EB-2005-0523

ONTARIO ENERGY BOARD

IN THE MATTER OF a proceeding initiated by the Ontario Energy Board to make certain determinations respecting conservation and demand management ("CDM") by Local Distribution Companies ("LDC") activities as described in the Electric Distribution Rates ("EDR") Handbook and Total Resource Cost ("TRC") Guide pursuant to sections 19(4) and 78 of the *Ontario Energy Board Act, 1998*.

MOTION RECORD (INCLUDING WRITTEN SUBMISSIONS) FOR POLLUTION PROBE

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December 20, 2005

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EB-2005-0523

ONTARIO ENERGY BOARD

IN THE MATTER OF a proceeding initiated by the Ontario Energy Board to make certain determinations respecting conservation and demand management ("CDM") by Local Distribution Companies ("LDC") activities as described in the Electric Distribution Rates ("EDR") Handbook and Total Resource Cost ("TRC") Guide pursuant to sections 19(4) and 78 of the *Ontario Energy Board Act, 1998*.

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Summary

Pollution Probe submits that:

1. The Ontario Energy Board has legal jurisdiction under its governing statute to order an LDC to spend funds on CDM programmes in an amount that is different from (e.g. higher than) the amount proposed by an LDC in a test year. The Board may do so on an ongoing basis, in accordance with relevant Board objectives, particularly those of economic efficiency and cost-effectiveness, and in general support of energy conservation;

2. The Board should, in the present particular context, order LDC's to increase spending on conservation (CDM) programmes, in view of the Government of Ontario's clearly stated support for conservation, the reasonableness of increased spending in view of the experience in other jurisdictions, and the track record of success of conservation programmes in the analogous natural gas sector in Ontario;

3. The Board should require LDCs to justify, with evidence, their proposed free ridership levels for all CDM programmes, on a programme by programme basis; and

4. When an LDC participates in a conservation (CDM) programme with a non-regulated third party, the LDC should only be entitled to claim the "incremental" benefits associated with its participation in the programme, that is, the benefits reasonably attributable to or resulting from its participation.

Each of these submissions is discussed in detail below.

Issue #1: Should the Board order an LDC to spend money on CDM programmes in an amount that is different from the amount proposed by an LDC in a test year and, if so, under what circumstances?

Pollution Probe submits that the Board has jurisdiction to order an LDC to spend money on conservation (CDM) programmes in an amount that is different from (e.g. higher than) the amount proposed by an LDC in a test year. Pollution Probe further submits that the Board should exercise its jurisdiction in that regard, on an ongoing basis where appropriate and necessary, in accordance with relevant Board objectives, particularly those of economic efficiency and cost-effectiveness, and in general support of energy conservation. Each of these sub-issues is dealt with below.

1. *The Board has legal jurisdiction to order CDM spending*

Pollution Probe submits that it is clear from the legislation that the Board has the legal jurisdiction and power to make an order that requires an LDC to spend money on CDM programmes in an amount that is different from the amount proposed by an LDC in a test year, particularly within the rates approval context. While the Board might not have the "freestanding" power to directly order LDCs to specifically carry out particular and detailed CDM activities, Pollution Probe submits that the Board does have a more general authority to, in effect, require certain types and degrees of activities under its rate setting powers, particularly when dealing with the potential recovery of CDM investments by LDCs through rates. It appears that the Board has previously acknowledged this position,[1] and the *Ontario Energy Board Act, 1998* (the "*OEB Act*")[2] reinforces this position. In short, the Board may set and require compliance with standards and targets related to efficiency (and conservation) in the context of setting just and reasonable rates.

The relevant key objectives of the Board for this proceeding are outlined in subsection 1(1) of the *OEB Act*:

> **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.

Section 83 complements these objectives by specifically providing measurement mechanisms that the Board may use to implicitly further these objectives.

> **Standards, targets and criteria**
> 83. (1) The Board may establish standards, targets and criteria for evaluation of performance by generators to whom section 78.1 applies, transmitters, distributors and retailers.
>
> **Regard for standards, targets**
> (2) The Board may have regard to the standards, targets and criteria referred to in subsection (1) in exercising its powers and performing its duties under this or any other Act in relation to generators to whom section 78.1 applies, transmitters, distributors and retailers, including establishing the conditions of a license.

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[1] EB-2005-0315, Decision and Order, November 22, 2005 at p. 11 [Motion Record – Tab 3, URL: http://www.oebdocs.oeb.gov.on.ca/pdf/dec_order_yorkregion_20051122.pdf].
[2] S.O. 1998, c. 15, Schedule B (as amended) [Motion Record – Tab 4].

