728 \$ 709 \$ 709
15% Working Capital	φ - φ -	\$ 709 \$ 709
Smart Meters Fixed Assets in Rate Base	\$ -	\$ 2,080,069
Return on Rate Base Deemed Debt - Long Term	55 OO/	57 F9/
Deemed Debt - Long Term Deemed Debt - Short Term	55.0% \$ - \$ -	57.5% \$ 1,196,039 \$ -
Deemed Equity	45.0% \$ -	42.5% \$ 884,029
• •	\$ -	\$ 2,080,069
Weighted Debt Rate - Long Term	6.95%	6.95% \$ 83,125
Short Term Debt Rate	\$ -	\$ -
Equity Rate	9.00% \$ -	9.00% \$ 79,563
Return on Rate Base	\$ - \$	\$ 162,687
Operating Expenses		
Incremental Operating Expenses	\$ -	
Amortization Expenses	\$ -	
Revenue Requirement before PILs	\$ -	
	<u> </u>	
Calculation of Taxable Income		
Incremental Operating Expenses	\$ -	
Depreciation Expense Interest Expense	\$ - \$ -	
Taxable Income for PILs	\$ -	
Grossed up PILs		
Revenue Requirement before PILs		
Grossed up PILs		
Revenue Requirement for Smart Meters	-	
Smart Meter Rate Adder Revenue Requirement for Smart Meters		
Total Metered Customers	120,293	
Annualized amount required per metered customer		
Number of months in year	12	
Smart Meter Rate Adder		
Smart Meter Deferral Account Balance - PILs Calculation		
Income Tax		70.505
Net Income Amortization		79,563 143,404
CCA		- 172,085
Revised Taxable Income	-	50,882
Tax Rate	36.12%	36.12%
Income Taxes Payable	<u> </u>	18,379
Ontario Capital Tax		
Smart Meter Related Fixed Assets	-	4,158,719
Less: Exemption	-	-
Deemed Taxable Capital	- 0.0000/	4,158,719
Ontario Capital Tax Rate NET OCT Amount	0.300%	0.285% 3,951
901 Fillioditi		0,001
Change in Income Taxes Payable	PILs Payable Gross Up Grossed Up PILs - 36.12% -	PILs Payable Gross Up 18,379 36.12%
Change in OCT	- 50.12%	3,951
PILs		22,329

	Actual 2008 -	Actual 2009 \$ -	\$ -
	\$ -	\$ - \$ -	\$ -
	\$ - \$ 6,870,945	\$ - \$ 13,429,951	\$ - \$ 18,407,302
	\$ - \$ -	\$ 13,429,951 \$ - \$ - \$ - \$ 13,429,951	\$ - \$ 18,407,302 \$ - \$ 364,016
	\$ - \$ 6,870,945	\$ - \$ 13,429,951	\$ -
	\$ 6,152 \$ 923 \$ 923	\$ 324,466 \$ 48,670 \$ 48,670	\$ 876,347 \$ 131,452
	\$ 6,871,868	\$ 13,478,621	
	60.0% \$ 4,123,121 \$ -	60.0% \$ 8,087,173 \$ -	60.0%
	40.0% \$ 2,748,747 \$ 6,871,868	40.0% \$ 5,391,448 \$ 13,478,621	40.0%
	6.95% \$ 286,557	6.95% \$ 562,058	6.85%
	\$ - \$ 247,387	\$ - 9.00% \$ 485,230	9.00%
\$ 162,687	\$ 533,944 \$ 533,944	\$ 1,047,289 \$ 1,047,289	3.0076
\$ 4,728	\$ 6,152	\$ 324,466	
\$ 143,404	\$ 483,748	\$ 969,455	
\$ 310,819	\$ 1,023,844	\$ 2,341,210	
\$ (4,728) \$ (143,404)	\$ (6,152)	\$ (324,466)	
\$ (143,404) \$ (83,125)	\$ (483,748) \$ (286,557)	\$ (969,455) \$ (562,058)	
\$ 79,563	\$ 247,387	\$ 485,230	
32,721	91,924	185,565	
310,819	1,023,844	2,341,210	
32,721	91,924	185,565	
343,540	1,115,769	2,526,775	
343,540 126,026	1,115,769 129,522	2,526,775 130,963	
2.73	8.61	19.29	
12 0.23	12 0.72	12 1.61	
	247,387	485,230	680,500
	483,748	969,455	1,590,498
	- 566,731 164,404	- 1,104,241 350,445	- 1,917,715 353,283
	33.50% 55,075	33.00% 115,647	31.00% 109,518
	9,583,172	17,276,730	20,265,907
	9,583,172 0.285%	17,276,730 0.225%	20,265,907 0.075%
	9,104	12,958	5,066
Grossed Up PILs	PILs Payable Gross Up Grossed Up PILs	PILs Payable Gross Up Grossed Up PILs	PILs Payable
28,770 3,951	55,075 33.50% 82,820 9,104 9,104	115,647 33.00% 172,607 12,958 12,958	109,518 5,066
32,721	64,179 91,924	128,604 185,565	114,584

Forecast 2010 \$ -	\$ - \$ -
\$ - \$ - \$ 3,907,008 \$ - \$ 647,140 \$ 485,355	\$ -
\$ 3,907,008 \$ - \$ 647,140 \$ 485,355	\$ -
\$ 647,140	\$ 3,807,575 \$ -
A 10 1	\$ 323,570
\$ 18,771,319 \$ - \$ 4,554,149 \$ - \$4,617,647	\$ -
103,522	103,522
\$ 131,452 \$ 15,528 \$ 15,528 \$ 15,528	\$ 15,528
\$ 18,902,771 \$ 4,569,677 \$4,633,175	
\$ 11,341,662	56.0%
\$ - \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4.0% 40.0%
<u>\$ 18,902,771</u> <u>\$ 4,569,677</u> \$4,633,175	
\$ 776,904 \$ 172,734 \$ 6.75% \$ 175,134 \$ 2.07% \$ 3,784 \$ 2.07%	6.75% 2.07%
\$ 680,500 \$ 1,457,404 \$ 1,457,404 \$ 9.85% \$ 180,045 \$ 356,563 \$ 356,563 \$ 356,563 \$ 361,517 \$ 361,517	9.85%
<u> </u>	
\$ 876,347	
\$ 1,590,498 \$ 486,502 \$ 486,502	
<u>\$ 3,924,249</u> <u>\$ 946,586</u> \$ 951,541	
\$ (876,347)	
\$ (1,590,498) \$ (486,502) \$ (486,502)	
\$ (776,904) \$ 680,500 \$ 180,045 \$ (178,970) \$ 182,547	
163,788 (28,155) 113,237	
3,924,249 946,586 951,541	
163,788(28,155) 113,237	
<u>4,088,037</u> 918,431 1,064,778	
4,088,037 918,431 1,064,778	
132,427 30.87 133,888 6.86 133,888	
12 12	
<u>2.57</u> 0.66	
180,045	163,379
486,502 - 738,056 - 350,906	486,502 - 322,834
- <u>71,509</u> 318,143	327,047
28.25% - 20,201 26.25% 83,512	25.50% 83,397
	·
4,860,898	3,887,894
4,860,898 4,374,396	3,887,894
0.000% 	0.000%
Gross Up Grossed Up PILs Pils Payable Gross Up Grossed Up PILs Pils Payable Gross Up Grossed Up PILs	PILs Payable
31.00% 158,721 - 20,201 28.25% - 28,155 83,512 26.25% 113,237	83,397
	83,397

Forecast 2013			Forecast 2	014
	\$ \$	-		
	\$	-		
	\$	3,482,858		
	\$	- 161,785		
\$4,131,145	\$	-	\$3,644,643	
		103,522		
\$ 15,528	\$	15,528	\$ 15,528	
¢4 146 672			\$2 660 172	_
\$4,146,673		•	\$3,660,172	-
\$2,322,137 \$ 165,867		56.0% 4.0%	\$2,049,696 \$ 146,407	
\$1,658,669		40.0%		
\$4,146,673		•	\$3,660,172	- =
\$ 156,744		6.75%	\$ 138,354	
\$ 3,433 \$ 163,379		2.07% 9.85%	\$ 3,031 \$ 144,211	
\$ 323,557 \$ 323,557		3.0370	\$ 285,596	\$ 285,596
\$ 103,522				\$ 103,522
\$ 486,502				\$ 486,502
\$ 913,580				\$ 875,620
\$ (103,522) \$ (486,502)				\$ (103,522) \$ (486,502)
\$ (486,502) \$ (160,178)				\$ (486,502) \$ (141,385)
\$ 163,379				\$ 144,211
111,942				111,235
913,580				875,620
111,942				111,235
1,025,523				986,855
1,025,523				986,855
133,888 7.66				133,888
12				12
0.64				0.61
		144,211		
		486,502		
	-	297,007 333,706		
		25.00%		
		83,426		
		3,401,393		
		3,401,393		
		0.000%		
		-		
Gross Up Grossed Up PILs	PI			Grossed Up PILs
25.50% 111,942 -		83,426	25.00%	111,235
111,942		83,426		111,235

For Accounting

OH & UG Services	Amortization Period	Opening Balance	Actual 2006 Additions	Actual Amortization For 2006	2006 Net Book Value	2006 Average NBV
Smart meters-1860		-	-	-	- -	- -
Computers-1920 - HDW Computers-1925 - SFT		-	-		-	-
Tools, Shops - 1940		-			- -	-
		-	-	-	-	-
	Amortization Period	Opening Balance	Actual 2007 Additions	Actual Amortization For 2007	2007 Net Book Value	2007 Average NBV
OH & UG Services Smart meters-1860 Computers-1920		- - -	4,302,123	143,404	- 4,158,719 -	2,079,360 -
Computers-1925 Tools, Shops - 1940		-			-	-
10013, 011003		-	4,302,123	143,404	4,158,719	2,079,360
483,748.24						
OH & UG Services		Opening Balance	Actual 2008 Additions	Actual Amortization For 2008	2008 Net Book Value	2008 Average NBV
Smart meters-1860		4,158,719	5,908,201	483,748	9,583,172	6,870,945
Computers-1920 Computers-1925		-			-	-
Tools, Shops - 1940					<u> </u>	
969,455.40		4,158,719	5,908,201	483,748	9,583,172	6,870,945
,		Opening Balance	Actual 2009 Additions	Actual Amortization For 2009	2009 Net Book Value	2009 Average NBV
OH & UG Services General Office	25 10		-	-	-	-
Building Renovations	30		-	-	-	-
Smart meters-1860 Computers-1920	15 5	, ,	8,663,014	969,455	17,276,730	13,429,951 -
Computers-1925	5	-			-	-
Tools, Shops - 1940 1,509,605.87	10	9,583,172	8,663,014	969,455	17,276,730	13,429,951
,,		-,,	Forecast 2010	Forecast Amortization For	, -,	-, -,
80,892.55	0.5	Opening Balance	Additions	2010	2010 Net Book Value	2010 Average NBV
OH & UG Services General Office	25 10		-	-	-	-
Building Renovations	30		- 2 770 750	4 500 606	-	-
Smart meters-1860 Computers-1920	15 5	, ,	3,770,750	1,509,606	19,537,874 -	18,407,302 -
Computers-1925 Tools, Shops - 1940	5 10		808,925	80,893	728,033	364,016
161,785	10	17,276,730	4,579,675	1,590,498	20,265,907	18,771,319
324,717		Opening Balance	Forecast 2011 Additions	Forecast Amortization For 2011	2011 Net Book Value	2011 Average NBV
OH & UG Services	25	-	-	- · · · · - · · · · · · · · · · · · · ·	-	-
General Office Building Renovations	10 30		-	-	-	-
Smart meters-1860	15	3,519,367	1,100,000	324,717	4,294,650	3,907,008
Computers-1920 Computers-1925 Tools, Shops - 1940	5 5 10	728,033		161,785	- 566,248 -	- 647,140 -
		4,247,400	1,100,000	486,502	4,860,898	4,554,149

		Opening Balance	Forecast 2012 Additions		Forecast Amortization For 2012	2012 Net Book Value	2012 Average NBV
OH & UG Services	25	-			-	-	· •
General Office	10	-			-	-	-
Building Renovations	30	-			-	-	-
Smart meters-1860	15	4,294,650			324,717	3,969,933	4,132,292
Computers-1920	5	=				-	-
Computers-1925	5	566,248			161,785	404,463	485,355
Tools, Shops - 1940	10	-				-	
		4,860,898		-	486,502	4,374,396	4,617,647
			Forecast 2013		Forecast Amortization For		
		Opening Balance	Additions		2013	2013 Net Book Value	2013 Average NBV
OH & UG Services	25	-		-	-	-	-
General Office	10	-		-	-	=	=
Building Renovations	30	=		-	-	=	-
Smart meters-1860	15	3,969,933		-	324,717	3,645,217	3,807,575
Computers-1920	5	=				=	-
Computers-1925	5	404,463		-	161,785	242,678	323,570
Tools, Shops - 1940	10	-				-	
		4,374,396		-	486,502	3,887,894	4,131,145
			Forecast 2014		Forecast Amortization For		
		Opening Balance	Additions		2014	2014 Net Book Value	2014 Average NBV
OH & UG Services	25	-			-	-	-
General Office	10	-			-	-	-
Building Renovations	30	-			-	-	-
Smart meters-1860	15	3,645,217		-	324,717	3,320,500	3,482,858
Computers-1920	5	-				-	-
Computers-1925	5	242,678		-	161,785	80,893	161,785
Tools, Shops - 1940	10	-				-	-
		3,887,894		-	486,502	3,401,393	3,644,643

Smart Meter Fixed Asset Continuity

For Tax Purposes

OH & UG Services Classification Clas	CA Class CCA R ass 47 ass 47 ass 45.1 ass 12 ass 8	8% 8% 55% 100% 20%	Opening UCC Balance 0 0 0 0 0 0 0 0	2006 Actual Additions	CCA For Opening UCC	CCA For 2006 Additions	Total CCA - 2006	Closing UCC Balance
OH & UG Services Classification Classification Classification Classification Computers-1920 Classification Clas	CA Class CCA F ass 47 ass 47 ass 45.1 ass 12 ass 8	8% 8% 55% 100% 20%	Opening UCC Balance	2007 Actual Additions - 4,302,123 - - - 4,302,123	CCA For Opening UCC	CCA For 2007 Additions - 172,085 172,085	Total CCA - 2007 - 172,085 - - - 172,085	Closing UCC Balance 4,130,038 4,130,038
OH & UG Services Classification Classification Classification Classification Computers-1920 Classification Clas	CA Class CCA F ass 47 ass 47 ass 45.1 ass 12 ass 8	8% 8% 55% 100% 20%	Opening UCC Balance	2008 Actual Additions - 5,908,201	CCA For Opening UCC - 330,403	CCA For 2008 Additions - 236,328 236,328	Total CCA - 2008 566,731	Closing UCC Balance - 9,471,508 - - - - 9,471,508
OH & UG Services Classification Clas	ass 47 ass 45.1 ass 12	8% 20% 10% 8% 55% 100% 20%	Opening UCC Balance	2009 Actual Additions	CCA For Opening UCC	CCA For 2009 Additions	Total CCA - 2009	Closing UCC Balance
OH & UG Services Classification Clas	ass 47 ass 45.1 ass 12	84te 8% 20% 10% 8% 55% 100% 20%	Opening UCC Balance 17,030,281 17,030,281	2010 Forecast Additions 3,770,750 - 808,925 - 4,579,675	CCA For Opening UCC	CCA For 2010 Additions	Total CCA - 2010 - - 1,513,252 - 404,463 1,917,715	Closing UCC Balance 19,287,778 - 404,463 - 19,692,241
OH & UG Services Classification Clas	ass 47 ass 45.1 ass 12	8% 20% 10% 8% 55% 100% 20%	Opening UCC Balance	2011 Forecast Additions 1,100,000 1,100,000	CCA For Opening UCC	CCA For 2011 Additions	Total CCA - 2011 - - - 333,594 404,463 738,056	Closing UCC Balance 4,386,326 4,386,326
	CA Class CCA R ass 47	Rate 8%	Opening UCC Balance	2012 Forecast Additions -	UCC -	Additions -	Total CCA - 2012	Closing UCC Balance

