

December 22, 2008

BY COURIER (7 COPIES) AND EMAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
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Dear Ms. Walli:

**Re: Pollution Probe – Motion to Review and Vary Issues Decision
EB-2008-0272 – Hydro One – 2009-10 Transmission Rates**

We are writing on behalf of Pollution Probe to request that the Board review and vary its recent decision that the upcoming hearing of Hydro One's transmission rates is not to include any examination of Hydro One's role in offering conservation and demand management programmes ("CDM") to Hydro One's major industrial customers which are directly connected to Hydro One's transmission system. Pollution Probe's Motion Record in support of that request to review is attached.

Pollution Probe respectfully submits that by excluding from the upcoming Hydro One hearing any consideration at all of Hydro One's CDM role in relation to scores of Ontario's largest electricity customers, equivalent to some 7-9% of Ontario's electricity demand at their peak, the Board is not only freezing and neglecting a potentially major area of conservation in Ontario, but is also proceeding in a direction contrary to the spirit of the province's conservation strategies, as publicly emphasized by the Honourable George Smitherman, Minister of Energy and Infrastructure.

Yours truly,



per: Murray Klippenstein

MK/mk/ba

Encl.

cc: Applicant and Intervenors by email per Procedural Order No. 2, Appendix B
The Honourable George Smitherman, Deputy Premier and Minister of Energy and
Infrastructure, by email and courier

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF a review of an Application filed by
Hydro One Networks Inc. under section 78 of the *Ontario Energy
Board Act, 1998*, seeking changes to the uniform provincial
transmission rates (the "Hydro One 2009-10 Transmission Rates
Application").

MOTION RECORD

**(Pollution Probe Motion to Review and Vary
Issues Decision to Include Issue Regarding CDM)**

December 22, 2008

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Barristers & Solicitors
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Counsel for Pollution Probe

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ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF a review of an Application filed by
Hydro One Networks Inc. under section 78 of the *Ontario Energy
Board Act, 1998*, seeking changes to the uniform provincial
transmission rates (the “Hydro One 2009-10 Transmission Rates
Application”).

NOTICE OF MOTION
(Pollution Probe Motion to Review and Vary
Issues Decision to Include Issue Regarding CDM)

THE INTERVENOR, POLLUTION PROBE, will make a motion to the Board on a date and
time to be set by the Board, at the Board’s Hearing Room, 25th Floor, 2300 Yonge Street,
Toronto, ON, M4P 1E4.

PROPOSED METHOD OF HEARING: The motion is to be heard:

- in writing because it is ;
- in writing as an opposed motion;
- orally.

THE MOTION IS FOR:

1. An Order that, after review, the Board varies the *Issues Decision and Procedural Order*
No. 2 to:

- a. include the proposed issue “Are the proposed Conservation and Demand Management programs, targets, and spending levels appropriate?” as Issue 3.7 on the Final Issues List; and
 - b. provide for consequential procedural steps (e.g. interrogatories, etc.) as a result of the inclusion of Issue 3.7; and
2. Such further and other relief as counsel may request and that seems just to the Board.

THE GROUNDS FOR THE MOTION ARE:

A. Summary

1. Pollution Probe is respectfully seeking that the Board review and vary the *Issues Decision and Procedural Order No. 2* (the “*Issues Decision*”) to include the proposed issue regarding Conservation and Demand Management (“CDM”). Pollution Probe respectfully seeks this review and variance in light of questions regarding the correctness of the *Issues Decision* on the proposed CDM issue. If successful, Pollution Probe also seeks consequential procedural steps as a result of the inclusion of the proposed CDM issue (e.g. interrogatories, etc.).

B. Detailed Submissions

2. The OEB’s December 1, 2008 *Issues Decision*, which defines the list of issues for this hearing, turned down Pollution Probe’s request to include as an issue in this hearing the question of whether Hydro One’s conservation and demand management programmes, targets and spending levels are appropriate. The effect of the Board’s decision to exclude this issue from the list of issues for the hearing means that the existing and potential role of Hydro One in increasing conservation and demand management in Ontario will be ignored in this important review of Hydro One’s operations.

3. As the province's pre-eminent electricity transmission company, Hydro One serves over 90 transmission-connected industrial electricity customers that represent approximately 7-9% of Ontario's electricity demand at their average monthly peak. By excluding from this hearing at the outset *even the consideration of* the role of conservation and demand management programmes by Hydro One, the Ontario Energy Board is abandoning its oversight of utility-led conservation assistance for approximately 7-9% of Ontario's peak demand.
4. In Pollution Probe's submission, this is completely contrary to the provincial government's commitment to foster a "conservation culture" in Ontario, and flies in the face of strong comments from the Honourable George Smitherman, Ontario's Minister of Energy and Infrastructure and Deputy Premier, who stated that "conservation is the cheapest energy you can buy, and I'm bound and determined to buy LOTS of it. ... we are counting on conservation to absorb 75 per cent of all the demand growth going forward. ... the times dictate greater resolve than ever before" By refusing to look at Hydro One's role in supporting the conservation efforts of its large directly connected industrial customers, which comprise some 7-9% of Ontario's electricity peak demand, the Energy Board is seriously undermining Minister Smitherman's efforts.
5. Pollution Probe submits that the Board's decision to exclude this issue from the Issues List is an appropriate decision for the Board to review and vary under Rule 42 and 44 of the Board's Rules, because there is a legitimate and important question as to the correctness of the decision.
6. The question as to correctness of the decision arises in part because of factual errors in the Board's decision, errors arising from the selective and arguably misleading nature of Hydro One's evidence on this point. Specifically, the Board's decision states that "Hydro One submitted that ... the development of such [CDM] programs is under the purview of direct customers and the OPA. The Board notes that CDM programs have been, and continue to be, distribution based."

7. In fact, Hydro One itself operates at least two major conservation programs for its directly connected major industrial customers (e.g. the Double Return Program and the Electricity Retrofit Incentive Program, which are described on Hydro One's website. Copies of the relevant web site pages are attached). This contradicts the Board's factual statement quoted above that such programs "have been, and continue to be, distribution based". It also appears to contradict Hydro One's factual submissions, as quoted by the Board, above, that "the development of such programs is under the purview of direct customers and the OPA". Hydro One's evidence and submissions before the Board on this point fail to mention Hydro One's own major CDM programmes for its directly connected industrial customers, and leave the impression, without explicitly stating so, that Hydro One has no such CDM programmes. Pollution Probe submits that Hydro One's evidence was misleading, perhaps inadvertently, and resulted in the above factual errors in the Board's decision.
8. Pollution Probe submits that Hydro One's present involvement with apparently major conservation and demand management programmes for its directly connected major industrial customers (e.g. the Double Return Program and the Electricity Retrofit Incentive Program) strongly suggests that Pollution Probe's proposed issue item with respect to CDM should be on the Issues List for the hearing, so that the issue can at least be reviewed by the Board. Ironically, these programmes, by their very existence, would appear to contradict the position put forward by Hydro One in its original submissions -- that there is no need for ratepayers to fund CDM initiatives beyond those of the OPA and major customers' own internal programmes. One could ask why Hydro One is offering these programmes if there is no need for them? This would in itself suggest that the Board should add this issue to the Issues List and examine Hydro One's apparently contradictory position and actions.
9. More importantly, Pollution Probe submits that the existence of these programmes supports Pollution Probe's position that CDM programmes such as these, in relation to Hydro One's directly connected large industrial customers, have a valid role, and in fact

should probably be expanded. At a minimum, the issue should be added to the Issues List so it could be appropriately reviewed.

10. Pollution Probe therefore submits that it is appropriate and necessary for the Board to review and vary its decision on this one point.

D. Statutory Instruments Relied On

11. Pollution Probe particularly relies on section 1 of the *Ontario Energy Board Act, 1998*, and Rules 42 and 44 of the *Ontario Energy Board Rules of Practices and Procedure*.

THE FOLLOWING DOCUMENTARY EVIDENCE will be used at the hearing of the motion:

1. Marked excerpts from the *Issues Decision and Procedural Order No. 2* dated December 1, 2008 [Motion Record, Tab 2];
2. Pollution Probe's Submissions on Proposed Issues List dated November 21, 2008 [Motion Record, Tab 3];
3. Marked copy of Hydro One's Comments Respecting Proposed Issues List dated November 25, 2008 [Motion Record, Tab 4];
4. Marked excerpt from the Transmission Customers Load Forecast (Exhibit H1, Tab 2, Schedule 1, Pages 3-4) [Motion Record, Tab 5];
5. Affidavit of Kent Elson sworn on December 22, 2008 and the exhibits attached thereto (copies of full speech by Minister and documents from Hydro One's website) [Motion Record, Tab 6];
6. Marked excerpts from the *Report of the Board on the Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and*

Beyond dated March 2, 2007 [Motion Record, Tab 7];

7. Excerpts regarding CDM from the Transmission Business Load Forecast and Methodology (Exhibit A, Tab 14, Schedule 3, Pages 8-9 and Attachment C) [Motion Record, Tab 8];
8. *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B, s. 1 [Motion Record, Tab 9];
9. Rules 42 and 44 of the *Ontario Energy Board Rules of Practice and Procedure* [Motion Record, Tab 10]; and
10. Such further materials as Pollution Probe may submit.

Date: December 22, 2008

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Counsel for Pollution Probe

TO: HYDRO ONE NETWORKS INC.
per Procedural Order No. 2, Appendix B

AND TO: INTERVENORS
per Procedural Order No. 2, Appendix B

Ontario Energy Board

Commission de l'énergie de l'Ontario



EB-2008-0272

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S. O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF a review of an application filed by Hydro One Networks Inc. under section 78 of the *Ontario Energy Board Act, 1998*, seeking changes to the uniform provincial transmission rates.

ISSUES DECISION AND PROCEDURAL ORDER NO. 2

On September 30, 2008, Hydro One Networks Inc. ("Hydro One") filed an application with the Ontario Energy Board (the "Board") under section 78 of *Ontario Energy Board Act, 1998*. The application seeks approval for changes to the uniform provincial transmission rates that Hydro One charges for electricity transmission to be effective and implemented on July 1, 2009. The Board has assigned the application file number EB-2008-0272.

The Board issued a Notice of Application on October 17, 2008. Hydro One served and published the Notice as directed by the Board.

Issues Decision

Procedural Order No. 1 was issued on November 14, 2008 and contained a proposed issues list. Submissions were received from the following parties on the proposed issues list:

- Vulnerable Energy Consumers Coalition ("VECC")
- Association of Major Power Consumers in Ontario ("AMPCO")

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VECC sought confirmation that the reference to compensation in Issue 3.3 includes both staffing levels and per employee compensation. VECC also noted that the revenue requirement includes pension and post employment benefit costs and sought clarification as to whether these items are included in the scope of Issue 3.3.

The Board confirms that it is appropriate under Issue 3.3 to examine staffing levels, per employee compensation, pension and post employment benefits.

VECC proposed the following issues be added:

- Is Hydro One Networks' proposed transmission overhead capitalization rate appropriate?
- Are the amounts proposed to be included in the 2009 and 2010 revenue requirements for income and other taxes appropriate?

VECC submitted that these issues were required to ensure that certain calculations have been carried out appropriately and in accordance with previously approved Board methodologies.

The Board has determined that it is appropriate to add these issues to the list.

Pollution Probe proposed an issue be added related to conservation and demand management: "Are the proposed Conservation and Demand Management programs, targets and spending levels appropriate?"

The Board has determined that it is not appropriate to include this proposed issue. Hydro One submitted that its application contains no request for funding of CDM programs and that the development of such programs is under the purview of direct customers and the OPA. The Board notes that CDM programs have been, and continue to be, distribution based. Pollution Probe referred to recent statements by the Minister of Energy about the role of local distribution companies and submitted that Hydro One acts in the role of an LDC for its customers who are directly connected to the transmission system. Given the size and sophistication of these directly connected customers, the Board does not agree that the analogy with LDCs is appropriate.

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November 21, 2008

BY COURIER (7 COPIES) AND EMAIL

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Dear Ms. Walli:

**Re: Pollution Probe – Submissions on Proposed Issues List
EB-2008-0272 – Hydro One – 2009-10 Transmission Rates**

Pursuant to Procedural Order No. 1, we write to provide Pollution Probe’s submissions on the proposed issues list for this matter. In summary, Pollution Probe submits that one issue should be added regarding conservation and demand management, and Pollution Probe takes no position with respect to the other proposed issues.

Pollution Probe submits that the following issue should be specifically added to the proposed issues list:

- 3.4 Are the proposed Conservation and Demand Management programs, targets, and spending levels appropriate?

For clarity, Pollution Probe’s focus for this issue in this proceeding is on the approximately 100 large industrial companies that are direct customers of Hydro One instead of an LDC (e.g. Vale Inco and U.S. Steel Canada). The focus is not on LDCs who are customers of Hydro One and have their own CDM programs. Pollution Probe submits that the Board’s examination of CDM with respect to these direct large customers in this proceeding would be analogous to how the Board examines CDM in an LDC proceeding with respect to the LDC’s customers.

Pollution Probe submits energy conservation and efficiency are a top priority for the Government of Ontario for a variety of reasons. Pollution Probe particularly notes the following recent remarks made by the Honourable George Smitherman, Deputy Premier and Minister of Energy and Infrastructure:

Using less energy doesn’t just reduce the carbon. It doesn’t just reduce the bill. It also makes our province more productive so we have an economic advantage as well.
Conservation is the cheapest energy you can buy, and I’m bound and determined to buy LOTS of it.
...

Already we are counting on conservation to absorb 75 per cent of all the demand growth going forward. The good news about conservation isn't limited to lower energy use however. Conservation initiatives are intense drivers of green-sector careers in research and development, energy efficient construction and retrofitting, and the home-grown jobs that will be created for manufacturers, assemblers and installers.

...
But just because we are doing well doesn't mean we can't do better ... for the times dictate greater resolve than ever before.