It is also clear from other sections that the Board has general powers to make orders that apply generally or particularly, and such orders may have such conditions as the Board considers proper.[3] With respect to electricity rates specifically, the Board has clear authority to make orders approving or fixing just and reasonable rates,[4] and such orders:

> may include conditions, classifications or practices applicable to the transmission, distribution or retailing of electricity, *including rules respecting the calculation of rates*. [emphasis added][5]

The calculation of rates is intrinsically linked to the assessment of CDM programmes, particularly since a consequence is that an LDC may be entitled to modified rates due to the results of their CDM investments. As a result, all of the discussed objectives and powers of the Board apply during such an assessment (particularly those with respect to economic efficiency and cost-effectiveness of demand management as well as those regarding standards, targets, and criteria), and the net result is that the Board has the authority to order that an LDC engage in certain types and amounts of CDM spending, even if those differ from the types and amounts applied for by the LDC.

2. *Whether and when the Board should exercise its jurisdiction with respect to an LDC's CDM spending*

Since it is apparent, in Pollution Probe's submission, that the Board possesses the legal authority to make orders increasing an LDC's CDM spending within the rates context, the question arises as to whether and when the Board should exercise such jurisdiction. It is Pollution Probe's submission that the Board should exercise this jurisdiction on an ongoing basis, where appropriate and necessary, in accordance with relevant Board objectives, particularly those of economic efficiency and cost-effectiveness. These conservation related objectives are embedded in the Board's statute as ongoing goals.

Pollution Probe will not attempt to outline a general test or tests which would identify all the situations in which the Board should exercise its powers with respect to CDM spending. Instead, Pollution Probe will focus on various factual aspects of the current situation in Ontario which together entail that the Board should exercise its jurisdiction at this time.

First, the Government of Ontario has identified conservation as a clear and pressing priority, including in the LDC context. According to Premier Dalton McGuinty, Ontario must become a North American leader in conservation:

> "Our government is taking bold action to help make Ontario a North American leader in conservation.
>
> ...

[3] *OEB Act*, ss. 19(2) and 23(1) [Motion Record – Tab 4].
[4] *OEB Act*, s. 78(3) [Motion Record – Tab 4].
[5] *OEB Act*, s. 78(6) [Motion Record – Tab 4].

I am talking about nothing less than creating a profound shift in the culture of this province.

About moving from a culture of inefficiency to a culture of innovation.

About moving from a culture of waste to a culture of conservation.

...

But the benefits of a culture of conservation go beyond what people will see on their monthly bills.

A culture of conservation will help Ontario build a high-skills, high-tech, high-performance economy by rewarding and encouraging innovation.

This, in turn, will help stimulate investment, create jobs and build a stronger, more sustainable economy.

And an economy we can all be proud of."[6]

According to the former Minister of Energy, the Honourable Dwight Duncan, Ontario's electric utilities have a key role to play in creating a culture of conservation:

> "We believe that LDCs can and should be agents of change at the local level to promote conservation. LDCs are extremely well placed to encourage conservation and energy efficiency in the communities they serve, and we will need all their expertise, ingenuity and leadership to help build that conservation culture in Ontario." [7]

Secondly, increases in CDM spending for Ontario LDCs are reasonable when put in the context of the levels of such spending at other North American utilities. According to a report filed by OEB Staff in RP-2004-0188, C&DM spending, as a percentage of their total revenues, is between 2 and 3% for a number of North America's leading utilities. For example, it is:

- 2.47% for B.C. Hydro;
- 2.01% for Florida Power Corp;
- 3.31% for Wisconsin Power & Light Co;
- 2.26% for Connecticut Light & Power Co;

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[6] Remarks by Dalton McGuinty, Premier of Ontario, Building A Culture of Conservation, Statement to the Legislative Assembly – April 19, 2004 at p. 4 & 6, URL: http://www.premier.gov.on.ca/english/news/Energy041904_speech.asp [Motion Record – Tab 5].

[7] Notes for Remarks by the Honourable Dwight Duncan, Minister of Energy, "Choosing What Works For A Change", The Empire Club, Toronto, April 15, 2004 at p. 6, URL: http://www.energy.gov.on.ca/index.cfm?fuseaction=media.speeches&speech=15042004 [Motion Record – Tab 6].

- 3.02% for Massachusetts Electric Co; and
- 3.70% for Public Service Elec & Gas Co.[8]

Thirdly, Ontario has a great deal of practical experience and proven results in the related (although not exactly identical) field of natural gas. Under the visionary leadership of the OEB, Enbridge Gas Distribution has developed energy conservation programmes that are reducing its customers' bills by over $1 billion. Enbridge's ratio of TRC net savings (i.e. bill reductions) to utility spending is over 12 to 1,[9] which is among the very highest in North America for utility-sponsored conservation programmes.

There are positive indications that aggressive and cost-effective promotion of conservation and demand management ("CDM") by Ontario's electric utilities can similarly provide huge bill reductions for Ontario consumers, including by reducing the need to build expensive new electricity generating stations.

Therefore it is Pollution Probe's submission that the OEB should direct Ontario's electric LDCs to raise their *customers'-side-of-the-meter* CDM expenditures[10] to at least 1%, 2% and 3% of their total revenue requirements[11] by 2007, 2008 and 2009 respectively. In addition, LDCs that have the potential to cost-effectively invest an even higher level of funding on CDM should be clearly encouraged to do so.