Sulding Renovations Class 6	General Office Class 8	20%		_	_		_	_
Smart meters-1860 Class 47 8% 4,386,326 - 350,906 - 350,906 - 350,906 - 4,035,420					_	_	_	_
Computers-1920 Class 45.1 55%				_	350 906		350 906	3 4 035 420
Computers-1925 Class 12 100% - - - - - - - - -				_	-	_	-	-,000,420
Tools, Shops - 1940 Class 8								
A								
CCA Class CCA Class CCA Rate Opening UCC Balance CCA For 2013 Additions CCA For 2013 Closing UCC Balance CCA For 2014 Additions CCA For 2014 CCA For 2014 Closing UCC Balance CCA For 2014 CCA For 2014 Closing UCC Balance CCA For 2014 CCB F	1000, 0110ps 1040 01035 0	2070			350 906		350 906	3 4 035 420
CCA Class CCA Rate Opening UCC Balance Opening UCC Balance Opening UCC Balance Class 47 8% -			1,000,020		000,000		000,000	1,000,120
OH & UG Services Class 47 8% -					CCA For Opening	CCA For 2013		
Class 47	CCA Cla	iss CCA Rate	Opening UCC Balance	2013 Forecast Additions	UCC	Additions	Total CCA - 2013	Closing UCC Balance
Building Renovations Class 6 10% -	OH & UG Services Class 47	8%			-	-	-	
Smart meters-1860 Class 47 8% 4,035,420 - 322,834 - 322,834 3,712,587	General Office Class 8	20%	-	-	-	-	-	-
Smart meters-1860 Class 47 8% 4,035,420 - 322,834 - 322,834 3,712,587	Building Renovations Class 6	10%	-	_	-	-	-	_
Computers-1920		8%	4,035,420	_	322,834	-	322,834	4 3,712,587
Computers-1925	Computers-1920 Class 45	5.1 55%		-	_		-	_
Tools, Shops - 1940 Class 8 20%				_				_
A A A A A A A A A A		20%	-	_				_
CCA Class CCA Rate Opening UCC Balance 2014 Forecast Additions UCC Additions Total CCA - 2014 Closing UCC Balance OH & UG Services Class 47 8% -<	,,.		4,035,420		322,834	-	322,834	3,712,587
CCA Class CCA Rate Opening UCC Balance 2014 Forecast Additions UCC Additions Total CCA - 2014 Closing UCC Balance OH & UG Services Class 47 8% -<								
OH & UG Services Class 47 8%					CCA For Opening	CCA For 2014		
OH & UG Services Class 47 8%	CCA Cla	iss CCA Rate	Opening UCC Balance	2014 Forecast Additions	UCC	Additions	Total CCA - 2014	Closing UCC Balance
Building Renovations: Class 6 10% - <td>OH & UG Services Class 47</td> <td></td> <td></td> <td>_</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	OH & UG Services Class 47			_	-	-	-	-
Building Renovations Class 6 10% - <td>General Office Class 8</td> <td>20%</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	General Office Class 8	20%	-		-	-	-	-
Smart meters-1860 Class 47 8% 3,712,587 - 297,007 - 297,007 3,415,580 Computers-1920 Class 45.1 55% -	Building Renovations Class 6			-	-	-	-	-
Computers-1920 Class 45.1 55%		8%	3,712,587	-	297,007	-	297,007	7 3,415,580
Computers-1925 Class 12 100% - <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>				-	-	-	-	-
Tools, Shops - 1940 Class 8 20%		100%	-	-	-	-	-	-
3,712,587 - 297,007 - 297,007 3,415,580				-	-	-	-	-
				-	297,007	-	297,007	7 3,415,580

Table 9-1
Total Smart Meters Installed

Year	Residential	General Service < 50 KW	General Service > 50 KW	Total
2006	-	-	-	-
2007	37,179	-	-	37,179
2008	40,154	-	-	40,154
2009	44,289	3,570	-	47,859
Subtotal	121,622	3,570	-	125,192
2010	4,530	2,875		7,405
2011			985	985
Subtotal	4,530	2,875	985	8,390
Total	126,152	6,445	985	133,582

Hydro One Brampton Deployment Schedule for 2010

Month	Residential	General Service < 50 kW	Total
January	411	478	889
February	289	683	972
March	616	423	1,039
April	905	21	926
May	555	165	720
June	680	0	680
July	287	0	287
August	287	0	287
September	125	300	425
October	125	400	525
November	125	360	485
December	125	45	170
Total	4,530	2,875	7,405

Hydro One Brampton Deployment Schedule for 2011

Month	Residential	General Service < 50 kW	General Service > 50 kW	Total
January	0	0	83	83
February	0	0	82	82
March	0	0	82	82
April	0	0	82	82
May	0	0	82	82
June	0	0	82	82
July	0	0	82	82
August	0	0	82	82
September	0	0	82	82
October	0	0	82	82
November	0	0	82	82
December	0	0	82	82
Total	0	0	985	985

Table 9-7 Rate Adder - 2010 to 2014

Revenue Requirement	8,083,624
Projected collection to end of 2010	1,595,953
Balance to be collected from 2011 to 2014	6,487,671
Projected average number of customers	133,888
Number of months	48
Rate adder	1.01

2011 Smart Meter Rate Rider Application

Final Disposition Rider

Revenue Requirement:	
2006 Rate Year Entitlement	-
2007 Rate Year Entitlement	343,540
2008 Rate Year Entitlement	1,115,769
2009 Rate Year Entitlement	2,526,775
	3,986,083
Smart Rate Rider Billed:	
2006 Rate Year Billed May 1/06 - April 30/07	-
2007 Rate Year Billed May 1/07 - April 30/08	(964,337)
2008 Rate Year Billed May 1/08 - April 30/09	(978,674)
2009 Rate Year Billed May 1/09 - Dec 31/09	(1,191,228)
	(3,134,239)
Smart Meter Costs for Recovery	851,845
·	
Forecasted Number of Customers	132,427
Number of Months	12
Disposition Rate Rider	0.54

Rate Adder

Revenue Requirement:	
2010 Rate Year Entitlement	4,088,037
2011 Rate Year Entitlement	918,431
2012 Rate Year Entitlement	1,064,778
2013 Rate Year Entitlement	1,025,523
2014 Rate Year Entitlement	986,855
	8,083,624
Smart Rate Rider Billed: 2010 Rate Year Forecast Jan 1/10 - December 31/10	(1,595,953)
Smart Meter Costs for Recovery	6,487,671
Forecasted Number of Customers Number of Months	133,888
Rate Adder	1.01

Table 9-4
Summary of Revised Revenue Requirement Calculations from 2006 to 2009

	2006	2007	2008	2009	Total
Return on rate base	-	162,687	533,944	1,047,289	1,743,920
Operating expenses	-	4,728	6,152	324,466	335,345
Depreciation expenses	-	143,404	483,748	969,455	1,596,608
PILs	-	32,721	91,924	185,565	310,210
Revenue Requirement	-	343,540	1,115,769	2,526,775	3,986,083

Table 9-5 Summary of Revised Revenue Requirement Calculations from 2010 to 2014

	2010	2011	2012	2013
Return on rate base	1,457,404	356,563	361,517	323,557
Operating expenses	876,347	103,522	103,522	103,522
Depreciation expenses	1,590,498	486,502	486,502	486,502
PILs	163,788	(28,155)	113,237	111,942
Revenue Requirement	4,088,037	918,431	1,064,778	1,025,523

2014	
285,59	5
103,52	2
486,50	2
111,23	5
986,85	5

Hydro One Brampton Networks Inc. EB-2010-

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Average Fixed Asset	t Values
---------------------	----------

OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software Stores & Tools

Working Capital

Operation Expense 15% Working Capital

Smart Meters Fixed Assets in Rate Base

Return on Rate Base

Deemed Debt - Long Term
Deemed Debt - Short Term
Deemed Equity

Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base

Operating Expenses

Incremental Operating Expenses

Amortization Expenses

Revenue Requirement before PILs

Calculation of Taxable Income

Incremental Operating Expenses
Depreciation Expense
Interest Expense
Taxable Income for PILs

Grossed up PILs

Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters

Smart Meter Rate Adder

Revenue Requirement for Smart Meters
Total Metered Customers
Annualized amount required per metered customer
Number of months in year
Smart Meter Rate Adder

Smart Meter Deferral Account Balance - PILs Calculation

Income Tax

Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable

Ontario Capital Tax

Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate NET OCT Amount

Change in Income Taxes Payable Change in OCT

		Actual 2006	
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	45.0%	\$ -	
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	0.300%		
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	PILs Payable	Gross Un	Grossed Un PII
\$	FILS FAYADIE -	Gross Up 36.12%	Grossed Up PILs
\$	-		\$ - \$ -

Hydro One Brampton Networks Inc. EB-2010-

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Revenue Requirement Calculations
Average Fixed Asset Values OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software Stores & Tools
Working Capital Operation Expense 15% Working Capital
Smart Meters Fixed Assets in Rate Base
Return on Rate Base Deemed Debt - Long Term Deemed Debt - Short Term Deemed Equity
Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base
Operating Expenses Incremental Operating Expenses
Amortization Expenses
Revenue Requirement before PILs
Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs
Grossed up PILs
Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters
Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder
Smart Meter Deferral Account Balance - PILs Calculation
Income Tax Net Income Amortization

Amortization

Revised Taxable Income Tax Rate Income Taxes Payable

Ontario Capital Tax
Smart Meter Related Fixed Assets
Less: Exemption
Deemed Taxable Capital
Ontario Capital Tax Rate
NET OCT Amount

Change in Income Taxes Payable Change in OCT PILs

PI \$ \$	Ls Payable 18,379 3,951	•	Gross Up 36.12%	Grossed \$ \$	d Up PILs 28,770 3,951
\$	3,951				
\$	4,158,719 0.285%				
\$	4,158,719				
•	4.450.740				
\$	18,379				
\$	50,882 36.12%				
\$	(172,085)				
\$	79,563 143,404				
				\$	0.23
				\$	2.73
				\$	343,540 126,026
				\$	32,721 343,540
				\$ \$	310,819
				\$	32,721
				\$	79,563
				\$	(143,404) (83,125)
				\$	(4,728)
				\$	310,819
				\$	143,404
				\$	4,728
	•	\$	162,687	\$	162,687
	9.00%	\$	79,563		
	6.95%	\$	2,080,069 83,125	•	
	42.5%	\$	884,029	_	
	57.5%	\$	1,196,039		
		\$	2,080,069	-	
\$	4,728 709	\$	709		
\$	-	\$	2,079,360		
\$ \$	2,079,360				
\$	- 0.70.000				

Actual 2007

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Neverlue Nequirement Galculations	
Average Fixed Asset Values	
OH & UG Services	\$
General Office	\$
Building Renovations	\$
Smart meters	\$
Computer Hardware	\$ \$
Computer Software	
Stores & Tools	\$
Working Capital	١.
Operation Expense	\$
15% Working Capital	\$
Smart Meters Fixed Assets in Rate Base	
Return on Rate Base	
Deemed Debt - Long Term	
Deemed Debt - Short Term	
Deemed Equity	
Weighted Debt Rate - Long Term	
Short Term Debt Rate	
Equity Rate	
Return on Rate Base	
Operating Expenses	
Incremental Operating Expenses	
Amortization Expenses	
7 = Ap3	
Revenue Requirement before PILs	
Calculation of Taxable Income	
Incremental Operating Expenses	
Depreciation Expense	
Interest Expense	
Taxable Income for PILs	
Grossed up PILs	
Clossed up l'ies	
Revenue Requirement before PILs	
Grossed up PILs	
Revenue Requirement for Smart Meters	
Smart Meter Rate Adder	
Revenue Requirement for Smart Meters	
Total Metered Customers	
Annualized amount required per metered customer	
Number of months in year	
Smart Meter Rate Adder	
Smart Meter Deferral Account Balance - PILs Calculation	
Income Tax	
Net Income	\$
Amortization	\$
CCA	\$
Revised Taxable Income	\$
Tax Rate	
Income Taxes Payable	\$
Ontario Capital Tax	
Smart Meter Related Fixed Assets	\$
Less: Exemption	ф 2
Deemed Taxable Capital	\$
Ontario Capital Tax Rate	Ψ
NET OCT Amount	\$
	Ė