We must raise the bar on how we measure conservation savings to ensure they are quantifiable and verifiable. And we must more clearly recognize that our Local Distribution Companies enjoy a special, powerful relationship with 4.8 million electricity ratepayers. *A relationship that dictates that LDCs be more clearly in the driver's seat when it comes to leading conservation and energy efficiency initiatives.* [emphasis added]¹

Pollution Probe submits these remarks apply by analogy to this proceeding and the approximately 100 large industrial companies that are direct customers of Hydro One. As a utility, Hydro One should be taking the lead with respect to conservation and energy efficiency initiatives for these large direct customers, particularly since the Government of Ontario ultimately owns Hydro One.

Pollution Probe also notes that the inclusion of this issue would be in accordance with the Board's statutory objectives of protecting the interests of consumers and promoting economic efficiency and cost-effectiveness.² As the Board is aware, well-executed CDM programs have the benefit of reducing a customer's net bill as well as other benefits (such as potentially reducing the need for additional transmission).

In conclusion, Pollution Probe respectfully submits that the proposed issue would simply allow for a proper Board examination of the CDM programs with respect to Hydro One's direct large customers. Accordingly, Pollution Probe submits that the proposed issue regarding CDM be added to the issues list for this proceeding.

Yours truly,



Basil Alexander

BA/ba

cc: Applicant and Intervenors by email per Procedural Order No. 1, Appendix B

¹ Excerpts from Remarks by the Honourable George Smitherman, Deputy Premier and Minister of Energy and Infrastructure to the Canadian Club in Toronto, Ontario on October 31, 2008 (available online at <http://www.energy.gov.on.ca/index.cfm?fuseaction=about.speeches&speech=31102008>)

² See *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B, s. 1(1).

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Vice President and Chief Regulatory Officer
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BY COURIER

November 25, 2008

Ms. Kirsten Walli
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Dear Ms. Walli:

EB-2008-0272 – Hydro One Networks' 2009-2010 Transmission Revenue Requirement and Rate Application – Comments Respecting Proposed Issues List

Hydro One Networks Inc. (“Hydro One”) is pleased to provide the following comments respecting the proposed issues list included as Appendix A to Procedural Order No.1, issued by the Board on November 14, 2008 and comments by intervenors submitted on November 21, 2008.

The issues list covers topics Hydro One believes will be the prime areas for focus during the hearing and excludes issues that:

- were identified as not being of concern during the stakeholder sessions;
- relate to the use of a methodology reviewed and accepted by the Board in a previous proceeding;
- relate to evidence where there is not a material change from the evidence reviewed as part of a previous rate application; and
- relate to evidence based on external consensus forecasts

Hydro One notes that there is general acceptance of the proposed issues list by the intervenors. The Vulnerable Energy Consumers Coalition (“VECC”), however, has felt the need for further specification within the broad issues categories.

Hydro One, like the Consumers Council of Canada and the Canadian Manufactures & Exporters, believe the changes proposed by (“VECC”) in their submission of November 21, 2008 are largely addressed under a broader interpretation of the issues as proposed in Procedural Order No. 1. As such, many of the modifications and additions proposed by VECC are not required.

For example, VECC's proposed Issue 1.2 can be addressed under Issue 3.2, dealing with Shared Services and proposed Issue 1.3 can be dealt with under Issue 2.1 since the economic indicators underlie the load forecast. Similarly, proposed Issue 3.4 respecting overhead capitalization can be addressed under Issue 3.2, Shared Services OM&A.

Hydro One supports VECC's inclusion of an issue to address the proposed rate base levels for 2009 and 2010. Issue 4.3 should read:

4.3 Are the amounts proposed for rate base in 2009 and 2010 appropriate?

Again, a broader interpretation of this issue will cover VECC's proposed Issues 4.4 and 4.5 since 2009 and 2010 rate base levels implicitly includes previous in-service additions.

VECC also proposed the addition of issues which Hydro One does not feel are required.

Proposed Issue 1.4 references the Export Transmission Service Rates Study to be undertaken by the IESO. AMPCO supported the inclusion of a similar issue 7.3. Inclusion of this issue is premature. The IESO has not responded to the Board's direction with respect to this study from the EB-2006-0501 Decision. Hydro One believes this issue is best raised during an IESO proceeding prior to any consideration in a Hydro One proceeding.

Proposed Issue 3.5 deals with the need to review income and other taxes. Since Hydro One follows all applicable tax guidelines and the application reflects current prevailing tax rates, the Company sees no need to include this as an additional issue. Any changes that might arise will continue to be captured in the tax rate change deferral account. This account is captured under Issues 5.1 and 5.2.

Proposed Issue 6.2 deals with the need to review the cost allocation methodology. Hydro One has not made any changes, nor is Hydro One proposing any changes, to the methodology last approved by the Board in their EB-2006-0501 Decision. Accordingly there is no need to have this added as an issue.

VECC also proposed two other issues be added, one respecting the appropriateness of new long-term debt and another issue dealing with whether Hydro One's proposed cost of capital is consistent with Board approved guidelines. The first issue can be dealt with under Issue 2.1 where the economic assumptions can be reviewed by stakeholders. Since Hydro One will follow the Board guidelines respecting the determination of the cost of capital, the Company does not see a need for this to be included as an issue.

The School Energy Coalition ("SEC") in their submission largely supported VECC's proposed issues additions. As such Hydro One's comments above apply equally to the submissions of SEC.

In their submission of November 21, 2008, Pollution Probe ("PP"), felt there is a need to add proposed Issue 3.4 to deal with Conservation and Demand Management ("CDM") specifically directed at large volume direct customers. Hydro One's submission does not request any funding for CDM programs

directed at this market. Hydro One feels direct customers have and will continue to invest in energy efficiency improvements as part of their ongoing business plans to remain competitive. These companies also have access to funding of CDM initiatives directly from the OPA. As such, there is no need for rate payers to fund additional initiatives and the Board should not add this as an issue in the EB-2008-0272 proceeding.

AMPCO in their November 21, 2008 submission also supported a shortened issues list and Hydro One agrees that the points raised by AMPCO can be addressed in the proposed issues list. It is not clear to Hydro One what AMPCO means by the "examination of Hydro One's activities on behalf of other organizations" in their discussion under Issue 2.2. AMPCO's specific example of "pre-development work in support of the OPA" is already addressed by Issue 5.3, which specifically requests a variance account for this work. As such, Issue 2.2 should remain as drafted.

With respect to AMPCO's proposed Issue 7.1, the determination of the proposed charge determinants are initially discussed in the pre-filed exhibit dealing with the load forecast and as such AMPCO's issue can be appropriately reviewed under Issue 2.1 of the originally proposed issues list.

AMPCO is also proposing the inclusion of issue 7.2 dealing with the appropriateness of the network charge determinant methodology. Although Hydro One does not support a change in methodology, if AMPCO intends to file evidence in support of their position, the Board may feel it is necessary to include this issue in the final issues list.

Hydro One believes the proposed issues list as suggested above will assist in focusing the oral hearing on the key issues in the Application and would further suggest that acceptance of a streamlined issues list negates the need for a settlement process.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

c. EB-2008-0272 Intervenors

Table 1
2009 Forecast Demand by Customer Category
 (The forecast demand in this table is for all customers, irrespective of whether they pay Connection Service charges)

Category	# of Customer Delivery Points	Sum of Average Monthly Coincident Peak (CP) Demand		Sum of Average of [Higher of Monthly CP or 85% of NCP from 7AM to 7PM]		Sum of Average Monthly Non-Coincident Peak (NCP) Demand	
		MW	% of Total	MW	% of Total	MW	% of Total
LDCs	430	18,947	92.2%	19,093	91.6%	20,198	91.0%
End-Use Customers	92	1,532	7.5%	1,670	8.0%	1,969	8.9%
Transmission-Connected Generators	85	62	0.3%	79	0.4%	19	0.1%
TOTAL TRANSMISSION	607	20,541	100.0%	20,842	100.0%	22,186	100.0%

Table 2
2010 Forecast Demand by Customer Category
 (The forecast demand in this table is for all customers, irrespective of whether they pay Connection Service charges)

Category	# of Customer Delivery Points	Sum of Average Monthly Coincident Peak (CP) Demand		Sum of Average of [Higher of Monthly CP or 85% of NCP from 7AM to 7PM]		Sum of Average Monthly Non-Coincident Peak (NCP) Demand	
		MW	% of Total	MW	% of Total	MW	% of Total
LDCs	430	18,432	92.6%	18,569	91.9%	19,711	91.3%
End-Use Customers	92	1,424	7.2%	1,559	7.7%	1,856	8.6%
Transmission-Connected Generators	85	51	0.3%	71	0.4%	18	0.1%
TOTAL TRANSMISSION	607	19,907	100.0%	20,199	100.0%	21,584	100.0%

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EB-2008-0272

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF a review of an Application filed by Hydro One Networks Inc. under section 78 of the *Ontario Energy Board Act, 1998*, seeking changes to the uniform provincial transmission rates (the “Hydro One 2009-10 Transmission Rates Application”).

AFFIDAVIT OF KENT ELSON
(Affidavit Supporting Pollution Probe Motion to
Review and Vary Issues Decision to Include Issue Regarding CDM)

I, **KENT ELSON**, of the City of Toronto in the Province of Ontario, **MAKE OATH AND SAY:**

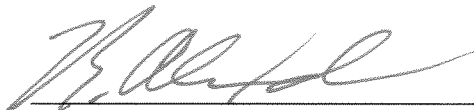
Background

1. I am a student-at-law with Klippensteins, Barristers and Solicitors, who is counsel for Pollution Probe in this proceeding. As such, I have personal knowledge of the matters discussed here except where I obtained information from other sources. In cases where I obtained information from other sources, I state the sources of such information, and I declare that I verily believe all such information to be true.
2. I swear this affidavit in support of the motion being brought by Pollution Probe to review and vary the Board’s *Issue Decision and Procedural Order No. 2*. I do not swear this affidavit for any improper purpose.

Website Documents for Motion

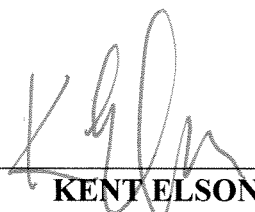
- 3. Attached as **Exhibit "A"** is a marked copy of the "Notes for remarks" by the Honourable George Smitherman, Deputy Premier and Minister of Energy and Infrastructure to the Canadian Club on October 31, 2008, as available on the website for the Ministry of Energy at
["http://www.energy.gov.on.ca/index.cfm?fuseaction=about.speeches&speech=31102008"](http://www.energy.gov.on.ca/index.cfm?fuseaction=about.speeches&speech=31102008).
- 4. Attached as **Exhibit "B"** is a marked copy of a list of programs offered to "transmission-connected customers" as available on Hydro One's website at
["http://www.hydroonenetworks.com/en/customers/LDCs_and_Tx/"](http://www.hydroonenetworks.com/en/customers/LDCs_and_Tx/). These programs include the Double Return Program and Electricity Retrofit Incentive Program.
- 5. Attached as **Exhibit "C"** are marked copies of additional information about the Double Return Program as available on Hydro One's website at
["http://www.hydroonenetworks.com/en/efficiency/double_return/Double_Return_FAQs_Transmission.pdf"](http://www.hydroonenetworks.com/en/efficiency/double_return/Double_Return_FAQs_Transmission.pdf) and
["http://www.hydroonenetworks.com/en/efficiency/double_return/default.asp"](http://www.hydroonenetworks.com/en/efficiency/double_return/default.asp).
- 6. Attached as **Exhibit "D"** are marked copies of additional information about the Electricity Retrofit Incentive Program as available on Hydro One's website at
["http://www.hydroonenetworks.com/en/efficiency/electricity_retrofit_incentive_program/default.asp"](http://www.hydroonenetworks.com/en/efficiency/electricity_retrofit_incentive_program/default.asp) and
["http://www.hydroonenetworks.com/en/efficiency/electricity_retrofit_incentive_program/program_details/business.asp"](http://www.hydroonenetworks.com/en/efficiency/electricity_retrofit_incentive_program/program_details/business.asp).

AFFIRMED before me at)
 the City of Toronto, in)
 the Province of Ontario, on)
 this 22nd day of December, 2008)


 _____)

A Commissioner for taking affidavits, etc.)

Basil Alexander



KENT ELSON



MINISTRY OF ENERGY AND INFRASTRUCTURE
< HOME / ABOUT THE MINISTRY / MINISTER'S SPEECHES

... is Exhibit A referred to in the
affidavit of Keat Elson
sworn before me, this 22nd
day of December 2008
[Signature]
A COMMISSIONER FOR TAKING AFFIDAVITS

Minister's Speeches

Notes for remarks By
The Honourable George Smitherman, Deputy Premier, Minister of Energy and Infrastructure

Canadian Club
Toronto, Ontario

October 31, 2008

Thank you Allan ... for the introduction and for the invitation to speak today.

The Canadian Club has a long and proud history as a forum for the most important and pressing issues of the day. I'm honoured to be here today.

Just two weeks ago, my cabinet colleague Dwight Duncan spoke here about the unprecedented challenges facing the global economy ... about Ontario's plan to lead ... and about how that plan will help Ontario adapt to this current turbulence and emerge stronger than ever.

In the fall economic statement, Minister Duncan talked about continuing to encourage long-term economic growth with strategic investments ... and by protecting key public services.

Of course, the way forward won't always be easy. But thanks to good policy and sound leadership, Ontario has a lot working in its favour.

As the Minister of Energy and Infrastructure, I think one of the best advantages we have is our unprecedented investment in infrastructure renewal, which when combined with the renaissance of our energy system offers a tsunami of investment opportunities.

Each of these comprehensive strategies will create home-grown jobs that stimulate local economies and allow us to plan confidently for tomorrow's challenges, rather than simply react to today's. Because when our underlying structures are sound, there are no heights we cannot reach.

And all across the landscape of my new Ministry, our investments in energy, in transit, in growth planning and in government buildings themselves are combining to lead the government's efforts to tackle climate change.

Now, I became Minister of Energy and Infrastructure just four short months ago, and I've been hitting the books ever since. I don't pretend to have captured all of the knowledge that is advisable to have ... at least not yet ... but I have added considerably to my knowledge base.

One of the first things I did, on a challenge from Dr. David Suzuki, was to see with my own eyes the green energy efforts of world-leading jurisdictions like Denmark, Spain and Germany.