Furthermore, it is Pollution Probe's submission that the potential for Hydro One, Hydro Ottawa, PowerStream and Toronto Hydro to cost-effectively increase their CDM expenditures in 2006 should be considered in these utilities' 2006 rates cases.

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[8] RP-2004-0188, "Overview of C&DM practices in North America and potential alternatives for Ontario", Prepared for the Ontario Energy Board by London Economics International, in Figures 1 & 2 on p. 9-10 URL: http://www.oeb.gov.on.ca/documents/edr_evidence_issuescdmv2_211204.pdf [Motion Record – Tab 7].

[9] i.e. $1,021,743,490 / $82,918,014 from EB-2005-0001, Ex. L, Tab 9, Sch. 1, Chris Neme, *Implementing Enbridge's Role in Ontario's Conservation Culture*, p.2 [Motion Record – Tab 8].

[10] i.e. demand response, energy efficiency, fuel switching and combined heat and power.

[11] i.e. distribution revenues and commodity costs.

Issue #2: Should the Board require LDCs to demonstrate free ridership levels for all CDM programmes on a program-by-programme basis?

As the Board has noted, "free ridership is a function of program design",[12] so the way a programme is designed can affect whether the free-ridership rate in the programme is higher or lower.[13] Accordingly, it may be possible to reduce a programme's free-rider rate by varying the programme's design, and, assuming everything else being equal, a programme will have greater net benefits if the programme's free-ridership rate is lower.

It is Pollution Probe's submission that LDCs should be required to demonstrate the free-ridership rates of each of their CDM programmes on a program-by-programme basis for the following reasons.

1. Evidence-based free-ridership levels create an incentive for LDCs to maximize the bill savings of their CDM programmes

As discussed in the Affidavit of Jack Gibbons,[14] the *Guide* lists 103 free-ridership rates for specific measures and custom projects that the utilities can use to calculate the net energy cost savings of their conservation programmes[15] *irrespective* of their programme's actual programme design or implementation procedures. For 101 of the 103 free-ridership rates, the *a priori* rate is 10% or less. Under the *Guide*'s procedures, a utility can use the OEB-approved low free-ridership rates to calculate the bill savings of its conservation programmes *even if the programme's actual free-ridership rate is much higher* (e.g. 90% or 100%).

Since the utilities under this approach can use the OEB approved rate even if their programme has much higher (i.e. worse) free-ridership rates, the utilities have virtually no financial incentive to minimize *actual* free-ridership rates and thus maximize the *actual* net bill savings that would result from their conservation programmes. This flaw could lead to a significant net reduction in the *actual* bill savings that are produced by the electric utilities' 2005 and 2006 conservation programmes.

As discussed in the Affidavit of Jack Gibbons,[16] assume for example that:

a) Half of the utilities' total conservation budget, namely $81.5 million, is spent on customer-side-of-the-meter conservation programmes;[17]

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[12] Appendix A, p. 6 attached to letter to All Electricity Distributors, Participants in the 2005 Conservation and Demand Management Initiative (RP-2004-0203) and Ontario Power Authority re: Total Resource Cost Guide from John Zych, Secretary, OEB, (September 8, 2005), URL: http://www.oeb.gov.on.ca/documents/cdm_appendixa_080905%20.pdf [Motion Record – Tab 9].

[13] See paras. 23-25 of the Affidavit of Jack Gibbons [Motion Record – Tab 2] for an example involving heat pumps that shows the potential variations in free-rider rates as result of the prgoramme's design.

[14] See particularly paras. 26-27 [Motion Record – Tab 2].

[15] Such as the free-rider rates for energy efficient refrigerators and air-conditioners.

[16] See particularly paras. 28-32 [Motion Record – Tab 2].

[17] The OEB has approved to date over $163 million of conservation spending by Ontario's electric utilities over a three year period ending in September 2007. [Ontario Energy Board, *News Release*, "OEB Issues

b) The conservation programmes' ratio of net bill reductions to utility spending is 12 to 1;[18]
c) The programmes' actual free-rider rates are 90% (i.e. 90% of the participants would have adopted the conservation measure even without the programmes); and
d) The OEB's *Guide* allows the utilities to calculate their bill savings assuming a 10% free-rider rate.

Under this scenario, the utilities' conservation programmes will create *actual* net bill savings for their customers of $97.8 million.[19]. However, since the OEB allows the utilities to *assume* that their free-rider rate is only 10%, their *calculated* bill savings will be $880.2 million,[20] and their *calculated* SSM incentive will be $44.01 million.[21] The result is that the *calculated* SSM incentive will equal 45% – a large portion – of the *actual* net bill savings in fact created by the utilities.[22]

However, if the utilities alternatively develop and implement excellent programmes, whose *actual* free-rider rates are 10%,[23] the *actual* net energy cost savings will be $880.2 million,[24] and the *actual* net energy cost savings will rise by $782.4 million relative to the 90% free-ridership rate.[25] However, their *calculated* SSM incentive would remain constant at $44.01 million[26] despite the large difference in *actual* net energy cost savings.