Change in Income Taxes Payable Change in OCT PILs

\$ - \$ - \$ - \$ 6,870,945 \$ -				Actual 2008		
\$ \$ 6,870,945 \$ \$ 6,870,945 \$ \$ 6,870,945 \$ \$ \$ 6,870,945 \$ \$ \$	\$			Actual 2000		
\$ 6,870,945 \$ - \$ 6,870,945 \$ - \$ 6,870,945 \$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ \$ 1,023,844 \$ 1,023,844 \$ 1,023		_				
\$ 6,870,945 \$ - \$ 6,870,945 \$ 6,152 \$ 923 \$ 923 \$ 60.0% \$ 4,123,121 \$ 40.0% \$ 2,748,747 \$ 6,871,868 \$ 6.95% \$ 286,557 \$ 9.00% \$ 247,387 \$ 533,944 \$ 533,944 \$ \$ 1,023,844 \$ \$ 1,023,844 \$ \$ 1,023,844 \$ \$ 1,023,844 \$ \$ 1,115,769 \$ 247,387 \$ 91,924 \$ 1,115,769 \$ 129,522 \$ 8.61 \$ 1,115,769 \$ 129,522 \$ 8.61 \$ 1,023,844 \$ 91,924 \$ 1,023,844	Φ	-				
\$ 6,152 \$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 533,944 \$ 6,152 \$ 483,748 \$ (286,557) \$ 247,387 \$ 91,924 \$ 1,023,844 \$ 91,924 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$ 1,115,769 \$ 1,115,769 \$ 1,115,769 \$ 2,27,387 \$ 91,924 \$ 1,023,844 \$ 1,023,	Ф					
\$ 6,152 \$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 533,944 \$ 6,152 \$ 483,748 \$ (286,557) \$ 247,387 \$ 91,924 \$ 1,023,844 \$ 91,924 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$ 1,115,769 \$ 1,115,769 \$ 1,115,769 \$ 2,27,387 \$ 91,924 \$ 1,023,844 \$ 1,023,	\$	6,870,945				
\$ 6,152 \$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 533,944 \$ 6,152 \$ 483,748 \$ (286,557) \$ 247,387 \$ 91,924 \$ 1,023,844 \$ 91,924 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$ 1,115,769 \$ 1,115,769 \$ 1,115,769 \$ 2,27,387 \$ 91,924 \$ 1,023,844 \$ 1,023,	\$	-				
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\$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 6,152 \$ 483,748 \$ 1,023,844 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$	\$	-	\$	6,870,945		
\$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 6,152 \$ 483,748 \$ 1,023,844 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$						
\$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 6,152 \$ 483,748 \$ 1,023,844 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$						
\$ 923 \$ 923 \$ 6,871,868 60.0% \$ 4,123,121 \$ - 40.0% \$ 2,748,747 \$ 6,871,868 6.95% \$ 286,557 9.00% \$ 247,387 \$ 533,944 \$ 6,152 \$ 483,748 \$ 1,023,844 \$ 1,023,844 \$ 91,924 \$ 1,115,769 \$	\$	6 152				
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2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Average Fixed Asset Values OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software Stores & Tools Working Capital Operation Expense 15% Working Capital Smart Meters Fixed Assets in Rate Base Return on Rate Base Deemed Debt - Long Term Deemed Debt - Short Term Deemed Debt - Short Term Deemed Debt - Short Term Deemed Equity Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base Operating Expenses Incremental Operating Expenses Amortization Expenses Revenue Requirement before PILs Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Rate Related Fixed Assets Less: Exemption Deemed Taxable Income Tax Rate Income Tax Rate Income Tax Rate Net Oct Amount	Revenue Requirement Calculations
Operation Expense 15% Working Capital Smart Meters Fixed Assets in Rate Base Return on Rate Base Deemed Debt - Long Term Deemed Debt - Short Term Deemed Debt - Short Term Deemed Equity Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base Operating Expenses Incremental Operating Expenses Amortization Expenses Revenue Requirement before PILs Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Tax Rate Less: Exemption Deemed Tax Rate	OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software
Return on Rate Base Deemed Debt - Long Term Deemed Debt - Short Term Deemed Debt - Short Term Deemed Equity Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base Operating Expenses Incremental Operating Expenses Amortization Expenses Revenue Requirement before PILs Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Operation Expense
Deemed Debt - Snort Term Deemed Debt - Short Term Deemed Equity Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base Operating Expenses Incremental Operating Expenses Amortization Expenses Revenue Requirement before PILs Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Smart Meters Fixed Assets in Rate Base
Short Term Debt Rate Equity Rate Return on Rate Base Operating Expenses Incremental Operating Expenses Amortization Expenses Revenue Requirement before PILs Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Rate Adder Smart Meter Rate Adder CCA Revised Taxable Income Tax Net Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Deemed Debt - Long Term Deemed Debt - Short Term
Incremental Operating Expenses Amortization Expenses Revenue Requirement before PILs Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Short Term Debt Rate Equity Rate
Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Rate Adder Smart Meter Rate Adder Count Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	
Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Rate Adder Smart Meter Rate Adder Smart Meter Rate Adder Ontario Capital Tax Smart Meter Rate Adder Ontario Capital Tax Rate Income Taxable Capital Ontario Capital Tax Rate	Amortization Expenses
Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs Grossed up PILs Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Revenue Requirement before PILs
Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Incremental Operating Expenses Depreciation Expense Interest Expense
Grossed up PILs Revenue Requirement for Smart Meters Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Grossed up PILs
Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder Smart Meter Deferral Account Balance - PILs Calculation Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Grossed up PILs
Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year
Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Smart Meter Deferral Account Balance - PILs Calculation
Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate	Net Income Amortization CCA Revised Taxable Income Tax Rate
	Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate

Change in Income Taxes Payable Change in OCT PILs

Φ.			Actual 2009		
\$ \$	-				
\$	-				
\$	13,429,951				
\$ \$	-				
\$ \$	-	\$	13,429,951		
Ψ		Ψ	10, 120,001		
\$	324,466	•	40.070		
\$	48,670	\$	48,670		
		\$	13,478,621		
	'				
	60.0%	\$ \$	8,087,173		
	40.0%	\$	5,391,448		
		\$	13,478,621		
	6.95%	\$	562,058		
	0.0070	\$	-		
	9.00%	\$	485,230		
		\$	1,047,289	\$	1,047,289
				\$	324,466
				Ψ	324,400
				\$	969,455
			,	\$	2,341,210
				\$	(324,466)
				\$	(969,455)
				\$	(562,058)
			i	\$	485,230
				\$	185,565
			•		·
				\$	2,341,210
				\$	185,565
			•	\$	2,526,775
				\$	2,526,775
			•	•	130,963
			;	\$	19.29
			,	\$	1.61
			:		
\$	485,230				
\$	969,455				
\$	(1,104,241)				
\$	350,445				
\$	33.00% 115,647				
Ψ	110,047				
\$	17,276,730				
\$	17 276 720				
Ф	17,276,730 0.225%				
\$	12,958				
ы	Ls Payable		Gross Up	Gra	seed IIn DII a
\$	115,647		33.00%	\$	ssed Up PILs 172,607
\$	12,958			\$	12,958

128,604

185,565

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Average	Fixed	Asset	Values

OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software Stores & Tools

Working Capital

Operation Expense 15% Working Capital

Smart Meters Fixed Assets in Rate Base

Return on Rate Base

Deemed Debt - Long Term Deemed Debt - Short Term Deemed Equity

Weighted Debt Rate - Long Term Short Term Debt Rate **Equity Rate** Return on Rate Base

Operating Expenses

Incremental Operating Expenses

Amortization Expenses

Revenue Requirement before PILs

Calculation of Taxable Income

Incremental Operating Expenses Depreciation Expense Interest Expense
Taxable Income for PILs

Grossed up PILs

Revenue Requirement before PILs Revenue Requirement for Smart Meters

Smart Meter Rate Adder

Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder

Smart Meter Deferral Account Balance - PILs Calculation

Income Tax

Net Income Amortization Revised Taxable Income Tax Rate Income Taxes Payable

Ontario Capital Tax

Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate
NET OCT Amount

Change in Income Taxes Payable Change in OCT

		F	orecast 2010		
\$	_		0100001 2010		
\$	_				
\$	_				
\$	18,407,302				
\$	-				
\$	364,016				
\$	-	\$	18,771,319		
Ψ		Ψ	.0,,0.0		
\$	876,347				
\$	131,452	\$	131,452		
Ψ	131,432	Ψ	131,432		
		\$	18,902,771	-	
		Ψ	10,302,771	•	
	60.0%	\$	11 3/1 662		
	00.0%	\$	11,341,662		
	40.0%	\$	7,561,108		
	40.0%			-	
		\$	18,902,771		
	6.85%	\$	776,904		
		\$	-		
	9.00%	\$	680,500		
		\$	1,457,404	\$	1,457,404
			.,,	• •	.,,
				\$	876,347
				Ψ	070,547
				\$	1,590,498
				Ψ	1,350,450
				\$	3,924,249
				Ψ	3,324,243
				•	(070.047)
				\$	(876,347)
				\$	(1,590,498)
				\$	(776,904)
				\$	680,500
				\$	163,788
				\$	3,924,249
				\$	163,788
				\$	4,088,037
				\$	4,088,037
					132,427
				\$	30.87
				÷	12
				\$	2.57
				Ψ	2.01
١.					
\$	680,500				
\$	1,590,498				
\$	(1,917,715)				
\$	353,283				
	31.00%				
\$	109,518				
	•				
\$	20,265,907				
\$	-				
\$	20,265,907				
	0.075%				
\$	5,066				
Ť	0,000				
-	II e Davahla		Gross IIn	G	seed IIs DII -
	ILs Payable		Gross Up		ssed Up PILs
\$	109,518		31.00%	\$	158,721
\$	5,066			\$	5,066
\$	114,584			\$	163,788

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Average	Fixed	Asset	Values
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OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software Stores & Tools

Working Capital

Operation Expense 15% Working Capital

Smart Meters Fixed Assets in Rate Base

Return on Rate Base

Deemed Debt - Long Term Deemed Debt - Short Term Deemed Equity

Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base

Operating Expenses

Incremental Operating Expenses

Amortization Expenses

Revenue Requirement before PILs

Calculation of Taxable Income

Incremental Operating Expenses Depreciation Expense Interest Expense

Interest Expense
Taxable Income for PILs

Grossed up PILs

Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters

Smart Meter Rate Adder

Revenue Requirement for Smart Meters
Total Metered Customers
Annualized amount required per metered customer
Number of months in year
Smart Meter Rate Adder

Smart Meter Deferral Account Balance - PILs Calculation

Income Tax

Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable

Ontario Capital Tax

Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate NET OCT Amount

Change in Income Taxes Payable Change in OCT

		Fo	recast 2011		
\$	-				
\$	-				
\$ \$	3,907,008				
\$	-				
\$	647,140				
\$	-	\$	4,554,149		
	103,522				
\$	15,528	\$	15,528		
Ι Ψ	10,020	Ψ	10,020		
		\$	4,569,677	_	
	•			_	
		_			
	56.0%	\$	2,559,019		
	4.0% 40.0%	\$ \$	182,787		
	40.0%	\$	1,827,871 4,569,677	-	
	•				
	6.75%	\$	172,734		
	2.07%	\$	3,784		
	9.85%	\$	180,045 356,563	\$	356,563
	·	Ψ	356,563	Ψ.	330,303
				\$	103,522
				\$	486,502
				•	040 500
				\$	946,586
				\$	(103,522)
				\$	(486,502)
				\$	(176,517)
				\$	180,045
				\$	(28,155)
				•	040 500
				\$	946,586
				<u>\$</u>	(28,155) 918,431
					0.0,.0.
				\$	918,431
					133,888
				\$	6.86
				\$	0.57
				φ	0.57
\$	180,045				
\$	486,502				
\$	(738,056)				
\$	(71,509)				
\$	28.25%				
Φ	(20,201)				
\$	4,860,898				
\$	-				
\$	4,860,898				
<u> </u>	0.000%				
-	-				
Р	ILs Payable		Gross Up	Gross	sed Up PILs
	(20,201)		28.25%	\$	(28,155)
\$					
\$	(20,201)			\$	(28,155)

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

November Requirement Galediations
Average Fixed Asset Values OH & UG Services General Office Building Renovations Smart meters Computer Hardware Computer Software Stores & Tools
Working Capital Operation Expense 15% Working Capital
Smart Meters Fixed Assets in Rate Base
Return on Rate Base Deemed Debt - Long Term Deemed Debt - Short Term Deemed Equity
Weighted Debt Rate - Long Term Short Term Debt Rate Equity Rate Return on Rate Base
Operating Expenses Incremental Operating Expenses
Amortization Expenses
Revenue Requirement before PILs
Calculation of Taxable Income Incremental Operating Expenses Depreciation Expense Interest Expense Taxable Income for PILs
Grossed up PILs
Revenue Requirement before PILs Grossed up PILs Revenue Requirement for Smart Meters
Smart Meter Rate Adder Revenue Requirement for Smart Meters Total Metered Customers Annualized amount required per metered customer Number of months in year Smart Meter Rate Adder
Smart Meter Deferral Account Balance - PILs Calculation
Income Tax Net Income Amortization CCA Revised Taxable Income Tax Rate Income Taxes Payable

Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital Ontario Capital Tax Rate NET OCT Amount