I saw some pretty amazing initiatives that are shrinking carbon footprints by creating clean, green power ... all the while stimulating green-sector economies with careers in research and development, and jobs in manufacturing, installation and retrofitting.

In Freiburg, Germany, I visited one neighbourhood where all the homes had solar panels on their roofs and great thinking in their design – that neighbourhood is a net supplier of energy.

I learned how Spain, which operates 15,000 MW of wind power, is now moving to compliment it with a similar dedication to solar power.

And, in Denmark, I visited a community of about 7,000 people that meets 100 per cent of its needs locally, from wind and combined heat-and-power projects fuelled by biomass, geothermal and energy from waste.

I learned about Germany and Spain's feed-in tariff system, an incentive structure that uses government policies and legislation tools to encourage national and regional utilities to adopt renewable energy. It has created a market for green energy ... and green jobs.

I'd say THE most important lesson is that through strong leadership ... and with a strong vision ... we can achieve multiple aims. That cleaner air need not come at the expense of economic activity as some would suspect – rather that the two are achieved hand in hand.

That's not to say we haven't taken the reins of strong, bold leadership already. We're making history on climate change by our determination to get off coal entirely.

Considering that last year 75 per cent of all electricity we used was from emission-free nuclear and large scale hydroelectric like Niagara Falls we have an enviable starting point. And we've made good progress at implementing renewables in place of coal through well received programs like RESOP and our renewable RFPs.

Still, from my European learnings I know we have plenty of room for improvement. You already know that I have initiated a review by the Ontario Power Authority of the province's Integrated Power System Plan. At the heart of that review lies these questions: "Have we created the conditions to maximize our full potential? Are our policies aligned with our ambitions for our economy and for our ecology?" And have we yet unlocked the model that will afford the First Nations and Métis community to participate fully?

I know we have done well. But I know we can do even better.

Our forthcoming policies will enhance certainty for investors and will streamline processes for the task at hand, which has been described as the greatest public policy challenge in

history.

With smart growth planning ... by investing strategically in infrastructure and in clean, green energy projects, we can grow liveable, sustainable communities with strong local economies and smaller carbon footprints. Good for all of us and good for Mother Earth.

Look how far we've come already since Premier McGuinty first laid down the challenge. In our pursuit to eliminate coal, we've cut this dirty electricity generation by one-third. By 2011, we'll have cut it by two-thirds. And by 2014, we'll be off coal altogether.

Here's how.

Just yesterday, I participated in the official opening of Canada's largest wind farm. The Melancthon EcoPower Centre near Shelburne isn't just 199.5 MW of fuelless power, it helped to vault us into first place among the provinces in installed wind capacity. And by the end of the year, Ontario will have more than 950 megawatts of wind power online, nearly double what we had at the beginning of 2008.

That's success we can – and WILL – build on.

Our forthcoming policy and legislative alteration that I mentioned earlier are being designed to lead the way, to send a strong, confident message that Ontario is dedicated to best-in-class programs and best-in-class progress.

Now, I've talked a lot about our plan to bring on new, cleaner and greener forms of energy, about the economic and environmental advantages of relying more on forms of energy that do not have a fuel source.

But as good as a move to renewables is, the best power out there is in the hands and minds of 13 million Ontarians.

When I was in California, I learned how that state has achieved flat growth in their per capita energy use since the energy crisis in the 70s. I think that's a track record worth aspiring to.

Using less energy doesn't just reduce the carbon. It doesn't just reduce the bill. It also makes our province more productive so we have an economic advantage as well.

Conservation is the cheapest energy you can buy, and I'm bound and determined to buy LOTS of it. We've made great investments so far. For instance, smart meters are being installed in millions of homes across the province. These devices will empower Ontarians to see the price of electricity and, more importantly, to manage its use. Dozens of innovative programs have unlocked 1350 MW of savings so far but our ambitions go much further.

Already we are counting on conservation to absorb 75 per cent of all the demand growth going forward. The good news about conservation isn't limited to lower energy use however. Conservation initiatives are intense drivers of green-sector careers in research and development, energy efficient construction and retrofitting, and the home-grown jobs that will be created for manufacturers, assemblers and installers.

The progress we have made to date is due to the concerted conservation efforts across the board, from government and energy agency initiatives ... to industry and business efforts ...

to residential customers who understand that every kilowatt counts.

And independent voices have noticed. In August, the non-profit Canadian Energy Efficiency Alliance recognized our conservation efforts – an “A” grade on its annual report card, Ontario's highest mark ever.

But just because we are doing well doesn't mean we can't do better ... for the times dictate greater resolve than ever before.

We must raise the bar on how we measure conservation savings to ensure they are quantifiable and verifiable. And we must more clearly recognize that our Local Distribution Companies enjoy a special, powerful relationship with 4.8 million electricity ratepayers. A relationship that dictates that LDCs be more clearly in the driver's seat when it comes to leading conservation and energy efficiency initiatives.

Throughout history, leaders have seized opportunities in challenging times. Leaders set high standards ... and empower the right people and the right players to deliver.

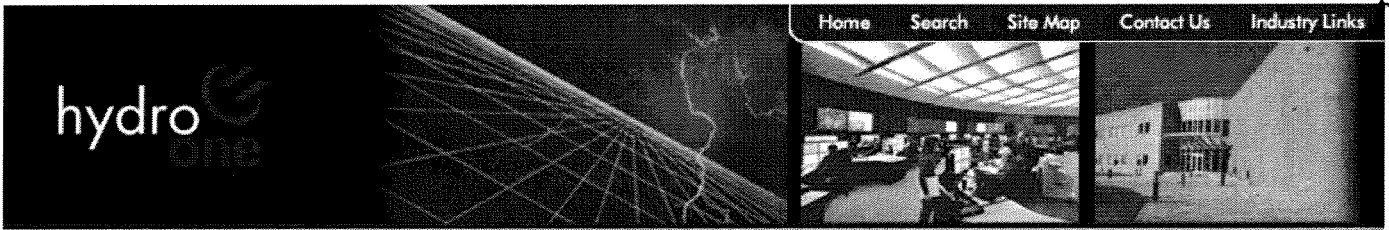
Ontario and Ontarians have embarked on a truly historic journey, blazing a path to one of the greenest energy profiles to be found anywhere.

The leaders in earlier centuries and decades gave us Niagara Falls and nuclear power. And now the torch is passed to us, to build on this legacy:

1. To eliminate coal.
2. To enhance renewables.
3. To stimulate conservation.
4. And to collectively meet this test: “Will you leave the earth in better shape than when you found her?”

[Click here to return to list of available speeches.](#)

Last update: December 9, 2008



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What's New

12/18/2008 - [Double Return Winter Program](#)

09/17/2008 - [Hydro One Transmission Rate Application Stakeholder Sessions](#)

Business Customers

DOUBLE RETURN

Reduce peak demand this summer by 5-10% over last year and get a cheque for **DOUBLE** of what you saved in delivery charges!

Home > Customers > **LDCs & Transmission-connected**

LDCs & Transmission-connected Companies

Hydro One is proud to supply electricity to more than 90 large transmission-connected industrial customers and 80 Local Distribution Companies (LDCs) across the province. Our Transmission-connected customers include pulp and paper mills, refineries, auto manufacturers, mining and steel companies. All of these customers have significant power requirements.



Programs

The following programs will assist LDCs and Transmission-connected customers manage their electricity supply connections with Hydro One. These have been developed in accordance with various regulations and Market Rules established in Ontario and the obligations they place on the participants. See below for a brief summary and links to more information about each program:



NEW! Load Customer Connection Process

For load customers planning to connect or modify an existing connection to the Hydro One transmission system, follow our customer connection process to help you complete the necessary applications and agreements. [Learn more.](#)



Wholesale Revenue Metering (Meter Exit Program)

All customers connected to the IESO control grid are responsible for their wholesale revenue metering. Each customer-owned metering installation must comply with the requirements and standards set out in Chapter 6 of the IESO Market Rules. [Learn more.](#)



Feeder Settings Program (PCMIS)

Hydro One has developed a program and software system to improve the management of feeder settings for Hydro One-owned Transformer Stations and breakers. The program clarifies the accountability of the Local Distribution Companies (LDCs) and the Transmitter (Hydro One). [Learn more.](#)



Power Quality Incident Reporting

Customer equipment can adversely affect the quality of electrical supply to another customer. Large motors, arc furnaces and a large number of non-linear loads can all contribute to Power Quality (PQ) disturbances. Hydro One responds to our customers' PQ issues through the Power Quality Inquiry Response Process. [Learn more.](#)



Unaccompanied Station Access Process

To ensure the utmost in public safety and security, Hydro One has developed a process to assist Transmission-connected LDCs with unaccompanied access to their equipment inside a Hydro One Transformer Station. [Learn more.](#)



LDC Work Program

Our LDC Work program manages the scheduling and implementation of requests for new or modified joint use of poles, long term load transfers, additional capacity, tie lines, power quality, new metering locations and reliability concerns. [Learn more.](#)

Network Operating

Login to our secure website to see your specific operating information, such as Customer Notification Bulletins, Briefings, Connection Agreements and more!

User ID:

Password:

LOGIN

OGCC Weekly Report

Ontario Grid Control Centre (OGCC) Reports are produced weekly to help our transmission & distribution customers stay informed. Download past issues below:

- > [Dec 11 - Dec 18](#)
- > [Dec 4 - Dec 10](#)
- > [Nov 27 - Dec 3](#)
- > [Nov 20 - Nov 26](#)
- > [Nov 13 - Nov 19](#)
- > [Archive](#)

[PDF Downloads](#)

Links

- [Directions: 2007 Transmission Status Report](#)
- [Transmission Solutions 2005-2014](#)
- [Hydro One Conditions of Service](#)
- [Hydro One Regulatory Affairs](#)
- [Independent Electricity System Operators \(IESO\)](#)
- [Ontario Energy Board](#)
- [Transmission System Code](#)
- [Distribution System Code](#)

B
 sworn before me, this 22nd day of December 2008.
 [Signature]
 A COMMISSIONER FOR TAKING AFFIDAVITS



Outage Planning for Transmission-connected Customers

Hydro One as a Transmitter has a responsibility to maintain and repair equipment to ensure the safe and reliable delivery of electricity to our customers. Scheduling outages is critical to the performance of the Transmission system. [Learn more.](#)



Double Return Program

Reduce your company's average peak electricity demand by 5-10% over last year (between 7 a.m. and 7 p.m. on business days) and we'll pay you double the amount of what you save in delivery charges! All transmission-connected Hydro One customers are automatically enrolled in the program. [Learn more.](#)



Electricity Retrofit Incentive Program (ERIP)

Hydro One has partnered with the Ontario Power Authority to provide incentives to qualifying Industrial customers for retrofit projects that result in measurable reductions in electrical peak demand. The incentive level starts at \$150 per kW saved! Applications submitted for pre-approval must be received by Hydro One Networks no later than December 31, 2008. [Learn more.](#)

Archived Bulletins

Read our archived customer bulletins and conference speeches below:



--- Choose a Customer Bulletin by Topic ---

--- Choose a 2007 Customer Conference Presentation by Topic ---

[[Printable Version](#)]

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This is Exhibit C referred to in the
affidavit of Kent Elson
sworn before me, this 22nd
day of December 2008
B. Alford
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DOUBLE RETURN

FAQs

What is the Double Return Program?

- It's a simple proposition. Reduce your peak electricity demand and we'll pay you for it.

Does my business qualify?

- All transmission-connected customers are eligible to participate in the Double Return program (except those participating in another OPA sponsored demand reduction program).

How can my business benefit?

- Take control of your electricity costs and make a positive return on your bottom line. When you reduce average peak electricity demand by 5-10%, Hydro One will give your company a cheque for double the amount of what you save in transmission charges.

Trimming a controllable cost can realize a positive return. The 5-10% reduction in peak can be achieved by rescheduling processes, reduced HVAC, shutting down non critical equipment or through energy saving measures with minimal or

no impact on normal business operations.

How does the program work?

- All you need to do is to reduce your company's peak electricity demand by a minimum of 5% (from 7 a.m. to 7 p.m., on business days, excluding weekends and holidays) during the program period and you will be rewarded with a cheque from Hydro One for double the amount of what you save, up to a maximum of 10% in transmission charges.
- Currently, the program runs for two three-month periods.
 - Summer period runs from July 1, 2008 to September 30, 2008.
 - Winter period runs from January 1, 2009 to March 31, 2009.

Continued on reverse

Load Reduction Example

Average Monthly Peak (7a.m. to 7 p.m. business days): 30 MW
 Average Monthly Consumption: 15,768 MWh

TARGET

10% Peak Load Reduction 3,000 kW
 (through reduced lighting, HVAC, and non-critical equipment usage or through on-site generation)

Savings (3,000 kW/30 MW) 10%

Hydro One Incentive:

Total Double Return Incentive
 (for 6 months):
 $\$17,400 \times 6 = \$104,400$

In this example, Hydro One will provide a total incentive payment of **\$104,400**.

Program Impact (all figures are approximate and signify maximum potential for savings)

Customer Savings/month

Reduced Transmission Network Charge (3,000 kW x 2.31\$/kW)	\$ 6,930
Reduced Transmission Connection Charge (3,000 kW x 0.59\$/kW)*	\$ 1,770
Total Transmission charge savings	\$ 8,700
Double Return Incentive/month (Transmission Charges)	\$ 17,400

* Assumes transmission connection peak occurs at same time as network peak.

IT'S WORTH MAKING THE EFFORT

DOUBLE RETURN

- Savings will be calculated based on the comparison of your current 7 a.m. to 7 p.m. business day 3-month average peak to the average peak in the same period of the previous year.
- Visit www.HydroOneNetworks.com/DoubleReturn for energy efficiency guides to help you make no cost or low cost operational changes which can significantly impact your company's bottom line. Guides are available regarding:
 - Electrotechnologies
 - Power Quality
 - Lighting
 - Heat Pumps
 - Compressed Air
 - Electric Motors
- Customers who require assistance in developing a plan to reduce peak demand can take advantage of one-on-one consultations with an energy specialist. At your request a Hydro One energy expert will visit your company to conduct a walk-through to identify peak reduction opportunities. E-mail DoubleReturn@HydroOne.com or call 1-877-345-6942 to book your consultation today.