The result of applying the *Guide*'s *a priori* free-rider rates system in the above two situations is that the utilities and their shareholders will receive the *same* profit bonuses through the SSM calculations despite a very large variation in actual net energy cost savings to customers. Because their level of effort and effectiveness would make no difference to their bonus, the utilities will have no financial incentive to increase their customers' energy cost savings (by $782.4 million in the discussed example) by adopting programme designs and procedures that will lower their actual free-rider rates from 90% to 10%.

The solution is for the *Guide* to change from an *a priori* or preset free-ridership rate system to an evidence-based system so that the utilities must provide evidence to back up the free-ridership rates they have used.

Total Resource Cost Guide for 2005 and 2006 Conservation and Demand Management Plans", September 8, 2005, URL: http://www.oeb.gov.on.ca/documents/press_release_080905.pdf [Motion Record – Tab 10]]

[18] Enbridge Gas Distribution is forecasting that its 2005 conservation programmes will have a ratio of net bill reductions to utility spending of 12 to 1. [See footnote 9 and EB-2005-0001,Ex. L, Tab 9, Sch. 1, Chris Neme, *Implementing Enbridge's Role in Ontario's Conservation Culture*, p. 2 [Motion Record – Tab 8].

[19] i.e. $81.5 million x 12 x (1-0.9).

[20] i.e. $81.5 million x 12 x (1-0.1).

[21] i.e. $880.2 million x 5%.

[22] i.e. $44.01 million / $97.8 million.

[23] i.e. 90% of the programme's participants would not have undertaken the measure in the absence of the programme.

[24] i.e. $81.5 million x 12 x (1-0.1).

[25] i.e. $880.2 million - $97.8 million.

[26] i.e. $880.2 million x 5%.

2. *Evidence-based free-ridership rates are necessary to determine the magnitude of the CDM programme's actual MW and MWh savings*

If the Board does not require the LDCs to use evidence-based free-rider rates on a programme by programme basis, we will also not know the magnitude of the actual MW and MWh savings that LDCs are producing. In the extreme, they will be providing no net reduction in MW or MWh if their actual free-rider rates are 100%.

In its *18-Month Outlook: An Assessment of the Reliability of the Ontario Electricity System*, the Independent Electricity System Operator ("IESO") noted that while conservation programmes can increase our security of supply, "the impact of new conservation initiatives is as yet difficult to forecast" and therefore their effects are not included in its demand forecast.[27] In other words, if the MW and MWh benefits of CDM programmes are not accurately measured, the IESO will not endorse reductions to expenditures on supply-side investments.

In addition, the IESO is proposing to establish a reliability demand response programme to increase Ontario's security of supply during the summer of 2006. Moreover, according to the IESO's draft demand response proposal, it will only purchase demand reductions that are "measurable and verifiable".[28]

Thus, one of the important potential benefits to customers and to Ontario of effective conservation (CDM) programmes – the possibility of saving money on expensive new generation options – is undermined if the energy savings are not seen to be credibly measured and demonstrated.

It is accordingly Pollution Probe's submission that the OEB must also ensure that the MW and MWh savings of the LDCs' CDM programmes are measurable and verifiable.

If the use of evidence-based free-rider rates reveals that particular conservation (CDM) programmes of an LDC are providing real MW and MWh savings, then these programmes can be expanded to increase Ontario's security of supply. On the other hand, if particular programmes are not providing any real net savings, they should be discontinued immediately, and replaced with other programmes.

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[27] IESO, *18-Month Outlook: An Assessment of the Reliability of the Ontario Electricity System* (September 27, 2005), p. iv, URL: http://www.ieso.ca/imoweb/pubs/marketReports/18MonthOutlook_2005sep.pdf [Excerpt attached as Exhibit C to the Affidavit of Jack Gibbons [Motion Record – Tab 2-C]].

[28] IESO, *IESO Reliability Measures 2006: Proposed Reliability Demand Response Program*, (November 22, 2005), p. 3, URL: http://www.ieso.ca/imoweb/pubs/consult/se8/se8_dr-20051122-RDRP-draft.pdf [Motion Record – Tab 11].

3. *Evidence-based free-ridership rates are necessary to determine if the CDM programmes are cost-effective*

Evidence-based free-ridership rates are a prerequisite for determining if the LDCs' CDM programmes are reducing their customers' bills. In the extreme situation of actual free-rider rates being 100%, LDCs will be simply increasing bills and providing no net MW or MWh savings.