Change in Income Taxes Payable Change in OCT

PILs

\$ 4,132,292 \$ 103,522 \$ 15,528 \$ 15,528	\$	-			
\$ 485,355 \$ - \$4,617,647 103,522 \$ 15,528 \$ 15,528	\$	4,132,292			
\$ - \$4,617,647 103,522 \$ 15,528 \$ 15,528 \$4,633,175 56,0% \$2,594,578 4.0% \$185,327 40.0% \$1,853,270 \$4,633,175 6.75% \$ 175,134 2.07% \$ 3,836 9.85% \$ 182,547 \$ 361,517 \$ 103,522 \$ 486,502 \$ 951,541 \$ 113,237 \$ 113,237 \$ 113,237 \$ 1,064,778 \$ 133,888 \$ 7.95 12 \$ 0.66 \$ 4,374,396 0.000% \$ - \$ 4,374,396 0.000% \$ - \$ 4,374,396 0.000% \$ - \$ 4,374,396 0.000% \$ 1 13,237	\$ \$	- 485 355			
\$ 15,528 \$ 15,528 \$ 4,633,175 \$ 56.0% \$ 2,594,578 \$ 4.0% \$ 185,327 \$ 40.0% \$ 1,853,270 \$ 54,633,175 \$ 6.75% \$ 175,134 \$ 2.07% \$ 3,836 \$ 9.85% \$ 182,547 \$ 361,517 \$ \$ 103,522 \$ 486,502 \$ 951,541 \$ 113,237 \$ 1,064,778 \$ 133,888 \$ 7.95 \$ 12 \$ 0.66 \$ \$ 3,512 \$ \$ 4,374,396 \$ 0.000% \$ \$ - \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 13,237 \$ 0.000% \$ - \$ \$ 0.000% \$ - \$ 0.000% \$ 0.000% \$ - \$ 0.000% \$ - \$ 0.000% \$ 0.000% \$ - \$ 0.000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$	\$	-	\$4,617,647		
\$ 15,528 \$ 15,528 \$ 4,633,175 \$ 56.0% \$ 2,594,578 \$ 4.0% \$ 185,327 \$ 40.0% \$ 1,853,270 \$ 54,633,175 \$ 6.75% \$ 175,134 \$ 2.07% \$ 3,836 \$ 9.85% \$ 182,547 \$ 361,517 \$ \$ 103,522 \$ 486,502 \$ 951,541 \$ 113,237 \$ 1,064,778 \$ 133,888 \$ 7.95 \$ 12 \$ 0.66 \$ \$ 3,512 \$ \$ 4,374,396 \$ 0.000% \$ \$ - \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 4,374,396 \$ 0.000% \$ - \$ \$ 13,237 \$ 0.000% \$ - \$ \$ 0.000% \$ - \$ 0.000% \$ 0.000% \$ - \$ 0.000% \$ - \$ 0.000% \$ 0.000% \$ - \$ 0.000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$ 0.0000% \$					
\$4,633,175 56.0% \$2,594,578 4.00% \$1,853,270 \$4,633,175 6.75% \$175,134 2.07% \$3,836 9.85% \$182,547 \$361,517 \$103,522 \$486,502 \$951,541 \$113,237 \$113,237 \$1,064,778 \$133,888 \$7,95 \$12 \$0.66 \$182,547 \$486,502 \$0.66 \$182,547 \$486,502 \$0.66 \$182,547 \$46,502 \$0.66		103,522			
56.0% \$2,594,578 4.0% \$ 185,327 40.0% \$1,853,270 \$4,633,175 6.75% \$ 175,134 2.07% \$ 3,836 9.85% \$ 182,547 \$ 361,517 \$ 103,522 \$ 486,502 \$ (486,502 \$ (178,970 \$ 113,237 \$ 113,237 \$ 1,064,778 133,888 \$ 7.95 12 \$ 0.66 \$ 182,547 \$ 486,502 \$ (350,906) \$ 318,143 26,25% \$ 83,512 \$ 4,374,396 0.000% \$ 0.000% \$ 0.000% \$ 13,237	\$	15,528	\$ 15,528		
56.0% \$2,594,578 4.0% \$ 185,327 40.0% \$1,853,270 \$4,633,175 6.75% \$ 175,134 2.07% \$ 3,836 9.85% \$ 182,547 \$ 361,517 \$ 103,522 \$ 486,502 \$ (486,502 \$ (178,970 \$ 113,237 \$ 113,237 \$ 1,064,778 133,888 \$ 7.95 12 \$ 0.66 \$ 182,547 \$ 486,502 \$ (350,906) \$ 318,143 26,25% \$ 83,512 \$ 4,374,396 0.000% \$ 0.000% \$ 0.000% \$ 13,237			\$4.633.175		
4.0% \$1,853,227 40.0% \$1,853,270		•		3	
4.0% \$1,853,227 40.0% \$1,853,270		56.0%	\$2 594 578		
\$4,633,175 6.75% \$ 175,134 2.07% \$ 3,836 9.85% \$ 182,547 \$ 361,517 \$ 361,517 \$ 103,522 \$ 486,502 \$ (178,970 \$ 182,547 \$ 113,237 \$ 1,064,778 \$ 1,064,778 \$ 1,064,778 \$ 2,076 \$ 1,064,778 \$ 1,064,778 \$ 1,064,778 \$ 1,064,778 \$ 1,064,602 \$ 0,000 \$ 318,143 26,25% \$ 83,512 \$ 4,374,396 0,000% \$ 1,374,396					
6.75% \$ 175,134		40.0%			
2.07% \$ 3,836 9.85% \$ 182,547 \$ 361,517 \$ 361,517 \$ 361,517 \$ 103,522 \$ 486,502 \$ 951,541 \$ 113,237 \$ 113,237 \$ 113,237 \$ 1,064,778 \$ 133,888 \$ 7,95 \$ 12 \$ 0.66 \$ 318,143 \$ 26,25% \$ 83,512 \$ 4,374,396 \$ 0.000% \$ \$ - \$ 4,374,396 \$ 0.000% \$ \$ - \$ \$ 4,374,396 \$ 0.000% \$ \$ - \$ \$ 1,32,37 \$ 0.67 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ 0.000% \$ - \$ \$ 1,32,37 \$ 0.000% \$ 0.0		:		•	
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\$ 103,522 \$ 486,502 \$ 951,541 \$ (103,522 \$ (486,502 \$ (178,970 \$ 182,547 \$ 113,237 \$ 1,064,778 \$ 133,888 \$ 7.95 12 \$ 0.66 \$ 318,143 26,25% \$ 83,512 PILs Payable \$ 83,512 PILs Payable \$ 83,512 Gross Up Grossed Up PILs \$ 1,3237				_	
\$ 486,502 \$ 951,541 \$ (103,522 \$ (486,502 \$ (178,970) \$ 182,547 \$ 113,237 \$ 1,064,778 \$ 1,064,778 \$ 133,888 \$ 7.95 12 \$ 0.66 \$ 38,512 \$ 4,374,396 0.000% \$ - \$ 4,374,396 0.0000% \$ 0.0000% \$ 0.0000%			\$ 361,517	\$	361,517
\$ 486,502 \$ 951,541 \$ (103,522 \$ (486,502 \$ (178,970) \$ 182,547 \$ 113,237 \$ 1,064,778 \$ 1,064,778 \$ 133,888 \$ 7.95 12 \$ 0.66 \$ 38,512 \$ 4,374,396 0.000% \$ - \$ 4,374,396 0.0000% \$ 0.0000% \$ 0.0000%					
\$ (103,522 \$ (486,502 \$ (486,502 \$ (178,970 \$ 182,547 \$ 1,064,778 \$ 1,064,778 \$ 133,888 \$ 7.95 \$ 12 \$ 0.66 \$ \$ 318,143 \$ 26,25% \$ 83,512 \$ 4,374,396 \$ 0.000% \$ \$ \$ \$ 1,374,396 \$ 0.000% \$ \$ \$ \$ 1,374,396 \$ 0.000% \$ \$ \$ \$ 1,374,396 \$ 0.000% \$ \$ \$ \$ 1,374,396 \$ 0.000% \$ \$ \$ \$ \$ 1,374,396 \$ 0.000% \$ \$ \$ \$ \$ \$ 1,374,396 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$				\$	103,522
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\$ 83,512 \$ 113,237		83.512			113.237

Forecast 2012

Change in Income Taxes Payable Change in OCT PILs

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

Revenue Requirement Calculations	
Average Fixed Asset Values	Forecast 2013
OH & UG Services	\$ -
General Office	\$ -
Building Renovations	\$ -
Smart meters	\$ 3,807,575
Computer Hardware	\$ -
Computer Nationale Computer Software	
Stores & Tools	\$ - \$4,131,145
Working Capital	
Operation Expense	103,522
15% Working Capital	\$ 15,528 \$ 15,528
Smart Meters Fixed Assets in Rate Base	\$4,146,673
Return on Rate Base	
Deemed Debt - Long Term	56.0% \$2,322,137
Deemed Debt - Short Term	4.0% \$ 165,867
Deemed Equity	40.0% \$1,658,669
Deemed Equity	
	\$4,146,673
Weighted Debt Rate - Long Term	6.75% \$ 156,744
Short Term Debt Rate	* **
Equity Rate	9.85% \$ 163,379
Return on Rate Base	<u>\$ 323,557</u> \$ 323,557
Operating Expenses	400 500
Incremental Operating Expenses	\$ 103,522
Amortization Expenses	\$ 486,502
Revenue Requirement before PILs	\$ 913,580
Calculation of Taxable Income	
Incremental Operating Expenses	\$ (103,522)
. • .	
Depreciation Expense	\$ (486,502)
Interest Expense	\$ (160,178)
Taxable Income for PILs	\$ 163,379
Grossed up PILs	\$ 111,942
Revenue Requirement before PILs	\$ 913,580
Grossed up PILs	\$ 111,942
Revenue Requirement for Smart Meters	\$ 1,025,523
Smart Meter Rate Adder	
Revenue Requirement for Smart Meters	\$ 1,025,523
Total Metered Customers	133,888
Annualized amount required per metered customer	
Number of months in year	12
Smart Meter Rate Adder	\$ 0.64
Smart Meter Deferral Account Balance - PILs Calculation	
Income Tax	
Net Income	\$ 163,379
Amortization	\$ 486,502
CCA	\$ (322,834)
Revised Taxable Income	\$ 327,047
Tax Rate	25.50%
Income Taxes Payable	\$ 83,397
Ontario Capital Tax	
Smart Meter Related Fixed Assets	\$ 3,887,894
Less: Exemption	\$ -
Deemed Taxable Capital	\$ 3,887,894
Ontario Capital Tax Rate	0.000%
NET OCT Amount	\$ -
	•

PILs Payable \$ 83,397 Gross Up Grossed Up PILs

111,942

25.50%

Change in Income Taxes Payable Change in OCT PILs

2011 Smart Meter Rate Rider Application Revenue Requirement Calculations

OH & UG Services General Office		
General Office	\$ -	
	\$ -	
Building Renovations	\$ -	
Smart meters	\$ 3,482,858	
Computer Hardware	\$ -	
Computer Software	\$ 161,785	
Stores & Tools	\$ - \$3,644,643	
Working Capital		
Operation Expense	103,522	
15% Working Capital	\$ 15,528 \$ 15,528	
Smart Meters Fixed Assets in Rate Base	\$3,660,172	
Return on Rate Base		
Deemed Debt - Long Term	56.0% \$2,049,696	
Deemed Debt - Short Term	4.0% \$ 146,407	
Deemed Equity	40.0% \$1,464,069	
20004 244)	\$3,660,172	
Weighted Debt Rate - Long Term	6.75% \$ 138,354	
Short Term Debt Rate	2.07% \$ 3,031	
Equity Rate	9.85% \$ 144,211	
Return on Rate Base		5,596
Operating Expenses		
Incremental Operating Expenses	\$ 10	3,522
Amortization Expenses	\$ 48	6,502
Revenue Requirement before PILs	\$ 87	5,620
Calculation of Taxable Income		
Incremental Operating Expenses	\$ (10	3,522
Depreciation Expense		6,502
Interest Expense		1,385
Taxable Income for PILs		4,211
Grossed up PILs	\$ 11	1,235
Revenue Requirement before PILs	\$ 87	5,620
Grossed up PILs		1,235
Revenue Requirement for Smart Meters		6,855
Smart Meter Rate Adder		
Revenue Requirement for Smart Meters	\$ 98	C 0EE
•	■	6,855
Total Metered Customers Appualized amount required per metered customer	\$	3,888 7.37
Annualized amount required per metered customer	4	
Number of months in year Smart Meter Rate Adder	Φ.	12
Smart Meter Rate Adder	2	0.61
Smart Meter Deferral Account Balance - PILs Calculation		
Income Tax		
Net Income	\$ 144,211	
Amortization	\$ 486,502	
CCA	\$ (297,007)	
Revised Taxable Income	\$ 333,706	
Tax Rate	25.00%	
	\$ 83,426	
Income Taxes Payable		
Income Taxes Payable Ontario Capital Tax	\$ 3,401,303	
Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets	\$ 3,401,393	
Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption	\$ -	
Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption Deemed Taxable Capital	\$ - \$ 3,401,393	
Income Taxes Payable Ontario Capital Tax Smart Meter Related Fixed Assets Less: Exemption	\$ -	

PILs Payable \$ 83,426 **Gross Up Grossed Up PILs** 25.00% \$ 111,235

INTIC	

Opening capital
Capital additions
Closing capital

				OAI IIAE				
2006	2007	2008	2009	2010	2011	2012	2013	2014
-	-	4,302,123.15	10,210,324.03	18,873,337.99	23,453,013.45	24,553,013.45	24,553,013.45	24,553,013.45
-	4,302,123.15	5,908,200.88	8,663,013.96	4,579,675.46	1,100,000.00	-	-	-
	4 202 122 1E	10 210 221 02	10 072 227 00	22 452 042 45	24 552 042 45	24 552 042 45	24 552 042 45	24 552 042 45

OM&A

Opening OM&A OM&A additions Closing OM&A

				•				
2006	2007	2008	2009	2010	2011	2012	2013	2014
-	-	4,727.57	10,879.53	335,345.37	1,211,692.37	1,315,214.34	1,418,736.31	1,522,258.28
-	4,727.57	6,151.96	324,465.84	876,347.00	103,521.97	103,521.97	103,521.97	103,521.97
-	4,727.57	10,879.53	335,345.37	1,211,692.37	1,315,214.34	1,418,736.31	1,522,258.28	1,625,780.25

COLLECTIONS

Opening collections Collection additions Closing collections

	2006	2007	2008	2009	2010	2011	2012	2013	2014
is -	-	-	598,993.37	1,840,706.33	3,134,238.51	4,730,191.51	5,198,191.51	5,666,191.51	6,134,191.51
IS	-	598,993.37	1,241,712.96	1,293,532.18	1,595,953.00	468,000.00	468,000.00	468,000.00	468,000.00
3	-	598,993.37	1,840,706.33	3,134,238.51	4,730,191.51	5,198,191.51	5,666,191.51	6,134,191.51	6,602,191.51

APPENDIX AB

FINAL REPORT FINAL REPORT AT 7.87/, DISCOUNT RATE AT 7.87/, DISCOUNT RATE Group Inc. Received March 24, 2004

TOTAL RESOURCE COST TEST ASSESSMENT OF THE '2005 LIGHTEN YOUR ELECTRICITY BILL' PROGRAM

For Hydro One Brampton

By SeeLine Group Inc. 416-703-8695

February 2006



1.0 Introduction

Energyshop.com was engaged by 32 Local Distribution Companies (LDCs), across the province of Ontario, to design, deliver and track a fall coupon campaign with retailer Canadian Tire. Throughout the late summer and early fall billing periods, participating utilities provided their customers with a bill insert containing valuable energy-savings coupons to help them save on their electricity bill.

Customers from each of the 32 LDCs, had until December 31, 2005 to redeem their point of purchase coupons at any local Canadian Tire outlet. Upon redemption, Canadian Tire sent the coupon to a redemption house, who then sorted by utility and product.

As part of this effort, SeeLine Group Inc. (SLG) was asked to undertake a Total Resource Costs (TRC) test assessment of the 2005 Lighten Your Electricity Bill Program as delivered by Energyshop.com. Using many of the technology cost and savings estimates outlined in the Ontario Energy Board's TRC Guide, program results were screened using SLG's SeeToolTM TRC Calculator. The number of participants and program cost data were provided by Energyshop.com.

This report includes a summary of assumptions and results from the TRC screening. Appendix A and B provides the detailed information on program assumptions.

2.0 Program Objectives

As outlined by Energyshop.com, this program was designed to achieve the following objectives:

- To help participating utilities achieve energy conservation and demand management results for their 2005 program year.
- Increase public awareness of energy conservation and demand management in the province of Ontario.
- Contribute to the overall development of an energy conservation culture in Ontario.

3.0 Program Results

3.1 Technology Savings Assumptions

SLG used many of the technology savings identified by the OEB in its Total Resource Guide.¹ For those technologies without defined savings, every effort was made to develop reasonable assumptions, defensible under the OEB guidelines. The following provides a brief outline of the savings assumptions used for this assessment.

http://www.oeb.gov.on.ca/documents/cases/RP-2004-0203/cdm assumptionsmeasureslist 141005.xls



Compact Fluorescent Bulbs

The 2005 program provided customers with a \$3 coupon on any pack of compact fluorescent bulbs. Using store data provided by Energyshop.com, the number of bulbs sold by wattage was used to develop the average wattage of bulb sold. Based on this information, it was assumed that the average wattage sold during this program was 15 watts. Additional detail can be found in Appendix A.

LED Seasonal Lights

Like the CFLs, customers were provided with a \$5 coupon for the purchase of any package of LED seasonal lights. Using store data provided by Energyshop.com, average size of LED light string sold during the campaign was determined. Based on this information, it was assumed that the average string sold had 59 bulbs.

Using the information in the OEB's TRC Guide, LED savings assumptions were adjusted to reflect a string with 59 bulbs as opposed to the 25 bulbs per string. Additional detail can be found in Appendix A.

With guidance from Energyshop.com, it was also assumed that 50% of the LED lights sold were those replacing a 5 watt Christmas string and the remaining 50% were used to replace mini lights which yields a slightly lower savings.

Ceiling Fans

At the time of this analysis, SLG felt there was not enough significant evidence to support a savings estimate for ceiling fans.

Programmable Thermostats

SLG used the savings estimate outlined in the OEB's TRC Guide. Participant rates were adjusted to account for market share. Using data provided by Energyshop.com and other studies, the following province wide fuel share assumptions were used:

Electrical Space Heating 17.3% Electrical Space Cooling (central air) 45.0%

Indoor Timers

In the absence of OEB savings estimates for indoor timers, SLG developed savings estimates for timers used on indoor lighting and air conditioners. Detailed information can be found in Appendix B.

The savings estimate for timers for indoor lighting is considered to be small. It assumes that the timer is used on a 60 W bulb and provides savings during the winter peak, winter mid peak and summer peak periods. In total, the timer is expected to provide approximately 98 kWh savings.

The savings estimate developed for timers used on unit air conditioners is based on the owner setting the timer to bring the air conditioner on a few hours before he or she



arrives home. Based on this assumption, a timer used for a unit air conditioner would provide approximately 108 kWh in annual savings.