Will I get more back if I reduce my peak by more than 10%?

- Incentives are capped at 10%, but you'll continue to make real gains on your bottom line from the additional savings trimmed off your electricity costs!

Where can I find up-to-date information about my load?

- As of July 1, 2008, your company's historical peak electricity demand, this year's peak reduction target, incentives, and current daily peaks information will be available when you log in on the Double Return program website at <http://HydroOneNetworks.com/DoubleReturn>.
- Hydro One transmission connected customers can see their hourly load profiles by logging into IESO website at <https://portal.ieso.ca>.

What are my costs to participate?

26

- There is no fee to participate in the Double Return Program. However, how much your company invests in energy efficiency improvements is really up to you. A walk-through of your company's facility may prove that a 5 - 10% reduction in peak electricity load is achievable through operational changes at little or no cost.

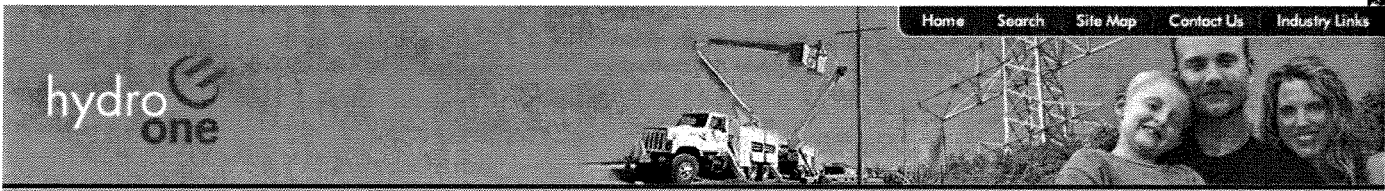
DOUBLE RETURN SUMMER CHALLENGE

Begins on July 1st, 2008

Call today to book your
consultation session

1-877-345-6942

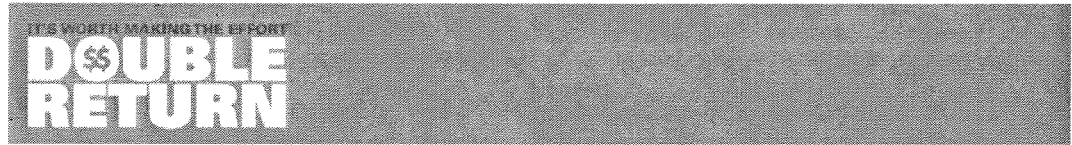




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Energy Efficiency Tips & Tools



What is the Double Return Program?

It's a simple proposition. Reduce your peak electricity demand **between 7:00 a.m. and 7:00 p.m.** during business hours (excluding holidays) and we'll pay you for it — **twice.**

Who is eligible for the program?

- All of Hydro One Networks' transmission-connected and commercial/industrial distribution customers with interval meters are eligible for this program and are automatically enrolled (except those participating in other OPA-sponsored demand reduction programs).
- All it takes is for you to reduce your company's average peak consumption between 7:00 a.m. and 7:00 p.m. by a minimum of 5% over the program period and you will be rewarded with a cheque from Hydro One for **double the amount** of what you saved in delivery charges.

To learn more about the Double Return Program, read our FAQs for [Commercial/Industrial Distribution customers](#) (PDF 295 KB), or our FAQs for [Transmission-connected customers](#) (PDF 295 KB).

How can my business benefit?

Take control of your electricity costs and make a positive return on your bottom line. When you reduce average peak electricity demand by 5-10% between the hours of 7:00 a.m. and 7:00 p.m. during business days, Hydro One will give your company a cheque for double the amount of what you save in delivery charges.

Trimming a controllable cost can realize a positive return. The 5-10% reduction in peak can be achieved by rescheduling processes, reduced HVAC, shutting down non critical equipment or through energy saving measures with minimal or no impact on normal business operations.

To help you reduce your electricity consumption this summer, download Hydro One's Energy Efficiency Guides for different technologies:

- Energy Efficiency Guide: [Electric Motors](#) (PDF 944 KB)
- Energy Efficiency Guide: [Compressed Air](#) (PDF 852 KB)
- Energy Efficiency Guide: [Electrotechnologies](#) (PDF 3.3 MB)
- Energy Efficiency Guide: [Power Quality](#) (PDF 584 KB)
- Energy Efficiency Guide: [Lighting](#) (PDF 952 KB)
- Energy Efficiency Guide: [Heat Pumps](#) (PDF 5.6 MB)

Where can I find up-to-date information about my peak load?

Starting July 1, 2008, click the green "Login" button to access a secure, confidential website where you can find your current peak information, savings targets and associated financial incentives. Peak load information will be updated on a weekly basis.

- Commercial/Industrial Distribution customers' hourly load profiles can be accessed by logging into <https://intervaldata.HydroOne.com>
- Transmission-connected customers' hourly load profiles can be accessed by logging into the IESO's website at <https://portal.ieso.ca>.

How does the program work?

- All you need to do is to reduce your company's peak electricity demand by a minimum of 5% (from 7 a.m. to 7 p.m., on business days, excluding weekends and holidays) during the program period and you will be rewarded with a cheque from Hydro One for double the amount of what you save, up to a maximum of 10% in delivery charges.
- The program runs for **two** three-month periods:
 - Summer period runs from June 1, 2008 to September 30, 2008.
 - Winter period runs from January 1, 2009 to March 31, 2009.
- Savings will be calculated based on the comparison of your current 7:00 a.m. to 7:00 p.m. business day 3-month average peak to the average peak in the same period of the previous year.

EXAMPLE:

Average Monthly Peak (7 am - 7 pm):	2 MW
Average Monthly Consumption:	1250 MWh
TARGET	
10% Load Reduction (through reduced lighting, HVAC, and non-critical equipment usage or through on-site generation)	200 kW
SAVINGS (200 kW/2 MW)	10%

Program Impact

(all figures are approximate and signify maximum potential for savings)



Customer Savings/month	
Reduced Delivery Charges/month (200kW)	\$2,400
Energy (kWh) Reduction/month (up to 125MWh)*	\$6,000
Double Return Incentive/month (delivery charges)	\$4,800
Total Monthly Savings	\$13,200
Total Savings for 6 months	\$79,200

Hydro One Incentive:
 Total Double Return Incentive (for 6 months)
 $\$4,800 \times 6 = \$28,800$
 In this example, Hydro One will provide a total incentive payment of \$28,800.

* Assumes savings due to reduced load and consumption.

Customers who require assistance in developing a plan to reduce peak demand can take advantage of one-on-one consultations with an energy specialist. At your request, a Hydro One energy expert will visit your company to conduct a walk-through to identify peak reduction opportunities. E-mail DoubleReturn@HydroOne.com or call **1-877-345-6942** to book your consultation today.

Will I get more back if I reduce my peak by more than 10%?

Incentives are capped at 10%, but you'll continue to make real gains on your bottom line from the additional savings trimmed off your electricity costs!

What are my costs to participate?

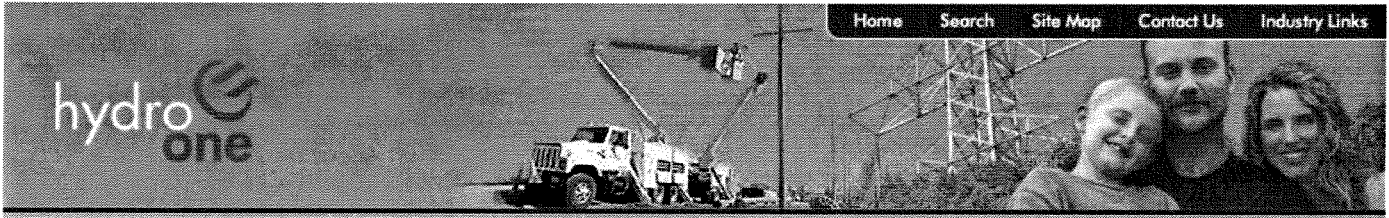
There is no fee to participate in the Double Return Program. However, how much your company invests in energy efficiency improvements is really up to you. A walk-through of your company's facility may prove that a 5 - 10% reduction in peak electricity load is achievable through operational changes at little or no cost.



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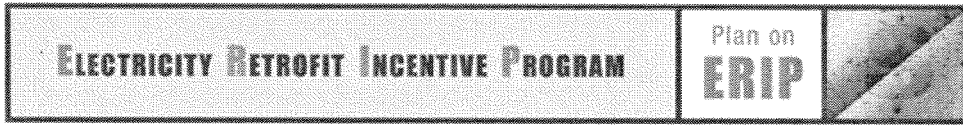
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Energy Efficiency Tips & Tools

In this Section:

- » **NEW!** [ERIP Energy Audit Contest](#)
- » [Program Details for Business Projects](#)
- » [Program Details for Farm Projects](#)



When it's time to retrofit your business, why not choose equipment that will save you money? With all the financial and timing considerations, energy-efficient options may not be the first thing on your mind. So we've made it easy for you. The Electricity Retrofit Incentive Program (ERIP) gives you the most energy-efficient solutions to improve your bottom line.



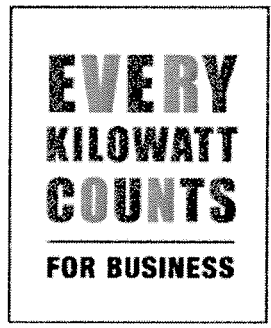
For details, download our [Fact Sheet](#) (PDF 606 KB) and [Brochure](#) (PDF 637 KB). To apply, click on a button below:



Fixed Incentives for Specific Technologies

Rebates are offered for technologies on a per-unit or performance basis. Refer to the worksheets and [Prescriptive Project Guidelines](#) for more information about qualifying Prescriptive Technologies, such as:

- Energy-efficient Lighting
- Unitary A/C Units (up to 25 tonnes) that are ENERGY STAR®-qualified/CEE compliant
- Three-phase premium efficiency motors
- Three-phase ENERGY STAR® Power Transformers
- Incentives are also available for agricultural fans, creep heat and controls.



Incentives for Custom Projects

Incentives will be available for pre-approved projects that result in measurable reductions in electrical peak demand. These projects may be completed using energy-efficient, leading-edge technologies specified by Hydro One or may be based on innovative, custom solutions.

The incentive offered at \$150/kW is based specifically on the level of improvement. Refer to the [Custom Project Guidelines](#) for more information about eligibility.

Eligibility

Applicants must be owners or tenants of business premises served by Hydro One. Please note that if you are a tenant, you must obtain permission from the property owner for installation of the measures for which an incentive is claimed.

Although the OPA Guidelines state that ERIP deadlines are based on a three-year commitment, the contract between Hydro One Networks and the OPA for the delivery of the program is reviewed on

I, D. Kent Elson, referred to in the
 Affidavit of Kent Elson
 sworn before me, this 22nd
 day of December, 2008.

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a yearly basis. Hydro One Networks, therefore, recommends that customers apply for incentives based on the following deadlines, as funding is limited and the program may not be offered beyond 2008:

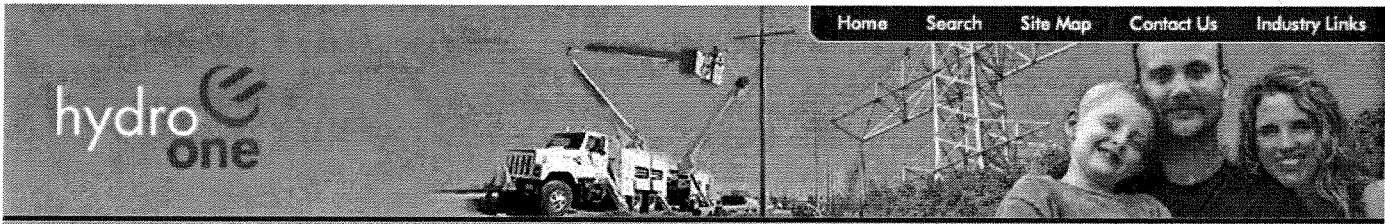
- Applications submitted for pre-approval must be received by Hydro One Networks **no later than December 31, 2008.**
- Applications submitted for Prescriptive incentives after project installation must be received by Hydro One Networks **no later than December 31, 2008.**
- Projects must be completed and all supporting documentation received by Hydro One **within 12 months of pre-approval.**

More Information

For more information, see program details for [business/institutional projects](#) or [farm projects](#), or e-mail ERIP@HydroOne.com.

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Home > Energy Efficiency Tips & Tools > Electricity Retrofit Incentive Program > Business/Institutional Projects

Energy Efficiency Tips & Tools



Business/Institutional Projects — How to Apply

Before starting your application, please review our [Fact Sheet](#), then follow the steps outlined below:

STEP 1 Read the Guidelines for a [Prescriptive](#) and [Custom](#) project, and decide which type of project would be the best fit for your business.

STEP 2 Download and complete the relevant [Worksheets](#) for your project (see [below](#)).

STEP 3 Fill out the [Application](#).

STEP 4 E-mail or courier your completed Application and all worksheets by **December 31, 2008** to ERIP@HydroOne.com or **Hydro One Networks, Conservation and Demand Management Program Office, 483 Bay Street, 14th Floor, Toronto, ON M5G 2P5.**



Worksheets (MS Excel)

Prescriptive Forms



[Lighting Systems](#)



[Motors](#)



[Transformers](#)



[Unitary A/C](#)



New Forms



[Hot Water](#)



[Space Cooling](#)



[Food Services](#)

Custom Project Forms



[Custom Project Worksheet](#)



[Custom Project Calculator](#)

About the Program

Hydro One's Electricity Retrofit Incentive Program provides business, farm and institutional customers of Hydro One Networks Inc. with an opportunity to realize their energy efficiency potential, and to receive

attractive incentives to reduce the capital cost of energy efficient technologies.

The objective of the Electricity Retrofit Incentive Program is to initiate energy conservation and load management projects within the Commercial, Industrial, Agricultural and Institutional sectors by offering financial incentives.