The Board has a statutory mandate to ensure that the LDCs' expenditures are cost-effective and in the best interests of their customers.[29] Pollution Probe submits that it is difficult if not impossible for the Board to carry out this mandate effectively for conservation programmes unless it requires LDCs to use evidence-based free-rider rates to calculate the cost-effectiveness of their CDM programmes.

If evidence-based inputs reveal that the CDM programmes are cost-effective (and might cost-effectively be expanded), the Board can direct LDCs to increase their conservation (CDM) budgets in order to achieve additional bill reductions for consumers and to increase the competitiveness of Ontario's industries. On the other hand, particular programmes should be cancelled if the evidence-based inputs reveal that LDCs are not capable of implementing those CDM programmes cost-effectively.

4. *Evidence-based free-ridership rates are necessary to identify and expand or spread conservation (CDM) best practices*

In order to permit Ontario to obtain the maximum possible security of supply and bill reduction benefits from the LDCs' CDM programmes, it is essential that the best and most effective CDM programmes are identified. This will permit the expansion, and adoption by other LDCs, of programmes that incorporate best practices and allow the elimination of poor quality programmes.

However, the TRC benefits of all the CDM programmes must be calculated using evidence-based inputs, including evidence-based free-rider rates, in order to be able to identify the best CDM programmes.

5. *Evidence-based free-ridership rates are necessary to prevent the LDCs from earning excessive CDM profit bonuses*

The Board has ruled that the LDCs are eligible for conservation profit bonuses equal to 5% of the bill savings that their CDM programmes create for their customers.[30]

It is Pollution Probe's submission that a conservation profit bonus equal to 5% of the *actual* bill savings that the LDCs create for their customers is just and reasonable. However, as we have noted in sub-section #1 above, if the CDM programmes' actual free-rider rates are 90% and the Board allows the LDCs to calculate bill savings under the

[29] *OEB Act*, s. 1(1) [Motion Record – Tab 4].
[30] See *e.g.* the Affidavit of Jack Gibbons at paras. 11-13.

false assumption that their free-rider rates are 10%, the LDCs' profit bonuses would equal 45%, rather than 5%, of the actual bill savings.

It is Pollution Probe's submission that a conservation profit bonus equal to 45% of the *actual* bill savings would not be just and reasonable.

As we have already noted, the OEB has a statutory mandate to protect Ontario's electricity consumers.[31] It is Pollution Probe's submission that the use of evidence-based free-rider rates is an important and necessary tool for the Board's fulfillment of that part of its consumer protection mandate in this context.

Issue #3: Should an LDC only be entitled to claim incremental benefits associated with its participation in a CDM programme with a non-rate regulated third party?

It is Pollution Probe's submission that an LDC should only be entitled to claim the "incremental" benefits associated with its participation in a CDM programme with a non-rate regulated third party (e.g., NRCan) for the reasons below. The principle of "incremental" benefits helps ensure that LDC's claim benefits for only the conservation that they have actually helped bring about.

1. Only claiming "incremental" benefits is a prerequisite for ensuring that the LDCs do not earn excessive conservation profit bonuses.

The example discussed in the Affidavit of Jack Gibbons is helpful to understand the rationale for Pollution Probe's submission,[32] so assume that:

a) In the absence of any co-marketing by Utility A, NRCan's conservation programme will reduce the energy costs of Utility A's customers by $100 million; and
b) If the programme is co-marketed by Utility A, the programme will reduce the energy costs of Utility A's customers by $101 million.

If Utility A is allowed to claim 100% of the programme's benefits, it will earn a conservation bonus of $5.05 million.[33] The result would be that the utility's conservation profit bonus would equal 505% of the incremental bill savings that it has created for its customers.[34] Pollution Probe submits that such a result is not "just and reasonable". Furthermore, this excessive profit bonus will entail that the utility's conservation programme is increasing, not reducing, its customers' bills in *actual* terms, and such an outcome would not be economically efficient, cost-effective, or in the best interests of Ontario's ratepayers.

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[31] *OEB Act*, s. 1(1) [Motion Record – Tab 4].
[32] See particularly paras. 39-42 [Motion Record – Tab 2].
[33] i.e. $101 million x 5%.
[34] i.e. $5.05 milllion / $1 million.

On the other hand, if Utility A is only allowed to claim the "incremental" benefits associated with its participation in a CDM programme with a non-rate regulated utility, its conservation profit bonus will be $50,000.[35] In Pollution Probe's submission, such a result would be "just and reasonable".

2. *Only claiming incremental benefits is a prerequisite for ensuring that the LDCs will pursue the conservation opportunities which will maximize the bill savings for their customers.*

Another example is helpful for this topic, so assume that:

a) In the absence of any co-marketing by Utility A, NRCan's conservation programme will reduce the energy costs of Utility A's customers by $100 million;
b) If the programme is co-marketed by Utility A, the programme will reduce the energy costs of Utility A's customers by $101 million;
c) Utility A has the opportunity to implement a stand-alone conservation programme which will reduce its customers' bills by $10 million; and
d) Utility A can only afford to implement one of the above noted conservation programmes.