Based on discussions with EnergyShop.com it was assumed that 50% of the timers would be used for lighting and the remaining 50% would be used for air conditioners. SLG made an additional assumption and assumed that it was unlikely that all of the timers would be used appropriately; participation rates were reduced by 30%.

Outdoor Timers

The savings estimate for the outdoor timer is based on information from the OEB's TRC Guide.

EnerGuide for Homes

Based on information provided by Energyshop.com the potential savings for space heating load is estimated to be 250 kWh. Using the participant data provided by EnergyShop.com, SLG made adjustments to account for uptake on the audit recommendations and fuel market share. No additional fuel savings were considered for this analysis.



3.2 Summary of Program Participation

Technology	Number of Participants	Freeridership
Compact Fluorescent Bulbs	3,729	10.0%
LED Christmas Lights (indoor or outdoor) Replacing 5w Christmas Lights C-7 (25 Lights)	853	5.0%
LED Christmas Lights (indoor or outdoor) Replacing Incandescent Mini Lights	853	5.0%
Programmable Thermostat - Space Heating, Existing Single Family Detached	70	10.0%
Programmable Thermostat - Space Cooling, Existing Single Family Detached	183	10.0%
Timer - Outdoor Light	200	10.0%
Timer - Indoor - Light	32	10.0%
Timer - Indoor - Air Conditioners	31	10.0%
Ceiling Fan	51	10.0%
EnerGuide for Existing Homes - Space Heating		10.0%

^{*} Adjusted for fuel share and usage uptake

3.3 Summary of Net Program Savings

Technology	Summer Peak kW Savings	Annual kWh Savings in Year	Measure Life	Lifecycle kWh Savings
Compact Fluorescent Bulbs	0	350,335	4	1,401,338
LED Christmas Lights (indoor or outdoor) Replacing 5w Christmas Lights C-7 (25 Lights)	0.00	36,041	30.00	1,081,233
LED Christmas Lights (indoor or outdoor) Replacing Incandescent Mini Lights				
December 11 The second 1	0.00	13,794	30.00	413,805
Programmable Thermostat - Space Heating, Existing Single Family Detached	0.00	92,694	18.00	1,668,487
Programmable Thermostat - Space Cooling, Existing Single Family Detached	25.61	26,158	18.00	470,847
Timer - Outdoor Light	0.00			2017-01-02-02-02-02-02-02-02-02-02-02-02-02-02-
Timer - Indoor - Light		52,560	20.00	1,051,200
The transfer of the transfer o	1.70	2,825	20.00	56,494
Timer - Indoor - Air Conditioners	4.85	3,036	20.00	60,710
Ceiling Fan	0.00	-	20.00	
EnerGuide for Existing Homes - Space Heating	0.00	_	25.00	
Total		577,441	20.00	6,204,115



3.4 Summary of Total Resource Cost Test Results

Technology	TRC Benefits	Incremental Equipment Costs	Utility Program Costs	TRC Net Benefits	TRC B/C Ratio	
Compact Fluorescent Bulbs	\$87,736	\$6,711	\$-	\$81,025	13.07	
LED Christmas Lights (indoor or outdoor) Replacing 5w Christmas Lights C-7 (25 Lights)	\$40,993	\$1,620	\$-	\$39,373	25.31	
LED Christmas Lights (indoor or outdoor) Replacing Incandescent Mini Lights	\$15,689	\$1,620	\$-	\$14,069	9.69	
Programmable Thermostat - Space Heating, Existing Single Family Detached	\$72,827	\$3,793	\$-	\$69,034	19.20	
Programmable Thermostat - Space Cooling, Existing Single Family Detached	\$36,230	\$9,866	\$-	\$26,364	3.67	
Timer - Outdoor Light	\$45,329	\$3,600	\$-	\$41,729	12.59	
Timer - Indoor - Light	\$3,459	\$202	\$-	\$3,258	17.16	
Timer - Indoor - Air Conditioners	\$5,502	\$195	\$-	\$5,307	28.17	
Ceiling Fan	\$-	\$1,928	\$-	\$(1,928)	0.00	
EnerGuide for Existing Homes - Space Heating	\$-	\$-	\$-	\$-	n/a	
Program Costs	\$-	\$-	\$15,538	\$(15,538)	0.00	
Total	\$307,765	\$29,534	\$15,538	\$262,693	6,83	
			24114.98 Add	254116. TRC Ben	ofit) BC	Sal
	/	¥ 536.	48.98 Cost	-TRCC	est)	
Partic	ipani	TRC	Cost			

Total Resource Cost Test Assessment of the '2005 Lighten Up Your Electricity Bill' Program



"Chris Bodanis" <chris.bodanis@energyshop.c om>

cc bcc

09/03/2006 12:17 PM

Please respond to <chris@energyshop.com> Subject Lighten Your Electricity Bill - Final Report

To <sabbas@hydroonebrampton.com>

It is here.

The final report for this CDM program has been completed by SeeLine Group and is attached.

Overall, the program was a tremendous success and exceeded participation targets and generated significant savings.

In total, the program achieved over 18 Million in annual kWh savings and aggregate kW savings of over 5 MW. Total Summer kW savings amounted to 957 kW.

TRC Net Benefits for the entire program amounted to just over \$6.6 Million.

Not included in the report was the kW Winter peak savings.

The following chart totals both Summer and Winter kW peak savings.

Hydro (One Brampton	
a see Francis (1) (1)	Summer Peak kW	Winter Peak kW
Technology	Savings	Savings
Compact Fluorescent Bulbs	0	77.18
LED Christmas Lights (indoor or		
outdoor) Replacing 5w Christmas		
Lights C-7 (25 Lights)	0.00	14.58
LED Christmas Lights (indoor or		
outdoor) Replacing Incandescent		
Mini Lights	0.00	5.37
Programmable Thermostat -		
Space Heating, Existing Single		
Family Detached	0.00	10.94
Programmable Thermostat -		
Space Cooling, Existing Single		000 0000
Family Detached	26.80	
Timer - Outdoor Light	0.00	
Timer - Indoor - Light	1.70	
Timer - Indoor - Air Conditioners	4.85	0.00
Ceiling Fan	0.00	0.00
EnerGuide for Existing Homes -		
Space Heating	0.00	0.00
Total	33.36	142.09

Should you have any questions regarding the report, give us a call

Chris & Ian Energyshop.com 905-737-5041 x117

No virus found in this outgoing message. Checked by AVG Free Edition.



Version: 7.1.375 / Virus Database: 268.2.1/277 - Release Date: 3/8/2006 Hydro One Brampton.pdf

APPENDIX AC

From: "D. Mountain" <mountain@univmail.cis.mcmaster.ca> RWilliams@hydroonebrampton.com Cc: Syed_Abbas/HydroOneBrampton@hydroonebrampton.com, carrie.aloussis@hydroone.com Date: 03/29/06 02:36 PM Subject: Re: PARTICIPANTS IN REAL TIME MONITORING Hi Ralph, I have looked over the 45 in a little more detail.

Seven of the 45 were considered inactive. Maybe the real time monitor was never working. There are various reasons for this inactivity.

17 of 45 were dropped from the analysis for various reasons, most often because they did not fill out the questionnaires. We did remind participants who did not fill out questionnaires many times throughout the pilot, but we couldn't force anyone to fill out the questionnaire. (The billing data did not seem to be an issue for Brampton.)