For the business customers of Hydro One Networks, incentives are now available to assist in the implementation of conservation and demand management projects that will improve their bottom lines.

Timelines

Applications are accepted on a first-come, first-served basis. Customers applying for Custom Project Incentives must seek pre-approval. Customers applying for Prescriptive Incentives have an option of seeking funding approval prior to installation or post installation of the energy efficiency measure(s).

Although the OPA Guidelines state that ERIP deadlines are based on a three-year commitment, the contract between Hydro One Networks and the OPA for the delivery of the program is reviewed on a yearly basis. Hydro One Networks, therefore, recommends that customers apply for incentives based on the following deadlines, as funding is limited and the program may not be offered beyond 2008:

- Applications submitted for pre-approval must be received by Hydro One Networks **no later than December 31, 2008.**
- Applications submitted for Prescriptive incentives after project installation must be received by Hydro One Networks **no later than December 31, 2008.**
- Projects must be completed and all supporting documentation received by Hydro One **within 12 months of pre-approval.**

Funding is limited and Hydro One Networks reserves the right to cancel the program at any time.

Who Qualifies?

- All non-residential Hydro One Networks customers qualify. However, projects must have a minimum size to be eligible. Projects, motors excepted, must achieve a minimum incentive of \$150 to qualify.
- Applicants must be owners or tenants of business premises served by Hydro One Networks.
- Please note that if you are a tenant, you must obtain permission from the property owner for installation of the measures for which an incentive is claimed.

Qualifying Projects

Incentives will be available for pre-approved projects that result in measurable reductions in electrical peak demand. These projects may be completed using energy-efficient, leading-edge technologies prescribed by Hydro One Networks or may be based on innovative, custom solutions.

Prescriptive Projects

Rebates are offered for pre-approved technologies on a per-unit or performance basis. Read additional information about qualifying [Prescriptive Technologies](#).

An incentive is available for prescriptive projects (pre-approved technologies):

- Energy-efficient lighting products
- Unitary A/C units (up to 5 tons) that are ENERGY STAR® qualified/CEE compliant
- Three-phase premium efficiency motors
- Three-phase ENERGY STAR® Power Transformers

Custom Projects

All technology, equipment and systems are evaluated on the basis of their energy performance improvement. The incentive offered of \$150/kW is based specifically on the level of improvement. Read additional information about qualifying [Custom Projects](#).

How do I participate?

There are two ways to get started:

1. Use the self-serve method by reviewing our [Fact Sheet](#), then downloading the appropriate application form(s) and guideline(s) found at the top of this page. Mail or courier your completed application including all worksheet(s) to:

**Hydro One Networks
Conservation and Demand Management Program Office
483 Bay Street, 14th Floor
Toronto, ON M5G 2P5**

2. Contact Hydro One Networks via e-mail at ERIP@HydroOne.com.

[[Printable Version](#)]

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Ontario Energy Board
EB-2006-0266

Report of the Board

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

March 2, 2007

3.0 THE ROLE OF THE DISTRIBUTOR

3.1 2005 to 2007

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

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

Under the current model, the Board is responsible for approving the funding of CDM programs through distribution rates, with a focus on reviewing the prudence of CDM expenditures. To that end, the Board developed processes for distributors to apply for third tranche funding through 2005 distribution rates and for additional funding through 2006 and 2007 distribution rates. Funding through 2007 distribution rates is discussed in more detail in section 4.1.1 of this Report.

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

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

3.2 2007 to 2010

Once the Distributor CDM Fund is up and running, it is expected that funding for, and delivery of, the majority of distributor CDM activities will be coordinated by the OPA. The Directive sets out the respective roles and responsibilities of the OPA and distributors. According to the Directive, responsibility for the design of standard programs will lie with the OPA. These standard programs may include consumer awareness and education programs, market capacity building, and market transformation programs. Distributors may also design custom programs and apply to the OPA for funding of these programs.

Pursuant to the Directive, the OPA will be responsible for ensuring that all areas of the province have access to an appropriate set of CDM programs. This means that where a distributor has not entered into a contract with the OPA or where the OPA sees a need to deliver one or more specific CDM programs not being implemented by the

distributor, the OPA may either directly, or through a third party, deliver the CDM programs to consumers in the distributor's service area.

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

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

As set out in section 4.1.1 of this Report, distributors would also be able to apply to the Board for funding through distribution rates for certain CDM programs.

3.3 2010 and Beyond

The July 13, 2006 Directive is silent on the role of distributors in, and the source of funding for, CDM beyond 2010. As evidenced by the Government's long term conservation targets set out in the Supply Mix Directive, the Board assumes that the Government intends that CDM resources will be necessary beyond 2010.

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

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

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

4.0 THE REGULATORY FRAMEWORK

The Board assumes that once the Distributor CDM Fund is up and running, there will be two streams of funding available to distributors for the delivery of CDM programs: funding from the OPA, and funding through distribution rates. The ratemaking implications of each funding stream are different. In developing this regulatory framework, the Board has been guided by its December 10, 2004 decision in the

conservation and demand management proceeding (RP-2003-0203) and the Report of the Board on the 2006 Electricity Distribution Rate ("EDR") Handbook, which together set out the current treatment of CDM activities funded through distribution rates.

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

4.1 Program Planning

4.1.1 CDM Funding

OPA Funding

The OPA has a number of mechanisms available to it for funding CDM activities, including: the recently announced Distributor CDM Fund; the Conservation Fund; the Technology Development Fund; and OPA procurement processes needed to implement the IPSP and any other Ministerial Directives.

OEB Funding

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

Board staff proposed that funding through distribution rates be restricted to initiatives targeted to consumers within the distributor's licensed service area, and to initiatives that neither the OPA nor any other entity is already delivering within the distributor's service area. Such targeted initiatives might include, for example, a load control program that is triggered by conditions on the distributor's local system, rather than solely on province-wide market conditions, or a distribution system improvement initiative to reduce line losses.

Submissions of Parties

Parties were generally supportive of a dual funding model, but requested further details as to division of responsibilities between the Board and the OPA, and the application process for distributors. Some parties suggested that the Board make it a requirement that distributors first apply for funding from the OPA before making any application to the Board. Other parties suggested that the Board should encourage distributors to apply to the OPA first, but not necessarily make it a requirement.

In its submission, the OPA reported that it would not be in a position to fund distributor designed programs by October 1, 2007, as previously reported to the Board. The OPA further advised that funding would only be available for five standard programs³. The OPA requested that the Board encourage distributors to apply to the Board for funding through distribution rates for all other programs through to the end of the 2007 rate year, which ends April 30, 2008.

Conclusions

The Board considers it important that distributors be able to continue to deliver cost effective CDM programs. The Board originally expected that funding from the OPA would become available in October 2007, and that incremental funding through distribution rates would only be required for the period from May 1, 2007 to September 30, 2007. However, as indicated by the OPA's submission in this process, this potential funding gap will be longer than expected. The Board has experience in reviewing and approving CDM program proposals, and is thus in a position to ensure funding is available for CDM programs during this interim period. **As a result, the Board has determined that it is necessary to provide an extension of incremental funding for programs originally funded through third tranche funding, until such time as OPA funding for these programs becomes available.**

New programs or existing third tranche programs that are the same as the five soon to be offered by the OPA are not eligible for distribution rate funding.

Filing requirements for the extension of incremental funding for third tranche programs are outlined in the letter issued by the Board on March 1, 2007.

The Board will continue to receive applications for funding through distribution rates for programs designed to address local reliability or system improvement situations.

As funding from the OPA becomes available for all other types of programs, the Board expects that distributors will apply to the OPA for funding. However, where funding is not available from the OPA at the time of application, distributors may apply to the Board for funding through distribution rates. The Board will coordinate with the OPA to ensure that there is no duplication of funding.

In all cases, programs funded through distribution rates must be targeted to consumers within the distributor's licensed service area.

Filing requirements for new CDM programs will be the same as those outlined in the Board's Filing Requirements for Transmission and Distribution Applications, issued November 14, 2006.

³ The OPA has advised that these five programs are: Business Incentive Program, 10/10, Residential Demand Response, Appliance Retirement, and Small Commercial Direct Install.
March 2, 2007

Filed: September 30, 2008
 EB-2008-0272
 Exhibit A
 Tab 14
 Schedule 3
 Page 8 of 24

3.7 Conservation and Demand Management Forecast

Hydro One Transmission uses the Ontario Government's CDM target of a 5.0 percent peak load reduction (1,350 MW) by 2007. Of the stated 2007 target, 1,000 MW is assumed to be program-driven and the remainder (350 MW), natural conservation (consistent with the Board's August 16, 2007 Decision on Hydro One Networks' Transmission Proceeding EB-2006-0501). Beyond 2007, Hydro One Networks uses the CDM impacts provided by the OPA consistent with the IPSP submitted to the Board in August 2007. Table 2 summarizes the CDM impacts assumed in Hydro One Transmission's system load forecast for 2008, 2009, and 2010.

Table 2
Load Impact of C&DM on Ontario Demand (MW)

Year	Load Impact on <u>Maximum Peak Demand *</u>		Load Impact on <u>12-month Average Peak Demand **</u>	
	Incremental	Cumulative	Incremental	Cumulative
2008	251	1,251	189	993
2009	369	1,620	281	1,274
2010	787	2,407	789	2,063

* The figures represent the load impact of CDM on summer peaks.

** The figures represent the load impact of CDM on monthly peaks, averaged over 12 months in the year.

CDM programs will be planned and delivered through a number of agencies including the OPA, IESO, federal and provincial governments and LDCs. Programs implemented in the past two years, or that are in the process of being initiated, include the following:

- 1 • improved building codes for new housing and more stringent efficiency standards for
2 appliances;
- 3 • conservation programs to encourage more efficient use of lighting and appliances;
- 4 • demand response programs to reduce air conditioning and water heating load in the
5 summer months;
- 6 • use of smart metering and TOU rates to encourage consumers to shift consumption
7 patterns to the off-peak period; and
- 8 • programs to increase supply or reduce demand such as using back-up generation or
9 requesting large industrial customers to reduce consumption on a temporary basis.

10
11 The Board in its EB-2006-0501 Decision, directed Hydro One Transmission to base the
12 CDM adjustments to its load forecast on a much more rigorous analysis, including where
13 possible, load impacts attributable to specific programs. In response to this directive, a
14 detailed analysis of CDM programs is provided as Attachment C to this Exhibit.

15
16 Recent CDM program results reported by the OPA and the results of special studies
17 undertaken by Hydro One Transmission show that Ontario electricity consumers met the
18 provincial government's peak reduction target for 2007. It should be noted that these
19 conservation efforts are above and beyond the natural conservation assumed in the load
20 forecast. Survey results from Hydro One Transmission and the OPA show that Ontario
21 electricity consumers have responded to the conservation challenge, have participated in
22 CDM programs offered by the OPA, LDCs and other government agencies and have
23 taken various conservation actions on their own to save electricity.

24 25 **3.8 By-Pass Forecast**

26
27 Hydro One Transmission collects its transmission revenue through four types of Board-
28 approved transmission charges (networks, line connection, transformation connection,

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**Analysis of Conservation
and Demand Management Results in Ontario**

September, 2008

1 **1.0 OVERVIEW**

2

3 This report presents a detailed analysis of Conservation and Demand Management
4 (CDM) programs using available information as of September 2008. The analysis was
5 prepared to help assess the CDM impact on the load forecast.

6

7 The CDM impact on the load forecast can be grouped in the following way:

- 8 • CDM impact resulted from programs initiated by the Ontario Power Authority
9 (OPA);
- 10 • CDM impact resulted from programs initiated by local distribution companies
11 (LDCs);
- 12 • CDM impact resulted from programs initiated by other agencies, such as federal and
13 provincial governments;
- 14 • CDM impact resulted from actions initiated by Ontario electricity consumers on their
15 own that are above and beyond the natural conservation efforts assumed in the load
16 forecast. These conservation actions are difficult to measure because they are not
17 program specific and therefore the savings are not easily traceable measureable.

18

19 The Ontario government has set a summer peak reduction target of 1,350 MW for 2007
20 and another peak reduction target of 1,350 MW for 2010. Recent CDM program results
21 reported by the OPA and the results of special studies undertaken by Hydro One show
22 that Ontario electricity consumers met the provincial government's peak reduction target
23 for 2007. It should be noted that these conservation efforts are above and beyond the
24 natural conservation assumed in the load forecast.

25

26 Survey results from Hydro One and the OPA show that Ontario electricity consumers
27 have responded to the conservation challenge, have participated in CDM programs
28 offered by the OPA, LDCs and other government agencies and have taken various
29 conservation actions on their own to save electricity. Future evaluation, measurement
30 and verification (EMV) efforts by the OPA will be able to confirm the success achieved
31 by Ontario electricity consumers. The following sections provide a summary of the

1 program results recently reported by the OPA, special studies undertaken by Hydro One,
2 as well as details of CDM programs to be initiated by OPA for the 2008-2010 period.

3 4 **2.0 CDM RESULTS REPORTED BY OPA**

5
6 This section summarizes the CDM program results reported by the OPA in its June 2008
7 report, entitled “2007 CECCO Results - Supplement: Conservation Results”. The OPA
8 publishes progress reports regularly to provide updates on conservation initiatives taking
9 place within the province. Three types of conservation program savings are provided by
10 the OPA: forecasted, reported and verified savings. To date, the reported results indicate
11 that, as of the end of 2007, Ontario electricity consumers met or likely exceeded the
12 Ontario government’s peak demand reduction target of 1,350 MW. Verified savings are
13 not yet available from the OPA at the present time.

14
15 Table 1 uses the top-down approach to compare the weather-adjusted actual system peak
16 demand and the forecast for 2007. The comparison shows a summer peak demand
17 reduction of 1,462 MW between the forecast and the actual summer peak on a weather-
18 corrected basis. It should be noted that while the comparison indicates progress in
19 conservation, other factors such as changes in economic activity may also contribute to
20 the difference.