To provide its customers with the maximum possible incremental bill savings Utility A should implement the stand-alone program, which would provide to the customers net bill savings of $10 million *instead of* the $1 million of incremental bill savings that would be provided by the joint NRCan program.

However, if Utility A can claim 100% of the benefits of a joint programme with a non-rate regulated third party, the NRCan conservation programme would increase its conservation profit bonus by $5.05 million[36] compared to the stand-alone programme's conservation profit bonus of $500,000,[37] despite the fact that it provides the larger incremental bill savings for its customers. The result is that the Board's status quo allocation rule creates a perverse profit incentive that is not just and reasonable, cost-effective, or economically efficient.

Accordingly, the utility's conservation profit incentive must be a function of the "incremental" benefits that are created by the utility in order to align the interests of the utility's shareholders and customers in a just and reasonable manner.

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[35] i.e. $1 million x 5%.
[36] i.e. $101 million x 5%.
[37] i.e. $10 million x 5%.

Replies to Issues Raised by Other Parties' Correspondence and Evidence

Pollution Probe submits the following replies with respect to various issues raised by other parties in their correspondence regarding the topics discussed in this matter.

1. *Reply to the Electricity Distributors Association*

Mr. Moran, on behalf of the Electricity Distributors Association, implied that Pollution Probe opposes the pre-approval of free-rider rates by the Board.[38] However, it is submitted that this is not nor has it ever been Pollution Probe's position, and Pollution Probe has never suggested so.

In Pollution Probe's previous Notice of Motion prior to the commencement of this proceeding, paragraph 1(a)(ii) of the relief sought explicitly states that:[39]

> "The *Guide* be revised to provide that if a utility *wishes to obtain approval for the free-rider rate(s)* of one or more of its conservation programmes, it must provide the OEB with evidence to support the reasonableness of its proposed free-rider rate(s) *prior to programme implementation*, or alternatively, it must provide evidence to support the reasonableness of its estimated free-rider rates when it submits its SSM claim after the end of its fiscal year." [emphasis added]

It is clear from this paragraph that Pollution Probe's position is that pre-approval of free-ridership for a programme can occur if it is evidence-based. Furthermore, it is Pollution Probe's submission that if a utility obtains pre-approval for a free-rider rate for a specific CDM program, the utility can use the pre-approved rate, at the end of the year, to calculate the programme's TRC net benefits and the utility's SSM reward.

2. *Reply to Todd Williams*

In summary, Todd Williams, Hydro One's witness, suggests that requiring the LDCs to demonstrate free-ridership rates on a programme by programme basis will delay programme implementation, divert funds from programme implementation, reduce customer savings and potentially jeopardize the realization of the government's CDM targets.[40]

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[38] See letter dated November 7, 2005 to the Board Secretary from David Moran re: Pollution Probe's Motion requesting amendments to the Board's Total Resource Cost Guide [Motion Record – Tab 12].
[39] Notice of Motion by Pollution Probe dated October 14, 2005 regarding free-ridership rates and joint programme attribution in the *TRC Guide* [Motion Record – Tab 13]. See also the Affidavit of Jack Gibbons, para. 33(b) [Motion Record – Tab 2].
[40] Affidavit of Todd Williams at para. 31: "In essence, I expect that requiring LDCs to demonstrate free ridership on a program by program basis will delay implementation of CDM programs and divert funds from program implementation. Both of which will reduce the level of customer savings, which could also jeopardize realization of the government's CDM targets" [Motion Record – Tab 14; See also URL: http://www.oeb.gov.on.ca/documents/cases/EB-2005-0523/honi_affidavit_141205.pdf].

Pollution Probe submits that such concerns may result from too short-sighted or short-term a view of conservation programmes.

The Government's objective is for LDCs to develop innovative and cost-effective CDM programmes that will reduce customers' bills and make Ontario's economy more competitive. However, Pollution Probe believes that the development of innovative and cost-effective CDM programmes is not child's play. It is very possible that conservation (CDM) programmes, if not done wisely, could be ineffective and wasteful. Effective and optimal programmes require substantial insight, good judgment, and intelligent risk-taking. They require good management of staffing, administrative and organizational aspects of programme implementation. They often require careful technology and market research, including the estimation of free-rider rates, with significant allocation of resources for these purposes. For example, Union Gas' customer research and evaluation budgets constitute about 8% of its total proposed DSM spending for 2006.[41]

If electric utilities start implementing their CDM programmes without doing adequate research and analysis with respect to free-rider rates and other relevant factors, their programmes are unlikely to be as cost-effective as they should be. In the extreme, their CDM programmes could be a total waste of money.