Dean

On Mon, 27 Mar 2006 14:42:46 -0500 RWilliams@hydroonebrampton.com wrote: > Hi Dean > Thanks for the information. I now have a couple of questions. > 1. Of the 24 customers who's data was not used how many of these > were as > a result of not having them fill out the profile information > 2. Are the balance of the 24 who did not fill out profiles not > included > due to lack of billing data? If this is the case was data requested > and if > so when and of whom? > Our concerns are that this program has been underway for over a year > the results are need to be filed by the end of March and Hydro One

```
> Brampton are just finding out that greater than 50% of the population
> not valid. I would like to know why we are finding out so late that
> only have results for 46.7% of the population. Given our costs
> associated
> with the program and the results can only be applied to a small
> portion
> our TRC values will be squed and look out of proportion.
> I would appreciate your prompt response as we will have to address
> this
> issue and include the answers in our lessons learned section of the
> report.
> Thanking you in advance.
> Ralph Williams
> Energy Services Supervisor
> Hydro One Brampton
> 905 840 6300 ext 388
>
>
> "D. Mountain" <mountain@univmail.cis.mcmaster.ca>
> 03/26/06 11:07 PM
>
> To
> SAbbas@hydroonebrampton.com
> RWilliams@hydroonebrampton.com
> Subject
> Re: PARTICIPANTS IN REAL TIME MONITORING
>
>
>
>
> Dear Syed:
> While there were originally 45 participants from Hydro One Brampton,
> after deleting those for whom questionnaires were not completed or
> whom the billing data was inadequate, only 21 participants were left.
> Of those 21,
```

```
> 1 customer had no electric heating, electric water heating and no air
> conditioning (column 4 on page 35)
> 11 customers had no electric heating, no electric water heating and
> central air conditioning (column 5 on page 35)
> 1 customer had no electric heating, no electric water heating and no
> central air conditioning (column 6 on page 35)
> 8 customers had either some supplementary electric heating or some
> window air conditioning (column 7 on page 35) (2 of these 8 had
> electric water heating)
> adds up to 21 customers
> by the way 13 customers (1+11+1) had no electric heating
> The table on page 35 is a simulation (using the model), and that is
> why
> you see entries in columns (e.g., column 1,2,3) for which we had no
> sample participants.
>
> Dean
> On Fri, 24 Mar 2006 08:29:48 -0500
   SAbbas@hydroonebrampton.com wrote:
> > Good Morning Dean:
> > We got the results of Real Time Monitoring program. There are 45
> > participants in Hydro One Brampton part. Could you please send me
> the
> >
> > distribution of participants in each of the profile as mentioned on
> > 35 of the results.
> >
> > Thanks
> >
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APPENDIX AD

OPA Conservation & Demand

Allocation Methodology

#	Initiative
	2006 Every Kilowatt Counts (Spring)
	2006 Cool Savings
	2006 Secondary Refrigerator Retirement
	2006 Every Kilowatt Counts (Autumn)
	, ,
5	2006 Demand Response 1
	2007 Great Refrigerator Roundup
7	2007 Cool Savings
8	2007 Aboriginal
	2007 Every Kilowatt Counts
	2007 peaksaver®
	2007 Summer Savings
	2007 Affordable Housing
	2007 Social Housing
	2007 Energy Efficiency Assistance for Houses
	2007 Toronto Comprehensive
	2007 Electricity Retrofit Incentive
	2007 Demand Response 1
''	2007 Bornaria (Kooporioo 1
18	2007 Other Demand Response
	2007 Renewable Energy Standard Offer
	2008 Great Refrigerator Roundup
21	2008 Cool Savings
22	2008 Aboriginal
23	2008 Summer Sweepstakes
24	2008 Every Kilowatt Counts Power Savings Event
25	2008 peaksaver®
	2008 Electricity Retrofit Incentive
	2008 Toronto Comprehensive
	2008 High Performance New Construction
	2008 Power Savings Blitz
30	2008 Chiller Plant Re-Commissioning

31	2008 Demand Response 1
32	2008 Demand Response 3
33	2008 Other Demand Response
34	2008 LDC Custom – Hydro One Double Return
35	2008 Renewable Energy Standard Offer
36	2008 Other Customer Based Generation

Management Programs

Allocation Methodology
Measure level allocation based on 2006 residential energy throughput by LDC
Measure level allocation based on 2006 residential energy throughput by LDC
Measure level allocation based on 2006 residential energy throughput by LDC
Measure level allocation based on 2006 residential energy throughput by LDC
Initiative level allocation based on 2006 non-residential energy throughput by LDCs
Actual LDC specific results
Measure level allocation based on 2007 residential energy throughput by LDC
Actual LDC specific results
Measure level allocation based on 2007 residential energy throughput by LDC
Actual LDC specific results
Allocation determined by evaluation contractor based on residential customers
Actual LDC specific results
Initiative level allocation based on 2007 Residential Energy Throughput
Actual LDC specific results
Program run exclusively in Toronto
Actual LDC specific results
Initiative level allocation based on 2007 non-residential energy throughput by LDCs
initiative level allocation bacoa on 2007 Horr residential energy allocagnipat by 2500
Contract level allocation based on 2007 non-residential energy throughput by LDCs
A + 11 DO ""
Actual LDC specific results
Actual LDC specific results
Measure level allocation based on 2008 Residential Energy Throughput
Actual LDC specific results
Actual LDC specific results
Measure level allocation based on 2008 Residential Energy Throughput
Actual LDC specific results
LDC's respective proportion of province-wide reported gross demand savings.
Program run exclusively in Toronto
Actual LDC specific results
Actual LDC specific results

Initiative level allocation based on 2008 non-residential energy throughput by LDCs
Initiative level allocation based on 2008 non-residential energy throughput by LDCs
Contract level allocation based on 2008 non-residential energy throughput by LDCs
Program run exclusively in Hydro One
Actual LDC specific results
Actual LDC specific results

Notes
1) Although the program is managed internally and actual participant data is available, the small participant population of the Demand Response 1 program can lead to participant confidentiality issues if disclosed on an actual LDC share basis.
2) Program results are based on contracted namenlate canacity and not actual summer coincident neak demand
1) Although the program is managed internally and actual participant data is available, the small participant population of the Demand Response 1 program can lead to participant confidentiality issues if disclosed on an actual LDC share basis.
1) Although the program is managed internally and actual participant data is available, the small participant population of the Other Demand Response program can lead to participant confidentiality issues if disclosed on an actual LDC share basis.
Program results are based on contracted nameplate capacity and not actual summer coincident peak demand.
1 regram recurse are based on contracted nameplate capacity and not actual callinner contract pour generation
While this initiative underwent a thorough evaluation process at the provincial level, individual prescriptive input assumptions were not verified for all measures nor were reported savings from every individual LDC verified. A representative sample of retrofit projects were measured and verified and a province-wide savings total was derived. The province wide verified energy and demand savings were allocated to individual LDCs based on their respective proportion of province-wide reported gross demand savings.

- 1) Although the program is managed internally and actual participant data is available, the small participant population of the Demand Response 1 program can lead to participant confidentiality issues if disclosed on an actual LDC share basis.
- 1) Although the program is managed internally and actual participant data is available, the small participant population of the Demand Response 3 program can lead to participant confidentiality issues if disclosed on an actual LDC share basis.
- 1) Although the program is managed internally and actual participant data is available, the small participant population of the Other Demand Response program can lead to participant confidentiality issues if disclosed on an actual LDC share basis.

Verified

Program results are based on contracted nameplate capacity and not actual summer coincident peak generation Program results are based on contracted nameplate capacity and not actual summer coincident peak generation

OPA Conservation & Demand Management Programs

Annual Results

For: Hydro One Brampton Networks Inc.

#	Program Name	Program Year	Results Status		
					2006
1	Hydro One Brampton Networks Inc.	2006	Final		9.75
2	Hydro One Brampton Networks Inc.	2007	Final		0.00
3	Hydro One Brampton Networks Inc.	2008	Final		0.00
Total					10
	T=	1	I		
	Province Wide		Final		282.17
5	Province Wide	2007	Final		0.00
6	Province Wide	2008	Final		0.00
Total					282

2007	2008	2009	2010	2011	2012	2013	2014	2015
9.75	9.75	0.43	0.43	0.41	0.37	0.28	0.28	0.28
5.90	5.88	0.74	0.74	0.74	0.71	0.71	0.71	0.61
0.00	9.54	5.27	5.27	5.27	5.25	2.37	2.33	2.32
16	25	6	6	6	6	3	3	3
	_							
282.17	282.17	16.17	16.17	15.27	14.01	10.67	10.67	10.67
300.38	299.91	177.11	177.11	176.15	42.13	42.13	42.13	38.33
0.00	360.73	179.37	179.27	179.27	178.59	93.59	92.29	91.85
583	943	373	373	371	235	146	145	141

			Net								
	Summer Peak Demand Savings (MW)										
2016	2017	2018	2019	2020	2021	2022	2023	2024			
0.28	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00			
0.59	0.52	0.52	0.52	0.52	0.52	0.09	0.09	0.09			
2.27	2.21	2.20	2.20	2.17	1.25	1.23	1.13	0.37			
3	3	3	3	3	2	1	1	0			
10.67	10.67	10.67	0.00	0.00	0.00	0.00	0.00	0.00			
37.30	34.83	34.83	21.50	21.50	21.19	5.66	5.63	5.63			
87.72	80.98	80.63	80.63	79.52	45.40	45.03	41.23	26.42			
136	126	126	102	101	67	51	47	32			

2006	2032	2031	2030	2029	2028	2027	2026	2025
9,998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.37
9,998	0	0	0	0	0	0	0	0
374,407	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	1.95	2.46
0	0.00	0.00	0.00	0.00	0.00	14.41	14.41	26.42
374,407	0	0	0	0	0	14	16	29

2007	2008	2009	2010	2011	2012	2013	2014
9,998	9,998	9,998	9,998	6,348	6,199	278	278
9,581	9,536	5,031	5,031	5,031	4,847	4,847	4,847
0	8,603	8,506	8,506	8,506	8,005	8,005	7,484
19,578	28,136	23,534	23,534	19,884	19,051	13,130	12,609
	_	_	_				
374,407	374,407	374,407	374,407	237,735	232,140	10,417	10,417
474,318	472,717	391,717	391,717	371,920	199,587	194,587	194,587
0	360,162	335,617	334,553	334,553	316,559	316,378	297,758
848,725	1,207,285	1,101,741	1,100,677	944,208	748,286	521,382	502,761

	Net											
	Annual Energy Savings (MWh)											
2015	2016	2017	2018	2019	2020	2021	2022					
278	278	278	278	0	0	0	0					
1,608	1,422	863	863	863	863	863	112					
7,095	5,949	5,508	5,289	5,289	5,239	5,219	5,208					
8,981	7,649	6,649	6,430	6,152	6,102	6,082	5,320					
10,417	10,417	10,417	10,417	0	0	0	0					
77,277	66,358	46,225	46,225	46,225	46,225	41,971	14,937					
283,825	236,654	196,624	187,191	187,191	184,705	183,376	182,857					
371,519	313,429	253,265	243,833	233,416	230,930	225,346	197,794					

2023	2024	2025	2026	2027	2028	2029	2030	2031
0	0	0	0	0	0	0	0	0
95	95	0	0	0	0	0	0	0
4,934	557	557	41	41	0	0	0	0
5,029	652	557	41	41	0	0	0	0
0	0	0	0	0	0	0	0	0
14,313	14,313	10,907	8,607	0	0	0	0	0
171,903	59,667	59,667	41,012	41,012	0	0	0	0
186,216	73,980	70,574	49,619	41,012	0	0	0	0

2032	2006	2007	2008	2009	2010	2011	2012	2013
0	9.80	9.80	9.80	0.48	0.48	0.45	0.42	0.32
0	0.00	24.91	24.88	1.39	1.39	1.39	1.18	1.18
0	0.00	0.00	10.81	6.53	6.53	6.53	6.49	3.60
0	10	35	45	8	8	8	8	5
0	283.96	283.96	283.96	17.96	17.96	16.97	15.56	11.86
0	0.00	671.04	670.17	217.37	217.37	216.41	61.34	61.34
0	0.00	0.00	405.15	222.12	221.99	221.99	220.21	135.21
0	284	955	1,359	457	457	455	297	208

					Gross			
			Su	mmer Peal	C Demand S	Savings (M	W)	
2014	2015	2016	2017	2018	2019	2020	2021	2022
0.32	0.32	0.32	0.32	0.32	0.00	0.00	0.00	0.00
1.18	1.04	1.00	0.91	0.91	0.91	0.91	0.91	0.16
3.52	3.49	3.39	3.27	3.25	3.25	3.19	2.16	2.14
5	5	5	4	4	4	4	3	2
11.86	11.86	11.86	11.86	11.86	0.00	0.00	0.00	0.00
61.34	56.15	53.51	50.18	50.18	35.37	35.37	35.06	8.04
132.38	131.21	124.38	111.36	110.59	110.59	108.10	70.18	69.66
206	199	190	173	173	146	143	105	78

2023	2024	2025	2026	2027	2028	2029	2030	2031
				-				
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.97	0.62	0.62	0.04	0.04	0.00	0.00	0.00	0.00
2	1	1	0	0	0	0	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.99	7.99	2.46	1.95	0.00	0.00	0.00	0.00	0.00
63.43	36.95	36.95	16.08	16.08	0.00	0.00	0.00	0.00
71	45	39	18	16	0	0	0	0

2032	2006	2007	2008	2009	2010	2011	2012	2013
0.00	11,108	11,108	11,108	11,108	11,108	7,054	6,887	309
0.00	0	45,264	45,183	7,636	7,636	7,636	6,932	6,932
0.00	0	0	17,338	17,191	17,191	17,191	15,893	15,893
0	11,108	56,372	73,629	35,935	35,935	31,880	29,713	23,134
0.00	416,007	416,007	416,007	416,007	416,007	264,150	257,933	11,574
0.00	0	1,189,858	1,186,946	511,946	511,946	492,149	277,077	277,077
0.00	0	0	677,605	645,319	643,918	643,918	597,241	596,982
0	416,007	1,605,865	2,280,559	1,573,273	1,571,872	1,400,217	1,132,252	885,634

				G	iross			
			An	nual Energ	y Savings	(MWh)		
2014	2015	2016	2017	2018	2019	2020	2021	2022
309	309	309	309	309	0	0	0	0
6,932	2,717	2,241	1,502	1,502	1,502	1,502	1,502	190
14,728	13,689	11,567	10,760	10,248	10,248	10,134	10,110	10,096
21,969	16,715	14,118	12,571	12,059	11,750	11,636	11,612	10,286
11,574	11,574	11,574	11,574	11,574	0	0	0	0
277,077	123,786	95,856	69,231	69,231	69,231	69,231	64,977	17,763
555,334	518,183	434,492	359,600	339,246	339,246	334,040	332,452	331,746
843,986	653,544	541,923	440,405	420,052	408,477	403,271	397,429	349,509

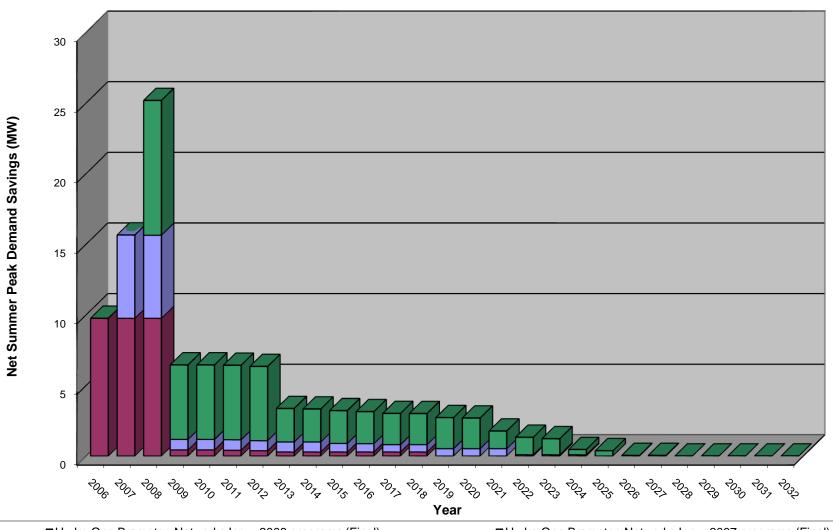
2023	2024	2025	2026	2027	2028	2029	2030	2031
0	0	0	0	0	0	0	0	0
159	159	0	0	0	0	0	0	0
9,607	944	944	45	45	0	0	0	0
9,765	1,103	944	45	45	0	0	0	0
	_					_	_	
0	0	0	0	0	0	0	0	0
16,629	16,629	10,907	8,607	0	0	0	0	0
313,985	79,645	79,645	47,148	47,148	0	0	0	0
330,614	96,274	90,551	55,754	47,148		0	0	0

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Net Summer Peak Demand Savings By Year (LDC Specific)

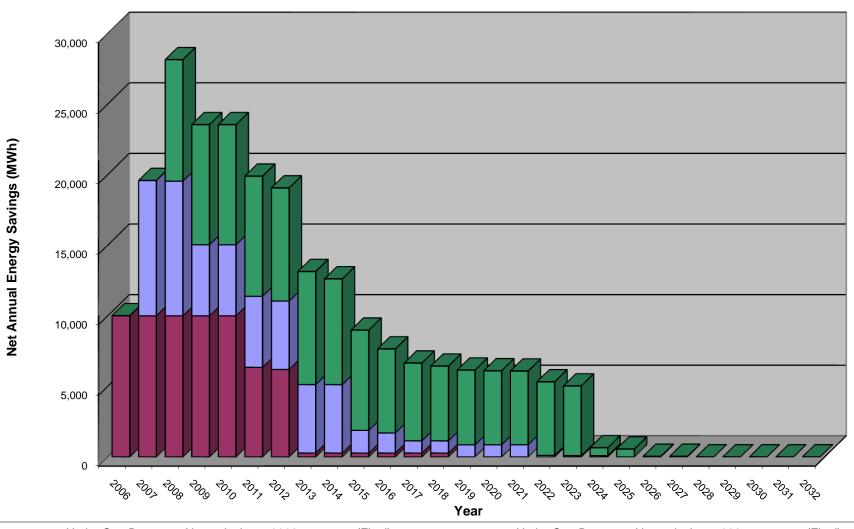


■ Hydro One Brampton Networks Inc. - 2008 programs (Final)

■ Hydro One Brampton Networks Inc. - 2007 programs (Final)