21
22 **Table 1:**
23 **Comparison of 2007 Peak Demand to Forecast (MW)**

24

Forecast 2007 Peak Demand	Weather Adjusted 2007 Peak Demand	Demand Reduction including Conservation and Other Factors
26,282	24,820	1,462

25 Source: “2007 CECO Annual Report – Supplement: Conservation Results” released by the OPA
26 in June 2008

27
28 Table 2 summarizes the CDM program results since 2005 using a bottom-up approach
29 and demonstrates that various conservation programs have resulted in savings of more

1 than 1,350 MW. The reported savings include programs initiated by the OPA, LDCs, the
 2 federal and provincial governments, as well as other agencies such as Enbridge and
 3 Union Gas and conservation actions that are not program related. Further details of
 4 conservation results by type of organization are summarized in Appendices A to D.

5
 6 **Table 2:**
 7 **CDM Impact Analysis by Program Type (in MW)**
 8

Year	Type of Program Savings				Total
	LDC	OPA Programs	Federal and Provincial Government Programs	Other	Annual Peak Savings
2005	22	n/a	23	30	75
2006	141	111	39	51	341
2007	94	486	57	337	974
Total	257	597	119	418	1390

9 Source: "Summary of Electricity Conservation Programs & Initiatives" prepared by Marbek
 10 Resource Consultants for the OPA released in June 2008 and "2007 CECO Annual Report-
 11 Supplement: Conservation Results" released by the OPA in June 2008
 12

13 In addition to the results reported in Table 2, there are other conservation activities and
 14 programs that have taken place in the province for which the savings have not been
 15 measured by the OPA because estimates are not readily available. Examples of these
 16 initiatives include:

- 17 • Naturally occurring conservation;
- 18 • New building code and equipment standards;
- 19 • Communication and education programs initiated by other agencies;
- 20 • Conservation actions initiated by customers that are above and beyond natural
 21 conservation.

22

3.0 SPECIAL STUDIES UNDERTAKEN BY HYDRO ONE

This section summarizes the results of two special studies undertaken by Hydro One to measure the load impact of CDM programs in Ontario. The first study is an econometric analysis to measure the impact of CDM programs on summer peak for 2004 and 2007 using the hourly load profile analysis approach. The second study is a special analysis to measure the conservation actions of Ontario electricity consumers.

3.1 Load Profile Analysis

Hydro One undertook a special study to measure the load impact of CDM programs in Ontario using the load profile analysis approach. This methodology captures the CDM impact by comparing the normalized hourly load shape profiles for 2004 and 2007 using actual hourly data for Ontario. In this analysis, 2004 represents the base year without CDM programs and 2007 represents the test year with CDM program results. The difference of the load profiles between these 2 years provides a measurement of the CDM impact achieved to date. Two regressions methods were examined in this study.

The first method is an in-house econometric model built to analyse the hourly loads for 2004 and 2007. The functional form of the load shape analysis for each hour i ($i=1, 2, 3, \dots, 24$) is defined as

Actual Load in hour $i = f\{CDD, HDD, Day\ type\}$ where CDD represents cooling degree days and HDD represents heating degree days

Regression equations were used to generate weather normalized hourly load profiles for 2004 and 2007. The monthly peak forecast was derived using the maximum hourly load value for each month. "Weather adjustment", the difference between the predicted load using normal weather conditions and the actual load, was added to the actual hourly load to produce a "normalized" hourly load shape. Thirty-one years of weather data were used to set the typical weather conditions. The economic growth between 2004 and 2007 was

1 removed using the historical relationship between the economic activity (i.e., GDP) and the
2 peak load. The estimated CDM impact is the difference between the monthly peak for
3 2004 and 2007 after removing the economic growth.

4
5 The second method is similar to the first method discussed above in terms of the
6 functional form, actual hourly data for the province, weather data and removal of the
7 economic growth. The only difference is using the hourly forecasting software program,
8 MetrixND, developed by Itron to generate the weather normalized hourly load profiles.
9 The monthly peak forecast was derived using the maximum hourly load value for each
10 month for the 2004 and 2007.

11
12 The regression results for both load profile models are statistically significant. The load
13 profile results from the two models show that Ontario had achieved a summer peak
14 demand reduction in the range of 1,450 MW to 1650 MW. The analysis is consistent
15 with the results reported by the OPA as presented in Section 2 of this report because the
16 Hydro One's studies use the actual hourly data to capture the conservation impacts that
17 are difficult to measure.

18 19 **3.2 Conservation Actions Undertaken by Customers**

20
21 CDM programs initiated by the OPA, LDCs, and other federal and provincial
22 governments are mostly program-specific and as such the program results are tracked and
23 measured. Conservation actions initiated by customers on their own are difficult to
24 measure because there are no specific evaluations to capture these impacts. For example,
25 it is very difficult to measure the "cultural change" associated with the CDM education
26 and communication materials circulated by the LDCs and other agencies (see Appendices
27 E and F for details).

28
29 Hydro One Distribution undertook a special study to measure the net load impact of
30 conservation actions initiated its retail customers on their own. The results of the special

1 study show at least 99 GWh of savings in 2006 can be attributed to the conservation
2 actions from the distribution customers (see Appendix G for details).

3
4 A special CDM survey was also launched in December 2007 by Hydro One Distribution
5 to confirm what conservation actions its retail customers have undertaken since 2004. Of
6 the 4,437 customers who received the e-mail survey, 1,741 customers (39.2%) responded.
7 Detailed analysis of the survey results can be found in Appendix H. The Hydro One's
8 survey results are consistent with the survey undertaken by the OPA (see Appendix I for
9 details). Based on these survey results, it is clear that Ontario electricity consumers have
10 responded to the conservation challenge, have participated in CDM programs offered by
11 the OPA, LDCs and other government agencies and have taken various conservation
12 actions on their own to save electricity.

13 14 **4.0 CDM PROGRAMS FOR 2008 TO 2010**

15
16 For the 2008-2010 period, Hydro One Networks uses the CDM impacts provided by the
17 OPA consistent with the IPSP submitted to the Board in August 2007. Table 3
18 summarizes the CDM programs by type of initiative and Table 4 presents the CDM
19 programs by sector. Further details by region, end-use profile and program are provided
20 in Appendix J.

21

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Table 3:
Identified Saving Potential on System Peak (MW) and Energy Saving Potential (TWh)

	System Peak Savings (MW)			Energy Savings (TWh)		
	2008	2009	2010	2008	2009	2010
Energy Efficiency	116	267	623	0.7	1.5	3.5
Fuel Switching	0	0	70	0.0	0.0	2.4
Customer-based Generation	20	64	148	0.1	0.4	0.9
Conservation Behavior	0	0	0	0.0	0.0	0.0
Demand Management	115	289	566	0.0	0.0	0.1
Total Identified Savings	251	620	1407	0.8	1.9	6.9

5 Source: Ontario Power Authority IPSP Pre-filed evidence in EB-2007-0707, Exhibit D, Tab 4,
6 Schedule 1, Attachment 4, Table 3

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Table 4:
Identified Saving Potential on System Peak (MW) by Sector

	Number of Programs	Net Savings (MW)
Mass Market Programs	13	315
Commercial / Institutional Market Programs	9	410
Industrial Markets	5	360
Other Influenced CDM	2	324
Total	29	1409

11 Source: OPA LDC Web-enabled teleconference, "Conservation Portfolio Overview", Feb. 2008

12
13 Table 5 shows the profile of CDM programs expected to be in the market for each sector
14 in 2008. This table only accounts for the OPA funded programs and does not include
15 incentives offered by other agencies such as the federal government. A more detailed
16 schedule by program is provided in Appendix K.

17

1 **Table 5:**
2 **OPA Conservation Programs in 2008 by Sector**
3

	Q1 Jan - Mar	Q2 Apr - Jun	Q3 Jul - Sep	Q4 Oct - Dec
Mass Market Program	2	5	7	9
Commercial / Institutional Program	2	4	6	8
Industrial Program	0	0	0	1
Demand Response Program	3	3	3	4
Conservation / Technology Funds	2	2	2	2

4 Source: Ontario Power Authority, "A Progress Report on Electricity Supply", Second Quarter
5 2008

1 **Appendix A**

2 **CDM Results Reported by OPA in June 2008**

3

4 Table A1 summarizes the CDM results for the 2005-2007 period for various conservation
5 programs and activities in Ontario. The reported results will be subject to detailed
6 evaluation, measurement, and verification by the OPA.

7

8 **Table A1:**
9 **Cumulative CDM Results 2005 -2007**

10

Conservation Activities	Estimated Demand Reduction 2005 -2007 (MW)
Ontario Power Authority's portfolio of programs	
Mass market	130
Commercial / institutional	150
Industrial (Demand Response)	317
Customer based generation	1
LDC programs (not OPA funded)	257
Natural gas companies	38
Non- governmental and other organizations	30
IESO demand response / dispatchable load program	273
Provincial regulations	1
Federal building/ programs	117
Enwave deep lake water cooling	56
Energy management companies	21
Total	1391

11 Source: "2007 CECO Annual Report-Supplement: Conservation Results" released by the OPA in
12 June 2008, Page: 10

1 **Appendix B**

2 **CDM Results Initiated by Local Distribution Companies**

3
4 This appendix summarizes the CDM results reported to the OEB by LDCs between 2005
5 and 2007. Table B1 provides a “bottom up” view of the CDM impact for each LDC
6 between 2005 and 2007 as report on the OEB website.

7
8 **Table B1:**

9 **Cumulative LDC CDM Program Results 2005 -2007**

10

LDC	Cumulative peak in kW	Cumulative Kwh saved
Barrie Hydro	557	4,616,820
Bluewater Power	40	180,077
BrantCounty Power	151	1,603,829
Burlington Hydro	235	3,155,386
Cambridge- North Dumfries	2,149	8,469,478
Centre Wellington hydro		838,693
Chatham-Kent Hydro Inc.	83	409,873
Collus		1,791,553
E.L.K. Energy Inc	-	737,837
Enersource Missisauga	14,661	31,927,637
Enwin Powerlines	3,961	30,734,496
Eriethames Powerlines	43	422,699
Essex Powerlines Corp	3,206	5,828,515
Festival Hydro Inc	136	2,790,776
Grand Valley		289,326
Greater Sudbury Hydro	6	786,393
Grimsby Powerlines Inc	161	1,600,156
Guelph Hydro Electric Systems Inc	1,012	6,480,164
Haldimand County Hydro	173	877,698
Halton Hills Hydro	238	3,095,282
Hamilton Hydro	76	
Hawkesbury Hydro Inc	-	149,945
Horizon	4,652	40,780,228
Hydro One Brampton	985	31,997,019
Hydro One Networks	63,771	271,877,550
Hydro Ottawa	5,981	67,657,016
Innisfil Hydro	-	106,409
Kenora		14,366
Kingston Electric	91	475,824
Kitchener Wilmot Hydro Inc	2,879	16,521,354
Lakefront	-	1,953,139
Lakeland	-	1,962,497

LDC	Cumulative peak in kW	Cumulative Kwh saved
London Hydro Inc	14,491	77,471,762
Middlesex Power Distribution Corporation	45	289,563
Midland	-	1,699,368
Milton Hydro	455	1,185,995
Newmarket Hydro	1,276	5,211,394
Niagara On The Lake Hydro Inc	180	610,161
Norfolk Power	-	1,632,161
North Bay Hydro	1,409	5,880,196
Orangeville	-	683,276
Orilla	-	1,318,695
Oshawa puc	1,245	3,134,923
Ottawa river power corp	-	9,285
Parrysound	-	934,466
Peterborough Distribution Inc.	529	5,717,541
Power Stream Inc	17,131	59,680,087
Renfrew	40	258,311
Rideau St. Lawrence	-	686,807
St. Thomas Energy Inc.	147	478,788
Toronto Hydro	68,520	262,371,278
Veridian	1,811	15,967,628
Wasaga	-	934,013
Waterloo North Hydro Inc	547	2,215,637
Welland Hydro Electric System Corp	232	2,856,861
Wellington North	-	536,569
West Coast Huron	-	128,965
Westario	-	4,409,982
Whitby Hydro	736	4,022,314
Woodstock	-	3,138,979

1 Source: OEB web site for CDM results by LDCs

2

1 **Appendix C**

2 **CDM Program Results Initiated by the OPA**

3

4 This appendix summarizes the OPA program results for Ontario between 2005 and 2007.

5 Table C1 below presents the overall impacts of OPA-coordinated conservation programs

6 until 2007 by sector. For further details on a program by program basis please refer to

7 Ontario Power Authority's "A Progress Report on Electricity Conservation 2007".

8

9 **Table C1:**

10 **OPA CDM Program Results 2005 -2007**

11

	Mass Market	Commercial and Industrial	Institutional	Total
Programs in market	6	6	2	14
Summer peak demand savings (MW)	130	149	317	597
Annual energy savings (GWh)	519	208	N/A	726
Lifetime energy saving (GWh)	2,251	1,175	N/A	3,426

12 Source: Ontario Power Authority "A Progress Report on Electricity Conservation 2007", Page: 3.

13

Appendix D

CDM Program Results Initiated by Federal and Provincial Government

Tables D1 and D2 summarize the program results initiated by federal and provincial governments and other agencies between 2005 and 2007. For further details, please refer to "Overview & Analysis of Provincial & Federal Electricity Conservation & Efficiency Initiatives", available at www.powerauthority.on.ca.