Pollution Probe believes that investing time and money in good conservation (CDM) programme development is an investment that will pay off. The result will be conservation programmes that deliver results, that do not waste money, and that can be replicated by other LDCs, that can be expanded, and that will save customers money. Pollution Probe submits that this is part of the movement to a "culture of conservation" which the Premier has committed to.[42]

It is therefore Pollution Probe's submission that requiring the LDCs to develop evidence-based free-rider rates is a prerequisite to, not an impediment to, increasing their customers' savings and realizing the province's CDM targets.

3. *Reply to David Heeney*

According to David Heeney, the LDCs will have no incentive to partner with non-rate regulated third parties if they can only claim the incremental benefits of their participation in joint CDM programmes:

> "The provincial government has a policy of encouraging partnerships and synergies between LDCs and other non-regulated third parties. If the utility can

[41] i.e. ($760,000 + $300,000) / $13,743,000 from EB-2005-0507, Appendix B, p. 27, Table 5 [Motion Record – Tab 15].
[42] Remarks by Dalton McGuinty, Premier of Ontario, Building A Culture of Conservation, Statement to the Legislative Assembly – April 19, 2004 at p. 4, URL: http://www.premier.gov.on.ca/english/news/Energy041904_speech.asp [Motion Record – Tab 5].

only claim the incremental benefits, there is no incentive to partner with these non-rate regulated third parties."[43]

Pollution Probe respectfully submits that this statement is mistaken. Under an incremental benefits allocation rule, an LDC will still have an incentive to partner with a non-rate regulated third party, because it still stands to earn a profit bonus (albeit not as large a bonus as under the – unjustified, in Pollution Probe's view – alternative rule). The profit bonus will be available only if the LDC's course of action will increase the total TRC net benefits of the joint CDM programmes and this, Pollution Probe submits, is the correct public policy. What the LDC would not receive are conservation profit bonuses for conservation that is not attributable to its participation in the joint CDM.

Conclusion

Pollution Probe therefore respectfully submits that:

1. The Ontario Energy Board has legal jurisdiction under its governing statute to order an LDC to spend funds on CDM programmes in an amount that is different from (eg. higher than) the amount proposed by an LDC in a test year. The Board may do so on an ongoing basis, in accordance with relevant Board objectives, particularly those of economic efficiency and cost-effectiveness, and in general support of energy conservation;

2. The Board should, in the present particular context, order LDCs to increase spending on conservation (CDM) programmes, in view of the Government of Ontario's clearly stated support for conservation, the reasonableness of increased spending in view of the experience in other jurisdictions, and the track record of success of conservation programmes in the analogous natural gas sector in Ontario;

3. The Board should require LDCs to justify, with evidence, their proposed free ridership levels for all CDM programmes, on a programme by programme basis; and

4. When an LDC participates in a conservation (CDM) programme with a non-regulated third party, the LDC should only be entitled to claim the "incremental" benefits associated with its participation in the programme, that is, the benefits reasonably attributable to or resulting from its participation.

[43] Affidavit of David Heeney, Exhibit B, p. 12 [Motion Record – Tab 16-B]. Also at URL: http://www.oeb.gov.on.ca/documents/cases/EB-2005-0523/lien_evidence_141205.pdf

Costs

Pollution Probe submits that it has participated responsibly and reasonably in this proceeding, and has contributed to the Board's understanding of the issues. It is Pollution Probe's respectful request that it be awarded 100% of its reasonably incurred costs of participating in this proceeding. As the Board is aware, Pollution Probe has no pecuniary interest in the outcome of this proceeding.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

December 20, 2005

Murray Klippenstein, Counsel for Pollution Probe

Basil Alexander, Counsel for Pollution Probe

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File No. RP-2004-0188

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 the preparation of a handbook for electricity distribution rate applications [2006 Electricity Distribution Rate Handbook].

AFFIDAVIT OF JACK GIBBONS

(Affidavit Supporting Motion by Pollution Probe)

I, **JACK GIBBONS**, of the City of Toronto in the Province of Ontario, **MAKE OATH AND SAY:**

A. Introduction

1. I am an economist and a consultant to Pollution Probe and Director of the Energy Programme at Pollution Probe. I have provided evidence at OEB hearings on at least 10 occasions, and I am a former Toronto Hydro Commissioner. Attached as Exhibit "A" is a current copy of my *curriculum vitae*.

2. Except where I obtained information from other sources, I have personal knowledge of the matters discussed here. In cases where I obtained information from other sources, I state the sources of such information (including my references in square brackets), and I declare that I verily believe all such information to be true.

3. I swear this affidavit in support of the motion being brought by Pollution Probe with respect to free-ridership rates and joint programme attribution, and I do not swear this affidavit for any improper purpose.