■ Hydro One Brampton Networks Inc. - 2006 programs (Final)

Net Annual Energy Savings By Year (LDC Specific)

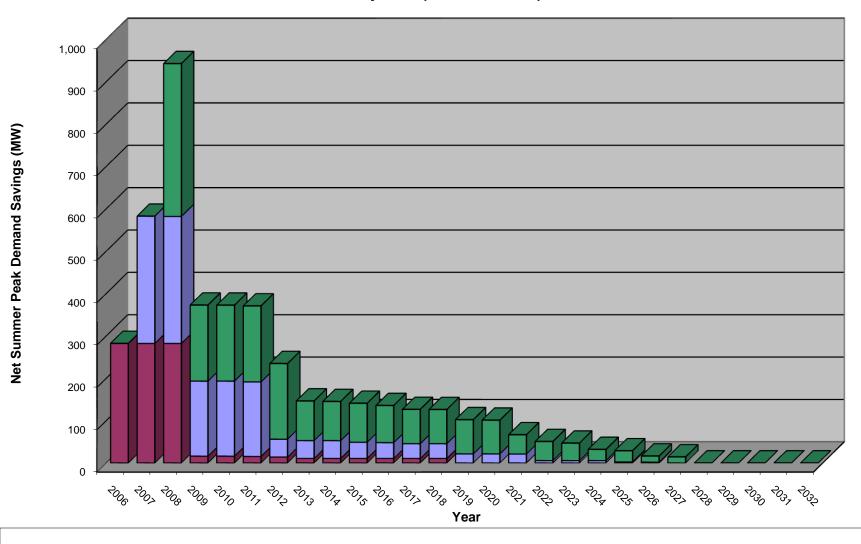


■ Hydro One Brampton Networks Inc. - 2008 programs (Final)

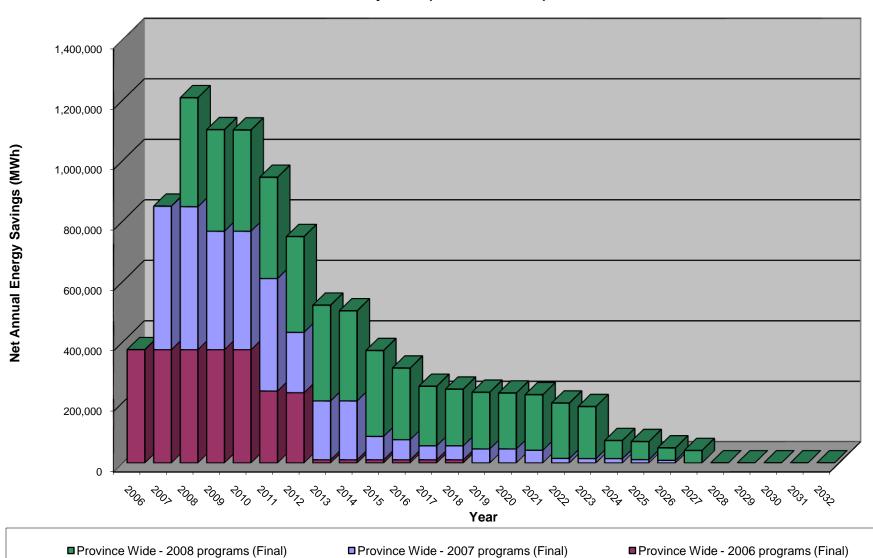
■Hydro One Brampton Networks Inc. - 2007 programs (Final)

■ Hydro One Brampton Networks Inc. - 2006 programs (Final)

Net Summer Peak Demand Savings By Year (Province Wide)



Net Annual Energy Savings By Year (Province Wide)



OPA Conservation & Demand Management Programs

Initiative Results

For:	Н١	/dro	One	Bramptoi	n Networks	Inc
		, ai o		Dianiploi	ITACTMOLIVE	1110.

For:	Hydro One Brampton Networks Inc.	
#	Initiative Name	Program Name
	2006 Every Kilowatt Counts (spring)	Consumer
	2 2006 Cool Savings Rebate Program	Consumer
	3 2006 Secondary Fridge Retirement Pilot	Consumer
	2006 Secondary Fridge Retirement Friot	Consumer
	2006 Demand Response 1	Industrial, Business
	Subtotal	madstrai, business
2000	Oubtotal	
7	2007 Great Refrigerator Roundup	Consumer
	3 2007 Cool Savings Rebate	Consumer
	2007 Aboriginal – Pilot	Consumer
	2007 Every Kilowatt Counts	Consumer
	2007 peaksaver®	Consumer, Business
	2007 Summer Savings	Consumer
	3 2007 Affordable Housing – Pilot	Consumer
14	2007 Social Housing – Pilot	Consumer
15	2007 Energy Efficiency Assistance for Houses – Pilot	Consumer
16	2007 Toronto Comprehensive	Business
17	2007 Electricity Retrofit Incentive Program	Business
18	3 2007 Demand Response 1	Industrial, Business
19	2007 Other Demand Response	Industrial, Business
20	2007 Renewable Energy Standard Offer	Consumer, Business, Industrial, Low-Income
2007	Subtotal	
	2008 Great Refrigerator Roundup	Consumer
	2 2008 Cool Savings Rebate	Consumer
	3 2008 Aboriginal	Consumer
	2008 Summer Sweepstakes	Consumer
	2008 Every Kilowatt Counts Power Savings Event	Consumer
	2008 peaksaver®	Consumer, Business
	2008 Electricity Retrofit Incentive	Business
	2008 Toronto Comprehensive	Business
	2008 High Performance New Construction	Business
	2008 Power Savings Blitz	Business
	2008 Chiller Plant Re-Commissioning	Business
	2 2008 Demand Response 1	Industrial Business
	2008 Demand Response 3	Industrial Business
	2008 Other Demand Response	Industrial, Business
	2008 LDC Custom	Consumer, Business, Industrial, Low-Income
	2008 Renewable Energy Standard Offer	Consumer, Business, Industrial, Low-Income
	7 2008 Other Customer Based Generation	Consumer, Business, Industrial, Low-Income
ZUU8 3	Subtotal	

Overall Total

Province Wide Results

#	Initiative Name	Program Name
		•
1	2006 Every Kilowatt Counts (spring)	Consumer
2	2006 Cool Savings Rebate Program	Consumer
3	2006 Secondary Fridge Retirement Pilot	Consumer
4	2006 Every Kilowatt Counts (fall)	Consumer
6	2006 Demand Response 1	Industrial, Business
2006 \$	Subtotal	
	2007 Great Refrigerator Roundup	Consumer
	2007 Cool Savings Rebate	Consumer
	2007 Aboriginal – Pilot	Consumer
	2007 Every Kilowatt Counts	Consumer
	2007 peaksaver®	Consumer, Business
	2007 Summer Savings	Consumer
	2007 Affordable Housing – Pilot	Consumer
	2007 Social Housing – Pilot	Consumer
	2007 Energy Efficiency Assistance for Houses – Pilot	Consumer
	2007 Toronto Comprehensive	Business
	2007 Electricity Retrofit Incentive Program	Business
	2007 Demand Response 1	Industrial, Business
19	2007 Other Demand Response	Industrial, Business
20	2007 Renewable Energy Standard Offer	Consumer, Business, Industrial, Low-Income
2007 \$	Subtotal	
	2008 Great Refrigerator Roundup	Consumer
	2008 Cool Savings Rebate	Consumer
	2008 Aboriginal	Consumer
	2008 Summer Sweepstakes	Consumer
	2008 Every Kilowatt Counts Power Savings Event	Consumer
	2008 peaksaver®	Consumer, Business
	2008 Electricity Retrofit Incentive	Business
	2008 Toronto Comprehensive	Business
	2008 High Performance New Construction	Business
	2008 Power Savings Blitz	Business
	2008 Chiller Plant Re-Commissioning	Business
	2008 Demand Response 1	Industrial, Business
	2008 Demand Response 3	Industrial, Business
	2008 Other Demand Response	Industrial, Business
	2008 LDC Custom	Consumer, Business, Industrial, Low-Income
	2008 Renewable Energy Standard Offer	Consumer, Business, Industrial, Low-Income
	2008 Other Customer Based Generation	Consumer, Business, Industrial, Low-Income
2008 9	Subtotal	

Overall Total

Program Year	Results Status	Allocation Methodology		
			2006	2007
2006	Final	2006 LDC Residential Energy Throughput	0.02	0.02
2006	Final	2006 LDC Residential Energy Throughput	0.28	0.28
2006	Final	2006 LDC Residential Energy Throughput	0.03	0.0
2006	Final	2006 LDC Residential Energy Throughput	0.09	0.0
2006	Final	2006 LDC Non-Residential Energy Throughput	9.32	9.3
			9.75	9.7
2007	Final	LDC Participation	0.00	0.0
	Final	2007 LDC Residential Energy Throughput	0.00	0.5
2007	Final	LDC Participation	0.00	0.0
2007	Final	2007 LDC Residential Energy Throughput	0.00	0.1
2007	Final	LDC Participation	0.00	0.0
2007	Final	Evaluation Contractor Determined	0.00	2.5
2007	Final	LDC Participation	0.00	0.0
2007	Final	2007 LDC Residential Energy Throughput	0.00	0.0
2007	Final	LDC Participation	0.00	0.0
2007	Final	LDC Participation	0.00	0.0
2007	Final	LDC Participation	0.00	0.0
2007	Final	2007 LDC Non-Residential Energy Throughput	0.00	1.7
2007	Final	2007 LDC Non-Residential Energy Throughput	0.00	8.0
2007	Final	LDC Participation	0.00	0.0
			0.00	5.9
2008	Final	LDC Participation	0.00	0.0
2008	Final	2008 LDC Residential Energy Throughput	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	2008 LDC Residential Energy Throughput	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	2008 LDC Non-Residential Energy Throughput	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	2008 LDC Non-Residential Energy Throughput	0.00	0.0
	Final	2008 LDC Non-Residential Energy Throughput	0.00	0.0
	Final	2008 LDC Non-Residential Energy Throughput	0.00	0.0
	Final	LDC Participation	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
2008	Final	LDC Participation	0.00	0.0
			0.00	0.0
			9.75	15.6

Results Status Final
Final Final
Final
Final
Final
Final
Final
Final
Final
Final
Final

2006	2007
2000	2001
0.89	0.89
10.67	10.67
1.27	1.27
3.34	3.34
266.00	266.00
282	282
0.00	1.54
0.00	19.82
0.00	0.96
0.00	5.07
0.00	13.32
0.00	45.00
0.00	0.31
0.00	1.40
0.00	0.50
0.00	130.90
0.00	1.80
0.00	51.40
0.00	26.40
0.00	1.95
0	300
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
U	0

2008	2009	2010	2011	2012	2013	2014	2015	2016
0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00
0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.00	0.00
9.32	0.00	0.00 0.43	0.00 0.41	0.00 0.37	0.00	0.00	0.00	0.00
9.75	0.43	0.43	0.41	0.37	0.28	0.28	0.28	0.28
0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.00
0.55	0.55	0.55	0.55	0.52	0.52	0.52	0.52	0.52
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00 1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.88	0.74	0.74	0.74	0.71	0.71	0.71	0.61	0.59
0.00					0.11		0.01	5166
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.04
0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.18	0.17	0.17	0.17	0.16	0.16	0.12	0.11	0.08
0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.76
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.89	2.89	2.89	2.89	2.89	0.00	0.00	0.00	0.00
0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.54	5.27	5.27	5.27	5.25	2.37	2.33	2.32	2.27
25.17	6.45	6.45	6.42	6.34	3.36	3.33	3.21	3.14

2008	2009	2010	2011	2012	2013	2014	2015	2016
			-			,		
0.89	0.89	0.89	0.00	0.00	0.00	0.00	0.00	0.00
10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67
1.27	1.27	1.27	1.27	0.00	0.00	0.00	0.00	0.00
3.34	3.34	3.34	3.34	3.34	0.00	0.00	0.00	0.00
266.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
282	16	16	15	14	11	11	11	11
4.54	4.54	4.54	4.54	4.00	4.00	4.00	4.04	0.00
1.54	1.54	1.54	1.54	1.36	1.36	1.36	1.04	0.00
19.82	19.82	19.82	19.82	18.69	18.69	18.69	18.69	18.69
0.96	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
4.59 13.32	4.59	4.59	4.59 13.32	4.59 13.32	4.59 13.32	4.59 13.32	1.12	1.12 13.32
45.00	13.32	13.32	0.00	0.00	0.00	0.00	13.32 0.00	0.00
0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
130.90	130.90	130.90	130.90	0.00	0.00	0.00	0.00	0.00
1.80	1.80	1.80	1.80	0.00	0.00	0.00	0.00	0.00
51.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
300	177	177	176	42	42	42	38	37
300							00	<u> </u>
3.67	3.67	3.67	3.67	3.56	3.56	3.56	3.56	2.75
14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.54	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.28
6.48	6.19	6.19	6.19	5.62	5.62	4.33	3.89	2.85
34.05	34.05	34.05	34.05	34.05	34.05	34.05	34.05	34.05
10.01	10.01	10.01	10.01	10.01	10.01	10.01	10.01	9.86
10.30	10.30	10.27	10.27	10.27	10.27	10.27	10.27	8.32
0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
0.44	0.44	0.36	0.36	0.36	0.36	0.36	0.36	0.36
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85.00	85.00	85.00	85.00	85.00	0.00	0.00	0.00	0.00
2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
361	179	179	179	179	94	92	92	88
943	373	373	371	235	146	145	141	136

		Net						
Sumr	ner Peak D		vings (MW)					
2017	2018	2019	2020	2021	2022	2023	2024	2025
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.52	0.52	0.52	0.52	0.52	0.09	0.09	0.09	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.52	0.52	0.52	0.52	0.52	0.09	0.09	0.09	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.41	0.41	0.41	0.41	0.41	0.41	0.33	0.33	0.33
0.02	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
0.06	0.02	0.06	0.03	0.03	0.03	0.02	0.00	0.02
0.92	0.92	0.92	0.92	0.00	0.00	0.00	0.00	0.00
0.76	0.76	0.76	0.76	0.76	0.76	0.73	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02
2.21	2.20	2.20	2.17	1.25	1.23	1.13	0.37	0.37
		•					•	
3.01	3.00	2.72	2.69	1.77	1.32	1.22	0.46	0.37

		Net						
Sum	mer Peak		avings (M)	W)				
2017	2018	2019	2020	2021	2022	2023	2024	2025
	1			1	T	T	ı	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.67	10.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	11	0	0	0	0	0	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.69	18.69	18.69	18.69	18.69	3.15	3.15	3.15	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.05	0.05	0.05	0.05	0.05	0.05	0.02	0.02	0.00
13.32	13.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.31	0.31	0.31	0.31	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
35	35	22	22	21	6	6	6	2
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.82	14.82	14.82	14.82	14.82	14.82	12.02	12.02	12.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.28	5.22	5.22	5.22	5.16	5.13	4.88	4.88	4.88
2.30	2.03	2.03	0.99	0.99	0.99	0.99	0.00	0.00
34.05	34.05	34.05	34.05	0.00	0.00	0.00	0.00	0.00
9.86	9.86	9.86	9.86	9.86	9.86	9.57	0.00	0.00
4.88	4.87	4.87	4.79	4.79	4.79	4.69	0.45	0.45
0.34	0.34	0.34	0.34	0.34	0.00	0.00	0.00	0.00
0.36	0.36	0.36	0.36	0.36	0.36	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00 1.78	0.00 1.78	0.00 1.78	0.00 1.78	0.00	0.00 1.78	0.00
1.78	1.78					1.78		1.78
7.30 81	7.30 81	7.30 81	7.30 80	7.30 45	7.30 45	7.30 41	7.30 26	7.30 26
01	01	01	00]	40	40	41	20	20
126	126	102	101	67	51	47	32	29

2026	2027	2028	2029	2030	2031	2032	2006	2007
0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,649	3,649
0.00	0.00	0.00	0.00	0.00	0.00	0.00	278	278
0.00	0.00	0.00	0.00	0.00	0.00	0.00	149	149
0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,921	5,921
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0 000
0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,998	9,998
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	238
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	839
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	3,668
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	4,506
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	331
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	9,581
0.00	0.00	0.00	0.00	0.00	0.00	0.00	<u> </u>	3,301
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.02	0.02	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.02	0.02	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.04	0.04	0.00	0.00	0.00	0.00	0.00	0	0
0.04	0.04	0.00	0.00	0.00	0.00	0.00	9,998	19,578

2026	2027	2028	2029	2030	2031	2032	2006	2007
0.00	0.00	0.00	0.00	0.00	0.00	0.00	136,671.67	136,671.67
0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,417.00	10,417.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,595.21	5,595.21
0.00	0.00	0.00	0.00	0.00	0.00	0.00	221,722.84	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0	0	0	0	0	0	374,407	374,407
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	13,539
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	,
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	,
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	81,000
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	4,254
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	,
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	,
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
1.95 2	0.00	0.00	0.00	0.00	0.00	0.00	0	,
	U	U	υĮ	υ <u>į</u>	U	0	U	474,310
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
4.88	4.88	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.45	0.45	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
1.78	1.78	0.00	0.00	0.00	0.00	0.00	0	
7.30	7.30	0.00	0.00	0.00	0.00	0.00	0	
14	14	0	0	0	0	0	0	0
16	14	0	0	0	0	0	374,407	848,725

2008	2009	2010	2011	2012	2013	2014	2015	2016
3,649	3,649	3,649	0	0	0	0	0	0
278	278	278	278	278	278	278	278	278
149	149	149	149	0	0	0	0	0
5,921	5,921	5,921	5,921	5,921	0	0	0	0
0	0	0	0	0	0	0	0	0
9,998	9,998	9,998	6,348	6,199	278	278	278	278
000	000	000	000	007	007	007	400	0
238 839	238 839	238 839	238 839	237 810	237 810	237 810	186 810	810
0	039	039	039	010	010	010	010	010
3,623	3,623	3,623	3,623	3,470	3,470	3,470	282	282
0	0	0	0	0, 11 0	0,	0,0	0	0
4,506	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
331	331	331	331	331	331	331	331	331
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
9,536	5,031	5,031	5,031	4,847	4,847	4,847	1,608	1,422
531	531	531	531	531	531	531	531	425
647	647	647	647	647	647	647	647	647
129	0 46	25						
3,323	3,309	3,309	3,309	2,808	2,808	2,287	1,898	1,198
18	18	18	18	18	18	18	18	1,130
3,919	3,919	3,919	3,919	3,919	3,919	3,919	3,919	3,599
0	0	0	0	0	0	0	0	0
10	10	10	10	10	10	10	10	10
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
26	26	26	26	26	26	26	26	26
0	0	0	0	0	0	0	0	0
8,603	8,506	8,506	8,506	8,005	8,005	7,484	7,095	5,949
28,136	23,534	23,534	19,884	19,051	13,130	12,609	8,981	7,649