Table D1:
Federal and Provincial CDM Program Results 2005 -2007 (MW)

Entity	Program	2005	2006	2007	Total
Federal	Equipment Performance Standards			480.68	480.68
	Existing Buildings Initiative	27.00	12.00	22.00	61.00
	FCM - Green Municipal Funds		12.80	25.75	38.55
	CIPEC - Industrial Energy Audit Incentive	18.91	14.46		33.37
	CIPEC - Dollars to \$ense	11.75	11.75		23.50
	Energy Star Labelling	8.29	8.29		16.58
	CIPEC - Other Achievements	7.03	7.03		14.06
	Commercial Building Incentive Program (CBIP)	3.75	6.44	3.40	13.59
	ecoENERGY for Industry - Dollars to \$ense			11.75	11.75
	ecoENERGY for Equipment			8.74	8.74
	ecoENERGY for Industry - Other CIPEC			7.03	7.03
	EnerGuide for Existing Homes	1.22	2.16		3.38
	ecoENERGY Retrofit - Homes			0.60	0.60
	ecoENERGY for Buildings and Houses - Housing			0.23	0.23
	Industrial Building Incentive Program (IBIP)	0.02	0.13		0.15
	EnerGuide for New Homes	0.03	0.11		0.15
	R-2000	0.05	0.04		0.09
Federal Totals	78.06	75.21	560.18	713.45	
Utility	3rd Tranche - Coalition of Large Distributors	15.00	97.51	22.34	134.85
	3rd Tranche - Hydro One	0.73	9.95	53.74	64.42
	Enwave - Deep Lake Water Cooling	8.95	21.72	26.04	56.70
	Union Gas - Various	9.01	9.44	10.99	29.44
	3rd Tranche - Small Distributors	3.82	17.13	4.67	25.62
	3rd Tranche - Medium Distributors	2.70	5.10	13.54	21.34
	Enbridge - Various	1.39	1.65	6.39	9.43
	Utility Totals	41.61	162.49	137.71	341.81
Non-Profit	Non-profit Totals	4.68	11.43	6.53	22.64
ESCO	ESCO Totals	6.02	6.68	8.88	21.58
Provincial	Ontario's Refrigerants Regulation			5.00	5.00
	OME - Net Metering		0.80	0.80	1.59
	Provincial Totals	0.00	0.80	5.80	6.59
Grand Totals	130.36	256.61	719.11	1106.07	

1 **Table D2:**
 2 **Federal and Provincial CDM Program Results 2005 -2007 (MWh)**
 3

Entity	Program	2005	2006	2007	Total
Federal	Equipment Performance Standards			2,640,000	2,640,000
	Existing Buildings Initiative	108,000	48,000	88,000	244,000
	CIPEC - Industrial Energy Audit Incentive	122,900	94,000		216,900
	FCM - Green Municipal Funds		51,200	103,000	154,200
	CIPEC - Dollars to \$ense	67,900	67,900		135,800
	Energy Star Labelling	48,000	48,000		96,000
	CIPEC - Other Achievements	45,700	45,700		91,400
	ecoENERGY for Ind. - Dollars to \$ense			67,900	67,900
	Comm. Building Incentive Program (CBIP)	15,019	25,747	13,589	54,355
	ecoENERGY for Equipment			48,000	48,000
	ecoENERGY for Industry - Other CIPEC			45,700	45,700
	EnerGuide for Existing Homes	10,699	18,924		29,623
	ecoENERGY Retrofit - Homes			5,250	5,250
	ecoENERGY for Buildings and Houses - Housing			2,000	2,000
	EnerGuide for New Homes	302	971		1,273
	Ind. Building Incentive Program (IBIP)	119	870		989
	R-2000	430	350		780
	Federal Totals	419,070	401,661	3,013,439	3,834,170
Utility	3rd Tranche - Coalition of Large Dist.	113,022	279,945	82,786	475,753
	3rd Tranche - Hydro One	8,865	91,149	180,535	280,549
	Union Gas - Various	60,348	70,426	85,509	216,282
	3rd Tranche - Medium Distributors	25,186	75,877	83,627	184,689
	Enwave - Deep Lake Water Cooling	23,211	38,265	60,381	121,857
	3rd Tranche - Small Distributors	15,978	51,721	14,141	81,840
	Enbridge - Various	6,458	7,659	29,621	43,738
	Utility Totals	253,068	615,041	536,600	1,404,709
ESCO	ESCO Total	27,927	32,193	40,614	100,734
Non-profit	Non-profit Total	6,310	15,709	8,137	30,155
Provincial	Ontario's Refrigerants Regulation			15,375	15,375
	OME - Net Metering		5,104	5,104	10,208
	Provincial Totals	0	5,104	20,479	25,583
Grand Totals	706,375	1,069,708	3,619,268	5,395,350	

4

5

Appendix E

CDM Programs Initiated by Other Organizations in Ontario

This appendix presents a sample of other CDM programs and educational initiatives offered by other organisations to Ontario electricity consumers in Ontario. These initiatives will have conservation impact, but results are not available from OPA yet.

Table E1:

Selected Other CDM / Educational Initiatives in Ontario

Program Name	Institution
Convenience store program	Ontario Convenience Stores Association
Compressed Air Leak Management System	Ontario Mining Association
Direct Install Small Business Pilot Project	Sustainable Buildings Canada
Direct Install Small Business Pilot Project	Greensaver
Energy Benchmarking Practices Ontario Wine Industry	Wine Council of Ontario
Energy Management University Health Network hospitals	University Health Network
Energy Management Best Practices in Multi-Use Facilities	Ontario Energy Association
Energy Star for New Homes	EnerQuality Corporation
Forest Industries Energy Manager and CDM Pilot	Ontario Forest Industries Association
Agricultural Learning Locations	AgEnergy Cooperative Inc.
Conservation Through Dialogue and Design	Association of Major Power Consumers in Ontario
Convenience Stores Conservation Pilot	Ontario Convenience Store Association
Effective Demand Side Management (DSM)	Canadian Energy Efficiency Alliance
Energy Efficiency Education Program for Trade Contractors Serving SME Sector	Energy Efficient Contractors Network
Energy Efficiency Secretariat for the College System	Association of Colleges of Applied Arts and Training of Ontario
Energy Savings & Capital Renewal Symposium	Association of Colleges of Applied Arts and Training of Ontario
ENERGY STAR® for New Homes	Enerquality
Feasibility of Expanding the Toronto Atmospheric Fund (TAF)	Clean Air Partnership
First Nations Conservation Project: Chippewas of Georgina Island	WindFall EcoWorks
Flick Off! / Unplug!: Text-Messaging Pilot	Summerhill Group
Greenlearning.ca	Pembina Institute
Market-Driven Incentives for the Residential Sector - Pilot Project	Green\$aver

Program Name	Institution
Net-Zero Energy homes - Building Capacity in Ontario	Net-Zero Energy Home Coalition
OFIA 2007 Energy Management Program	Ontario Forest Industries Association
OFIA Interim Energy Management Program	Ontario Forest Industries Association
On-farm Energy Audits	Ontario Ministry of Agriculture, Food and Rural Affairs
Pilot Energy Program (PEP) for Food Processors	Ontario Ministry of Agriculture, Food and Rural Affairs
Project Porchlight	One Change
Reduce the Juice	Power Up Renewable Energy
Restaurants and Green Grocers Energy Efficiency Pilot	Green\$aver
Rogers Centre Charette	Sustainable Buildings Canada
Skills for Energy Efficient Construction	Clean Air Partnership
Virtual Power Plant: Exploring the Potential for Aggregated Cogeneration	Canadian Energy Efficiency Alliance

1 Source: Conservation Bureau Website, www.conservationbureau.on.ca

2

Appendix F
CDM Education and Communication Programs

This appendix briefly describes the CDM education and communication programs and activities offered by Hydro One Distribution, OPA and other agencies.

Hydro One Distribution

In the past few years, Hydro One Distribution has used bill inserts, newspapers, special events, conferences and workshops, radio and TV series, fact sheets, energy efficiency guides, brochures, on-line energy audits and direct mail to promote energy efficiency and conservation. The availability of this information will help our customers build the “conservation culture”. Please visit www.PowerSaver.ca for more information.

Table F1 shows all energy conservation related bill inserts sent out to customers in 2005 by Hydro One.

Table F1:
Distribution of Bill Inserts and Energy Saving Tips in 2005

Topic	Printed and distributed pieces (000s)
Home Energy Efficiency Grant	22
Switch to Cold – 1	1,215
Switch to Cold – 2	1,215
Lighten Your Electricity Bill	1,215
Total	3,667

Source: Hydro One Communications Department

In 2006, Hydro One distributed 18% more inserts and energy saving tips with customer’s monthly bills. Table F2 below lists all the energy saving or conservation related inserts sent to customers.

Table F2:
Distribution of Bill Inserts and Energy Saving Tips in 2006

Topic	Printed and distributed pieces (000s)
Staying Connected – Winter '05	1,215
Staying Connected - Spring '06	1,215
Staying Connected - Summer '06	1,215
Power Cost Monitors	140
Power Cost Monitors v2	140
Old Shoulder Fridge Retirement	350
SmartStat P. Thermostats	25
Don't be a Fridge Magnet	22
LED Traffic Lights	1
LED Traffic Lights	1
LED Light Exchange	1
Total	4,325

Source: Hydro One Communications Department

In 2007 the number of energy saving bill inserts doubled in comparison to 2006. Table F3 provides details of inserts sent to customers in 2007.

Table F3:
Distribution of Bill Inserts and Energy Saving Tips in 2007

Topic	Printed and distributed pieces (000s)
Staying Connected - Winter 06-07	1,215
Staying Connected - Summer '07	1,215
Staying Connected - Fall '07	1,215
Smartstat thermostat, Zones 1&2	150
Online Appliance Survey	100
Cold Shoulder Fridge Retirement	1,500
10/10 Summer Savings program	950
Peaksaver thermostat program	1,215
OPA Great Refrigerator Roundup	1,500
PowerSaverPlus for Residential & Business Customers	1,500
Electricity Retrofit Incentive Program – ERIP	15
ERIP	15
ERIP promotional card on heavy stock	11
Total	10,609

Source: Hydro One Communications Department

Communication Programs Initiated by the OPA

The Ontario Power Authority has undertaken a broad range of conservation awareness activities since 2005. These include a launch of summer conservation programs, Electricity Conservation Awareness Day at Rogers Centre, a Use Electricity Wisely Wheel and a seasonal greeting card contest. The OPA also had several public appearances and media coverage is important to promote the long-term goal of building a culture of conservation. Information on these initiatives is available in “A 2007 Results – Supplement to 2007 Annual Report”, available at www.powerauthority.on.ca.

1 **Communication Programs Initiated by Other Government Agencies**

2

3 In addition, similar CDM materials and communication programs are offered by other
4 government agencies that may have an impact on customers can be found on the
5 following websites:

6

- 7 • Office of Energy Efficiency - <http://oee.nrcan.gc.ca>
- 8 • Ministry of Energy - <http://www.energy.gov.on.ca>
- 9 • Powerwise - <http://www.powerwise.ca>

10

Appendix G

Special Study to Assess Conservation Actions Initiated by Customers

Hydro One Distribution undertook a special analysis to measure the energy savings associated with conservation actions undertaken by its retail customers. This impact would be in addition to the natural conservation assumed in the load forecast. Customer conservation actions could be attributed to a numbers of reasons, including the following:

1. Conservation programs initiated by Hydro One Distribution
2. Conservation programs initiated by other government agencies such as OPA, federal and provincial governments.
3. Conservation actions initiated by customers on their own that are not captured and reported in (1) and (2).

The methodology used by Hydro One Distribution for this analysis is summarized below:

1. Hydro One Distribution created a database for 2003-2006 for customers who had billing information (and associated meter readings) covering the entire period. New customers or customers cancelling their service during this period with Hydro One Distribution were excluded. As a result, a database of over 515,000 was created. 2007 data was not analyzed because final billing data for the calendar year is not yet available.
2. Only residential customers were analyzed. General Service customers were not analyzed because they are more prone to changing economic conditions and as such it would be difficult to differentiate between changes in electricity consumption due to conservation actions or economic activities.
3. Customer electricity consumption data were normalized to take out changes due to unusual weather effects. The weather normalization methodology used by Hydro One Distribution was approved by the Board in the Distribution Cost Allocation Review (EB-2005-0317) and Hydro One's 2006 Distribution Rate case (EB-2005-0378).

- 1 4. Any changes in electricity consumption should be net of natural conservation. Two
 2 scenarios were used in this analysis:
- 3 a. Using Hydro One Distribution's estimate of natural conservation of 0.4% per
 4 year; and
- 5 b. Using natural conservation of 1% for 2006. This estimate is considered high
 6 but Hydro One Distribution is using this estimate as sensitivity analysis.
- 7 5. All program savings should be considered in order to estimate the net savings
 8 attributed to conservation actions initiated by customers on their own.

9

10 Table G1 shows the weather-normalized consumption for over 515,000 residential with
 11 good monthly billing data for 2003-2006 by customer rate class. A decline of 2.8% in
 12 energy consumption was observed for the residential customers in 2006. The decline in
 13 electricity consumption, as explained before, can be attributed to a number of reasons,
 14 including the CDM program impacts initiated by Hydro One Distribution, OPA, other
 15 government agencies, customer conservation actions on their own as well as natural
 16 conservation.

17

18 **Table G1:**
 19 **Residential and Farm Consumption 2003 – 2006**

20

Customer Class	Customer Count	2003 GWh	2004 GWh	2005 GWh	2006 GWh
Residential – High Density	195,242	2,644	2,675	2,674	2,587
Residential – Low Density	187,201	2,910	2,959	2,923	2,848
Residential – Acquired	86,383	981	982	996	973,
Urban	46,673	502	507	522	508
Total	515,499	7,037	7,123	7,115	6,916
% change for all residential customers			1.23%	-0.11%	-2.80%

21 Note: All figures are weather-normal. Only customers with complete monthly billing data for all
 22 four years are used in the analysis.

23

1 Table G2 estimates the net savings attributed to customer conservation efforts in 2006 net
 2 of all program-driven CDM results and natural conservation (using 1%). Table G3 does
 3 the same analysis using natural conservation of 0.4%. Based on this analysis, net savings
 4 of conservation efforts from Hydro One Distribution Retail customer are estimated to
 5 range from 109 GWh to 168 GWh in 2006.

6
 7 **Table G2:**

8 **Net Customer Conservation Savings Using 1% Natural Conservation**

9

Description	Percentage	Energy (GWh)
Total Energy Consumption (Residential and Farm) in 2006		11,543
Change in Energy Consumption in 2006 over 2005	-2.80%	323
Less Natural Efficiency Assumption of 1.0%	-1.00%	115
Less Impacts from Hydro One Distribution and other programs		109
CDM impact attributed to customers' own conservation actions		99

10 Note: 11,543 GWh are weather-normal residential energy load in 2006 for Hydro One
 11 Distribution Retail customers. The 109 GWh are based on residential programs analysis for
 12 2006.

13
 14 **Table G3:**

15 **Net Customer Conservation Savings Using 0.4% Natural Conservation**

16

Description	Percentage	Energy (GWh)
Total Energy Consumption (Res and Farm customers) in 2006		11,543
Change in Energy Consumption in 2006 over 2005	-2.80%	323
Less Natural Efficiency Assumption of 0.4%	-0.4%	46
Less Impacts from Hydro One Distribution and other programs		109
CDM impact attributed to customers' own conservation actions		168

17 Note: 11,543 GWh are weather-normal residential energy load in 2006 for Hydro One
 18 Distribution Retail customers. The 109 GWh are based on residential programs analysis for
 19 2006.

20

Appendix H

CDM Survey Undertaken by Hydro One

This appendix summarizes the key results of a special survey initiated by Hydro One Distribution between December 2007 and January 2008. The main objective of the survey was to assess the conservation actions, if any, undertaken by Hydro One Retail customers since 2004, particularly customer conservation actions that could not be easily captured by CDM programs initiated by Hydro One Distribution, OPA or other federal and provincial government agencies. The survey results have clearly demonstrated that Ontario residential customers are taking energy-efficiency actions on their own.

Survey Response Rate

- Total number of surveys sent out : 4,437
- Total number of responses : 1,742
- Overall response rate : 39.2%

Participation in conservation programs

Responses show increasing customer participation in CDM programs offered by Hydro One and other organisations.

Programs Offered by	2004	2005	2006	2007
Hydro One Distribution	10.5%	15.9%	30.9%	37.2%
Ontario Power Authority			5.8%	8.0%
Provincial Government			7.6%	9.7%
Federal Government			2.8%	3.7%

Spill-over effects

Survey results show in addition to using the coupons provided by Hydro One/OPA to purchase energy saving equipment, customers are buying additional products without coupons.

Equipment	With Coupons	Without Coupons	Ratio for Customers Not Using Coupons Versus Customer s Using Coupons
Compact Fluorescent Lights	4.36	10.69	2.5
LED	3.08	4.00	1.3
Timer	0.82	1.62	2.0
Motion Sensor	0.36	0.91	2.5
Dimmer	0.35	1.38	4.0
Ceiling Fan	0.51	1.49	2.9
Furnace Filter	1.21	4.82	4.0
Thermostat	0.69	0.84	1.2
Other	1.12	1.92	1.7

Conservation Culture

Results show customers are becoming increasingly aware of the need to conserve and are adopting such habits, especially starting in 2006 and 2007.

Conservation Action	2003	2004	2005	2006	2007
Use programmable thermostat	38%	42%	47%	53%	57%
Set back thermostat during the day and when away	65%	71%	75%	80%	82%
Set back thermostat during the night	63%	69%	72%	77%	80%
Turn off ac when not at home	39%	43%	48%	53%	56%
Natural cooling	68%	73%	77%	82%	85%
Maintained of ac and furnace filter	55%	59%	63%	67%	69%
Switch to non - electric space heating equipment	22%	25%	27%	29%	30%
Insulate electric water heater and pipes	34%	37%	40%	43%	46%
Use cold water doing laundry	49%	54%	62%	70%	75%
Switch to non electric water heating equipment	22%	24%	25%	25%	26%
Use CFLs or other energy efficiency lights	34%	45%	62%	76%	81%
Turn off lights when not in use	85%	90%	91%	95%	96%
Use an indoor timer	25%	27%	29%	30%	31%
Use an outdoor timer	36%	39%	43%	45%	48%
Use a dimmer switch	45%	48%	51%	53%	55%
Use a motion sensor	36%	39%	42%	45%	46%
Switch to LED holiday lights	8%	12%	23%	45%	56%
Switch to other LED lights	4%	3%	6%	11%	14%
Use timer on pool pump or heater	7%	8%	9%	10%	11%
Solar blanket	11%	12%	13%	14%	15%
Hang clothes to dry	54%	57%	61%	63%	65%
Wash dishes by hand	46%	48%	51%	53%	55%
Upgrade windows / door to prevent air leakage	32%	38%	40%	46%	48%
Air sealing and weatherization	37%	41%	47%	52%	54%
Other timers	11%	11%	12%	13%	15%

1 The following table highlights the top five conservation actions that were adopted by
 2 Hydro One Retail customers over the last 4 years. The figures in each year show the
 3 incremental change in customer adoption rate for each conservation action. For example,
 4 4% of the survey respondents said they had switched to the LED holiday lights in 2004,
 5 12% said they had switched in 2005 and another 22% of respondents said they had
 6 switched in 2006. By 2007, 56% of survey respondents said they used the LED holiday
 7 lights.

8

Conservation Action	2004	2005	2006	2007
Switch to LED holiday lights	4.0%	11.6%	21.5%	10.7%
Use Cols or other energy efficiency lights	11.4%	16.8%	13.6%	5.7%
Use cold water doing laundry	4.9%	7.8%	8.4%	4.5%
Use programmable thermostat	4.3%	4.6%	5.9%	4.3%
Upgrade windows / door to prevent air leakage	5.9%	1.8%	5.7%	1.7%

9

1 **Appendix I**

2 **CDM Survey Results Reported by the OPA**

3
4 The OPA survey results show that the conservation efforts are similar to Hydro One
5 distribution customers, indicating across Ontario most consumers are already conserving
6 electricity at home and are adopting new conservation actions as time goes by. Table II
7 compares the OPA and Hydro One CDM survey results.

8
9 **Table II:**

10 **Conservation Actions Adopted by Ontario Electricity Consumers**

11

Conservation Action	H1 CDM Survey	OPA CDM Survey
Set back thermostat	82%	84%
Use cold water doing laundry	75%	86%
Use CFLs or other energy efficiency lights	81%	88%
Turn off lights when not in use	96%	95%
Use a dimmer switch	55%	51%
Hang clothes to dry	65%	77%
Upgrade windows / door to prevent air leakage	48%	64%

12 Source: OPA 2008 Electricity Conservation Program Study July 2008, Slide 34

13

Appendix J
OPA Conservation Program Portfolio 2008–2010

Table J1:
OPA Portfolio 2008–2010 by Program

Program	Target (MW)	Net Savings (MW)
Mass Market Programs (13 programs)	451	315
New Single Family Construction Program	45	32
LDC Appliance Retirement Program	120	84
LDC Demand Response Program	108	76
LDC Redesigned Summer Savings Program	3	2
LDC Home Energy Efficiency Program	2	1
LDC Custom Programs	75	53
LDC Small Com. Direct Install Program	9	6
Aboriginal Program	3	2
Cool Savings Program	63	44
Every Kilowatt Counts Program	9	6
Community Engagement Program	6	4
New Appliance Program	8	5
Conservation Awareness	N/A	N/A
Commercial / Institutional Programs (9 programs)	587	410
Low Income Single Family Program	13	9
New Commercial Buildings Construction Program	30	21
Agricultural Program	3	2
LDC Electricity Retrofit Incentive Program	110	77
Toronto Comprehensive Program	228	159
Multi Family Buildings Program	43	30
Chiller Plant Re-commissioning Program	30	21
Institutional Buildings Portfolio Program	30	21
Fuel Switching Program	100	70
Industrial Programs (5 programs)	514	360
Industrial Energy Efficiency Program	113	79
Demand Response 1	4	3
Demand Response 2	42	29
Demand Response 3	330	231
Demand Response 4 (2009)	25	18
Other Programs and Costs		
Customer-owned Generation (RESOP and CESOP Programs)	212	148
Smart Meter Program (Administered by Government)	176	176
Total	1940	1409

7. Source: OPA LDC Web-enabled teleconference, "Conservation Portfolio Overview", Feb. 2008

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2
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4

Table J2:
OPA Portfolio 2008–2010 by Region

	System Peak Savings (MW)			Energy Savings (TWh)		
	2008	2009	2010	2008	2009	2010
Northwest	14	32	64	0	0.1	0.2
West	30	72	161	0.1	0.2	0.7
Northeast	17	42	91	0.1	0.1	0.6
Essa	17	43	96	0.1	0.1	0.5
Ottawa	15	39	97	0.1	0.1	0.6
East	15	37	83	0	0.1	0.4
GTA	80	201	478	0.3	0.7	2.5
Niagara	7	18	41	0	0.1	0.2
Southwest	55	135	296	0.2	0.4	1.3
Ontario	251	620	1407	0.8	2	6.9

5 Source: Ontario Power Authority IPSP Pre-filed evidence in EB-2007-0707, Exhibit D, Tab 4,
6 Schedule 1, Attachment 4, Table 5.

7

Table J3:
OPA Portfolio 2008–2010 by End Use Profile

	System Peak Savings (MW) in 2010	Energy Savings (TWh) in 2010
Residential	213	1.4
Space Heating SFD	0	0.1
Space Heating AP/AT	0	0.2
Room AC	8	0
Central AC	90	0.1
Furnace Fan	47	0.1
Lighting	35	1
Refrigeration	4	0
Freezer	3	0
Water Heating	5	0.1
Dish Washer	1	0
Clothes Washer / Dryer	4	0
Miscellaneous	16	0.2
Commercial/Institutional	302	1.3
Space Heating	0	0.1
Space Cooling	118	0.1
Ventilation	30	0.2
Lighting	146	0.9
Electric Auxiliary	5	0
Water Heating	3	0
Industrial	107	0.8
Process Machine Drive	45	0.4
Electrochemical Processes	1	0
Steam Production	0	0
Heat Production	38	0.3
HVAC	20	0.1
Lighting	3	0

Source: Ontario Power Authority IPSP Pre-filed evidence in EB-2007-0707, Exhibit D, Tab 4, Schedule 1, Attachment 4, Table 9.

Appendix K
CDM Programs Scheduled by OPA in 2008

	Q1 Jan - Mar	Q2 Apr - Jun	Q3 Jul - Sep	Q4 Oct-Dec
Mass Market Programs				
Great Refrigerator Roundup Program	x	x	x	x
Summer Sweepstakes		x	x	
Aboriginal Program		x	x	x
Cool Savings Rebate Program	x	x	x	x
Every Kilowatt Counts Power Savings Event		x		x
New Single Family Construction				x
LDC Home Energy Efficiency Program				x
Power Savings Blitz			x	x
LDC Custom Program			x	x
Community Engagement Program			x	x
Commercial/Institutional Programs				
High Performance New Construction		x	x	x
Electricity Retrofit Incentive Program	x	x	x	x
Toronto Comprehensive Program	x	x	x	x
Low Income Single Family Home				x
Multifamily Buildings Program			x	x
Commercial Fuel Switching		x	x	x
Building Portfolio Program				x
Chiller Plant Re-Commissioning			x	x
Industrial Programs				
Industrial Energy Efficiency Program				x
Demand Response Programs				
Demand Response 1	x	x	x	x
Demand Response 3	x	x	x	x
Demand Response 2				x
<i>peaksaver</i> ®	x	x	x	x
Conservation and Technology Fund				
Conservation Fund	x	x	x	x
Technology Development Fund	x	x	x	x

Source: Ontario Power Authority, "A Progress Report on Electricity Supply", Second Quarter 2008

Board objectives, electricity

1. (1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives:

1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.
2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry. 2004, c. 23, Sched. B, s. 1.

Facilitation of integrated power system plans

(2) In exercising its powers and performing its duties under this or any other Act in relation to electricity, the Board shall facilitate the implementation of all integrated power system plans approved under the *Electricity Act, 1998*. 2004, c. 23, Sched. B, s. 1.

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written submission or written evidence to provide it in the other language if the Board considers it necessary for the fair disposition of the matter.

40. Media Coverage

- 40.01 Radio and television recording of an oral or electronic hearing which is open to the public may be permitted on conditions the Board considers appropriate, and as directed by the Board.
- 40.02 The Board may refuse to permit the recording of all or any part of an oral or electronic hearing if, in the opinion of the Board, such coverage would inhibit specific witnesses or disrupt the proceeding in any way.

PART VI - COSTS

41. Cost Eligibility and Awards

- 41.01 Any person may apply to the Board for eligibility to receive cost awards in Board proceedings in accordance with the *Practice Directions*.
- 41.02 Any person in a proceeding whom the Board has determined to be eligible for cost awards under **Rule 41.01** may apply for costs in the proceeding in accordance with the *Practice Directions*.

PART VII - REVIEW

42. Request

- 42.01 Subject to **Rule 42.02**, any person may bring a motion requesting the Board to review all or part of a final order or decision, and to vary, suspend or cancel the order or decision.
- 42.02 A person who was not a party to the proceeding must first obtain the leave of the Board by way of a motion before it may bring a motion under **Rule 42.01**.
- 42.03 The notice of motion for a motion under **Rule 42.01** shall include the information required under **Rule 44**, and shall be filed and served within 20 calendar days of the date of the order or decision.

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- 42.04 Subject to **Rule 42.05**, a motion brought under **Rule 42.01** may also include a request to stay the order or decision pending the determination of the motion.
- 42.05 For greater certainty, a request to stay shall not be made where a stay is precluded by statute.
- 42.06 In respect of a request to stay made in accordance with **Rule 42.04**, the Board may order that the implementation of the order or decision be delayed, on conditions as it considers appropriate.

43. Board Powers

- 43.01 The Board may at any time indicate its intention to review all or part of any order or decision and may confirm, vary, suspend or cancel the order or decision by serving a letter on all parties to the proceeding.
- 43.02 The Board may at any time, without notice or a hearing of any kind, correct a typographical error, error of calculation or similar error made in its orders or decisions.

44. Motion to Review

- 44.01 Every notice of a motion made under **Rule 42.01**, in addition to the requirements under **Rule 8.02**, shall:
- (a) set out the grounds for the motion that raise a question as to the correctness of the order or decision, which grounds may include:
 - (i) error in fact;
 - (ii) change in circumstances;
 - (iii) new facts that have arisen;
 - (iv) facts that were not previously placed in evidence in the proceeding and could not have been discovered by reasonable diligence at the time; and
 - (b) if required, and subject to **Rule 42**, request a stay of the implementation of the order or decision or any part pending the determination of the motion.