20,130	25,554	25,554	19,004	13,031	13,130	12,003	0,301	1,043

2008	2009	2010	2011	2012	2013	2014	2015	2016
136,671.67	136,671.67	136,671.67	0.00	0.00	0.00	0.00	0.00	0.00
10,417.00	10,417.00	10,417.00	10,417.00	10,417.00	10,417.00	10,417.00	10,417.00	10,417.00
5,595.21	5,595.21	5,595.21	5,595.21	0.00	0.00	0.00	0.00	0.00
221,722.84	221,722.84		221,722.84	221,722.84	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
374,407	374,407	374,407	237,735	232,140	10,417	10,417	10,417	10,417
								_
13,539	13,539		13,539	13,460	13,460	13,460	10,919	0
30,191	30,191	30,191	30,191	29,153	29,153	29,153	29,153	29,153
19,797	19,797	19,797	0	0	0	0	0	0
130,440	130,440	130,440	130,440	124,914	124,914	124,914	10,145	10,145
0	0	0	0	0	0	0	0	0
81,000 4,254	4,254	4,254	4,254	4,254	4,254	0 4,254	4,254	4,254
11,900	11,900		11,900	11,900	11,900	11,900	11,900	11,900
2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300
165,690	165,690	165,690	165,690	0	0	0	0	0
5,000	5,000	5,000	5,000	5,000	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
8,607	8,607	8,607	8,607	8,607	8,607	8,607	8,607	8,607
472,717	391,717	391,717	371,920	199,587	194,587	194,587	77,277	66,358
0.1.00.1	0.1.00.1	0.4.00.4	01.001	00.044	22.244	22.244	22.24	00.040
34,024	34,024		34,024	33,911	33,911	33,911	33,911	26,840
23,393	23,393	23,393	23,393	23,393	23,393	23,393	23,393	23,393
0 37,551	13,550	13,550	13,550	0 13,550	0 13,550	0 13,550	0 13,550	7,423
118,754	118,237	118,237	118,237	100,356	100,356	81,735	67,824	42,822
681	681	681	681	681	681	681	681	681
54,593	54,593	54,593	54,593	54,593	54,593	54,593	54,593	50,140
58,059	58,032	57,546	57,546	57,546	57,364	57,364	57,364	52,847
287	287	287	287	287	287	287	287	287
3,205	3,205	2,627	2,627	2,627	2,627	2,627	2,606	2,606
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
2,118	2,118		2,118	2,118	2,118	2,118	2,118	2,118
27,498	27,498		27,498	27,498	27,498	27,498	27,498	27,498
360,162	335,617	334,553	334,553	316,559	316,378	297,758	283,825	236,654
1,207,285	1,101,741	1,100,677	944,208	748,286	521,382	502,761	371,519	313,429

		Net						
An	nual Energ	y Savings (MWh)					
2017	2018	2019	2020	2021	2022	2023	2024	2025
	ı			ı		ı		
0	0	0	0	0	0	0	0	0
278	278	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
278	278	0	0	0	0	0	0	0
- 1		-			-		-	
0	0	0	0	0	0	0	0	0
810	810	810	810	810	80	80	80	0
0	0	0	0	0	0	0	0	0
53	53	53	53	53	32	14	14	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
863	863	863	863	863	112	95	95	0
0	0	0	0	0	0	0	0	0
647	647	647	647	647	647	516	516	516
0	0	0	0	0	0	0	0	0
25	19	19	19	17	16	15	15	15
1,183	970	970	920	920	920	886	0	0
18	18	18	18	0	0	0	0	0
3,599	3,599	3,599	3,599	3,599	3,599	3,491	0	0
0	0	0	0	0	0	0	0	0
10	10	10	10	10	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
26	26	26	26	26	26	26	26	26
0	0	0	0	0	0	0	0	0
5,508	5,289	5,289	5,239	5,219	5,208	4,934	557	557
6,649	6,430	6,152	6,102	6,082	5,320	5,029	652	557
0,043	3,730	J, 132	J, 102	3,002	0,020	3,023	002	331

	ı	Net						
An	nual Energy		MWh)					
2017	2018	2019	2020	2021	2022	2023	2024	2025
		2010				2020		00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,417.00	10,417.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,417	10,417	0	0	0	0	0	0	0
		·	·	•	•	·	·	•
0	0	0	0	0	0	0	0	0
29,153	29,153	29,153	29,153	29,153	2,888	2,888	2,888	0
0	0	0	0	0	0	0	0	0
1,912	1,912	1,912	1,912	1,912	1,142	518	518	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
4,254	4,254	4,254	4,254	0	0	0	0	0
0	0	0	0	0	0	0	0	0
2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
8,607	8,607	8,607	8,607	8,607	8,607	8,607	8,607	8,607
46,225	46,225	46,225	46,225	41,971	14,937	14,313	14,313	10,907
			-1		_ 1			
0	0	0	0	0	0	0	0	0
23,393	23,393	23,393	23,393	23,393	23,393	18,655	18,655	18,655
0	0	0	0	0	0	0	0	0
7,423	5,625	5,625	5,625	4,976	4,745	4,512	4,512	4,512
42,276	34,667	34,667	32,884	32,884	32,884	31,656	0	0
681	681	681	681	0	0	0	0	0
50,140	50,140	50,140	50,140	50,140	50,140	48,635	0	0
40,202	40,178	40,178	39,474	39,474	39,474	38,766	6,885	6,885
287	287	287	287	287		0	0	0
2,606	2,606	2,606	2,606	2,606	2,606	63	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
2,118	2,118	2,118	2,118	2,118	2,118	2,118	2,118	2,118
27,498	27,498	27,498	27,498	27,498	27,498	27,498	27,498	27,498
196,624	187,191	187,191	184,705	183,376	182,857	171,903	59,667	59,667
130,024	101,131	101,131	107,103	100,570	102,037	17 1,303	33,007	33,007
253,265	243,833	233,416	230,930	225,346	197,794	186,216	73,980	70,574

2026	2027	2028	2029	2030	2031	2032	2006	2007
0	0	0	0	0	0	0	0.03	0.03
0	0	0	0	0	0	0	0.32	0.32
0	0	0	0	0	0	0	0.04	0.04
0	0	0	0	0	0	0	0.10	0.10
0	0	0	0	0 0	0	0	9.32	9.32 10
U U	<u> </u>	<u> </u>	<u> </u>	o _l	<u> </u>	U	10	10
0	0	0	0	0	0	0	0.00	0.07
0	0	0	0	0	0	0	0.00	1.10
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.20
0	0	0	0	0	0	0	0.00	0.00 20.86
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.04
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	1.74
0	0	0	0	0	0	0	0.00	0.89
0	0	0	0	0	0	0	0.00	0.00 25
	O ₁	o _l	o _l	o _l	o _l	<u> </u>		25
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
15	15	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
26	26	0	0	0	0	0	0.00	0.00
0	0	0	0	0	0	0	0.00	0.00
41	41	0	0	0	0	0	0	0
41	41	0	0	0	0	0	10	35

2026	2027	2028	2029	2030	2031	2032	2006	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.990	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.856	1
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.409	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.707	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	266.000	26
0	0	0	0	0	0	0	284	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	3
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	1
0	0	0	0	0	0	0	0.00	ı
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
8,607	0	0	0	0	0	0	0.00	
8,607	0	0	0	0	0	0	0	
			-	-				
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
4,512	4,512	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
6,885	6,885	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
0	0	0	0	0	0	0	0.00	
2,118	2,118	0	0	0	0	0	0.00	
27,498	27,498	0	0	0	0	0	0.00	
41,012	41,012	0	0	0	0	0	0.00	
•								
49,619	41,012	0	0	0	0	0	284	

2008	2009	2010	2011	2012	2013	2014	2015	2016
2000	2005	2010	2011	2012	2010	2014	2010	2010
0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00
0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00
9.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0	0	0	0	0	0	0	0
0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.00
1.10	1.10	1.10	1.10	0.90	0.90	0.90	0.90	0.90
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.06	0.06
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	1	1	1	1	1	1	1	1
25	•	•		•	•	•	•	•
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.08
0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.43	0.41	0.41	0.41	0.37	0.37	0.29	0.26	0.20
1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.30
0.00	0.00	0.00	0.00	0.00	0.00 0.02	0.00	0.00	0.00
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.89	2.89	2.89	2.89	2.89	0.00	0.00	0.00	0.00
0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	7	7	7	6	4	4	3	3
451		61					-	
45	8	8	8	8	5	5	5	5

2008	2009	2010	2011	2012	2013	2014	2015	2016
0.990	0.990	0.990	0.000	0.000	0.000	0.000	0.000	0.000
11.856	11.856	11.856	11.856	11.856	11.856	11.856	11.856	11.856
1.409	1.409	1.409	1.409	0.000	0.000	0.000	0.000	0.000
3.707	3.707	3.707	3.707	3.707	0.000	0.000	0.000	0.000
266.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
284	18	18	17	16	12	12	12	12
0.70	0 =0	0 =0	0 =0	0.00	0.00	0.00	2.2=	2.22
3.79	3.79	3.79	3.79	3.36	3.36	3.36	2.65	0.00
39.73	39.73	39.73	39.73	32.53	32.53	32.53	32.53	32.53
0.96	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
6.48	6.48	6.48	6.48	6.48	6.48	6.48	2.00	2.00
14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
375.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
1.40 0.50								
145.44	145.44	145.44	145.44	0.00	0.00	0.00	0.00	0.00
2.00	2.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00
51.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
670	217	217	216	61	61	61	56	54
0.0	2.7	211	210	O I I	O I	O I I	00	01
6.87	6.87	6.87	6.87	6.55	6.55	6.55	6.55	5.00
25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73	25.73
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.23	7.01	7.01	7.01	7.01	7.01	7.01	7.01	6.77
15.51	14.69	14.69	14.69	13.23	13.23	10.40	9.23	7.24
37.84	37.84	37.84	37.84	37.84	37.84	37.84	37.84	37.84
17.37	17.37	17.37	17.37	17.37	17.37	17.37	17.37	17.11
17.57	17.57	17.52	17.52	17.52	17.52	17.52	17.52	14.74
0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
0.48	0.48	0.39	0.39	0.39	0.39	0.39	0.39	0.39
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85.00	85.00	85.00	85.00	85.00	0.00	0.00	0.00	0.00
2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
405	222	222	222	220	135	132	131	124
1,359	457	457	455	297	208	206	199	190
.,000			.00					

		Gross						
Sumi	mer Peak	Demand S	avings (M	W)				
2017	2018	2019	2020	2021	2022	2023	2024	2025
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
o o	U _L	U	U	ΨĮ	U	U	U ₁	U
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.90	0.90	0.90	0.90	0.90	0.15	0.15	0.15	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	1	1	1	1	0	0	0	0
	·			·		·		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.71	0.71	0.71	0.71	0.71	0.71	0.58	0.58	0.58
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.17 1.03	0.15 1.03	0.15 1.03	0.08	0.08	0.08	0.08	0.00	0.00
1.30	1.30	1.30	1.30	1.30	1.30	1.27	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00 3	0.00	0.00 2	0.00 2	0.00	0.00	0.00
J	3	3	ગ		Z	Z	1	
4	4	4	4	3	2	2	1	1
•	•	-	-				<u> </u>	•

		Gross						
Sum	mer Peak [avings (MV	V)				
2017	2018	2019	2020	2021	2022	2023	2024	2025
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.856	11.856	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	12	0	0	0	0	0	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.53	32.53	32.53	32.53	32.53	5.51	5.51	5.51	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.07	0.00	0.07	0.07	0.00	0.07	0.02	0.02	0.00
14.80	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.31	0.31	0.31	0.31	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
50	50	35	35	35	8	8	8	2
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.73	25.73	25.73	25.73	25.73	25.73	20.88	20.88	20.88
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.77	6.70	6.70	6.70	6.61	6.58	6.25	6.25	6.25
5.99	5.31	5.31	2.95	2.95	2.95	2.95	0.00	0.00
37.84	37.84	37.84	37.84	0.00	0.00	0.00	0.00	0.00
17.11	17.11	17.11	17.11	17.11	17.11	16.60	0.00	0.00
7.98	7.95	7.95	7.83	7.83	7.83	7.67	0.74	0.74
0.49	0.49	0.49	0.49	0.49	0.00	0.00	0.00	0.00
0.39	0.39	0.39	0.39	0.39	0.39	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00 1.78	0.00 1.78	0.00	0.00	0.00	0.00	0.00	0.00 1.78	0.00
7.30	7.30	1.78 7.30	1.78 7.30	1.78 7.30	1.78 7.30	1.78 7.30	7.30	1.78 7.30
111	111	111	108	7.30 70	7.30 70	63	7.30 37	7.30 37
111	111	111	100	70	70	03	31	31
173	173	146	143	105	78	71	45	39

2026	2027	2028	2029	2030	2031	2032	2006	2007
0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,055	4,055
0.00	0.00	0.00	0.00	0.00	0.00	0.00	309	309
0.00	0.00	0.00	0.00	0.00	0.00	0.00	166	166
0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,578	6,578
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
U	U	U	0	U	0	U	11,108	11,108
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	591
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	1,596
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	5,199
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	37,547
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	331
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	4 5,264
U	U _I	U	U	U	0	U	U	45,204
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.02	0.02	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0.02	0.02	0.00	0.00	0.00	0.00	0.00	0	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	11,108	56,372

2026	2027	2028	2029	2030	2031	2032	2006	2007
0.000	0.000	0.000	0.000	0.000	0.000	0.000	151,857	151,857
0.000	0.000	0.000	0.000	0.000	0.000	0.000	11,574	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	6,217	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	246,359	246,359
0.000	0.000	0.000	0.000	0.000	0.000	0.000	C	-
0	0	0	0	0	0	0	416,007	416,007
0.00	0.00	2.22	2.22	2.22	0.00	2.22		J 00 = 10
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	· ·
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	,
0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0.00	0.00	0.00	0.00		,
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	· · · · · · · · · · · · · · · · · · ·
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	5,556
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	С	
1.95	0.00	0.00	0.00	0.00	0.00	0.00	C	
2	0	0	0	0	0	0	C	1,189,858
0.00	0.00	0.00	0.00	0.00	0.00	0.00	С	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0.00	0.00	0.00	0.00		
6.25	6.25	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	0
0.74	0.74	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	
0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1.78	1.78	0.00	0.00	0.00	0.00	0.00		
7.30	7.30	0.00	0.00	0.00	0.00	0.00	C	
16	16	0.00	0.00	0.00	0.00	0.00	C	
40	46						440.00	4 005 005
18	16	0	0	0	0	0	416,007	1,605,865

2008	2009	2010	2011	2012	2013	2014	2015	2016
4,055	4,055	4,055	0	0	0	0	0	0
309	309	309	309	309	309	309	309	309
166	166	166	166	0	0	0	0	0
6,578	6,578	6,578	6,578	6,578	0	0	0	0
0	0	0	0	0	0	0	0	0
11,108	11,108	11,108	7,054	6,887	309	309	309	309
591	591	591	591	588	588	588	476	0
1,596	1,596	1,596	1,596	1,413	1,413	1,413	1,413	1,413
0	0	0	0	0	0	0	0	0
5,118	5,118	5,118	5,118	4,600	4,600	4,600	498	498
0	0	0	0	0	0	0	0	0
37,547	0	0	0	0	0 0	0	0	0
331	331	331	331	331	331	331	331	331
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
45,183	7,636	7,636	7,636	6,932	6,932	6,932	2,717	2,241
-10,100	1,000	1,000	1,000	0,002	0,002	0,002	2,111	-,- -
977	977	977	977	976	976	976	976	773
1,126	1,126	1,126	1,126	1,126	1,126	1,126	1,126	1,126
0	0	0	0	0	0	0	0	0
165 8,242	8,201	8,201	8,201	60 6,903	60 6,903	5,738	4,699	33 3,360
21	21	21	21	21	21	21	21	21
6,768	6,768	6,768	6,768	6,768	6,768	6,768	6,768	6,215
0	0	0	0	0	0	0	0	0
14	14	14	14	14	14	14	14	14
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
26	26	26	26	26	26	26	26	26
47.220	0	0	0	0	0	0	0	0
17,338	17,191	17,191	17,191	15,893	15,893	14,728	13,689	11,567
73,629	35,935	35,935	31,880	29,713	23,134	21,969	16,715	14,118