B. Background to Pollution Probe's December 2004 Motion

4. On November 25, 2003, Ontario's then Energy Minister, the Honourable Dwight Duncan, announced that Ontario's electric utilities would be able to earn their full commercial return on capital effective March 1, 2005 if they reinvested "the equivalent of one year of these monies in conservation and demand management initiatives" [Ontario Ministry of Energy, News Backgrounder, "Ontario Energy Board Amendment Act Highlights Of The Proposed Changes", (November 25, 2003)]

5. However, at the time of Minister Duncan's announcement, the Ontario Energy Board's ("OEB's") status quo regulatory rules financially penalized electric utilities which reduced their customers' bills by helping their customers increase their energy efficiency. Specifically, the OEB's rules linked the utilities' distribution revenues and profits to their distribution volumes in kW and kWh. The higher their distribution volumes were, the higher their profits would be. Conversely, each kWh saved on the customers side-of-the-meter reduced a utility's profits.

6. Therefore, under the 2003 status-quo rules, it was not in the utilities' financial self-interest to spend their conservation and demand management monies in a manner which would provide the maximum possible electricity and bill savings for their customers. Specifically, it was in the utilities' financial self-interest to spend their conservation monies exclusively on utility side-of-the-meter conservation projects which would reduce their internal costs and not reduce their revenues and profits. Moreover, if they were to implement customer side-of-the-meter conservation programmes, it was in their financial self-interest to

implement programmes which would have only the minimum acceptable level of electricity and bill savings for their customers.

7. As a consequence, on November 12, 2004, Pollution Probe brought a motion asking the OEB for an Order establishing guidelines for a Lost Revenue Adjustment Mechanism ("LRAM") and a Shared Savings Mechanism ("SSM") for Ontario's electric utilities, which would permit such utilities to apply in a subsequent rate year for financial allowances in support of their fiscal 2005 energy conservation programmes.

8. An LRAM permits a utility to recover, in a subsequent rate year, the lost distribution revenues (plus carrying costs) that they experience as a result of their energy conservation programmes.

9. However, while an LRAM eliminates a "negative incentive" by removing a financial penalty for promoting conservation on the customer side-of-the-meter, it does not provide a utility with a "positive incentive" to aggressively and cost-effectively promote energy conservation.

10. An SSM, which provides the utility's shareholder with a small fraction (e.g. 5%) of the total net bill savings that are created by the utility's customer side-of-the-meter conservation programmes, can provide a utility with a positive incentive to develop and implement aggressive, innovative, and cost-effective customer side-of-the-meter conservation programmes.

C. The Board's Decision regarding Electricity Sector Conservation Incentives

11. In its landmark December 7, 2004 decision, the OEB, in response to Pollution Probe's motion, made the promotion of energy conservation profitable for Ontario's more than 80 electric utilities for the 2005 fiscal year. Specifically, the OEB approved Pollution Probe's LRAM and SSM proposals:

> With respect to incentive plans, or SSM as it's described, the Board proposes to adopt the plan put forward by Pollution Probe. The 5 percent figure appears to be reasonable in the circumstances. [RP-2004-0203, Transcript Volume 1, 7 December 2004, para. 23]

12. Pollution Probe's proposal is described in paragraph 17 of my affidavit supporting Pollution Probe's motion:

> It is accordingly my view from an economic and regulatory perspective that in order to create effective conservation promoting economic incentives in the electricity distribution sector, and to do so as soon as possible, an electric utility should be permitted to apply for a Shared Savings Mechanism (SSM) incentive beginning with fiscal 2005. The incentive for fiscal 2005 would be applied for subsequent to the year, and would be equal to a small fraction (e.g., 5%) of the total net bill savings that are created by the utility's fiscal 2005 "customer-side of the meter" conservation programmes.

13. On page 110 of its *RP-2004-0188 Report of the Board* (2005 May 11), the Board re-confirmed this shared savings incentive for fiscal year 2006.

D. The Board's Implementation of the Incentives – The Total Resource Cost Guide

14. On December 10, 2004, the Board approved applications by certain utilities to invest in conservation and demand management ("CDM") on the condition that the applicants file quarterly and annual reports including cost benefit analyses on their CDM initiatives.

15. This condition of approval became standard to all approvals of utility funds for CDM. Overall, the Board has approved over $163 million worth of CDM plans to be implemented by the utilities over a three year period ending in September 2007.

16. On September 8, 2005 the OEB issued its *Total Resource Cost Guide* (the "*Guide*" or "*TRC Guide*") which outlines the required analysis and techniques to perform a Total Resource Cost ("TRC") Test cost benefit analysis.

17. The net benefits calculated according to the TRC Test measures the net energy cost savings created by the utilities conservation programmes. According to the SSM, 5% of the net TRC Test benefits are to accrue to the utilities' shareholders as conservation profit bonuses.

E. The *TRC Guide*'s treatment of free-ridership rates and joint programme attribution rates.

18. The *Guide's* proposals with respect to free-ridership rates and joint programme attribution rates dramatically reduce the utilities' incentive to achieve the maximum possible energy cost savings for their customers and/or permit the utilities to earn excessive shareholder incentives. Attached as Exhibit "B" are the relevant excerpts from the *Guide*.

a) Free-ridership rates

19. The net kWh savings of a utility-sponsored energy conservation programme can be described with the following formula:

Savings = (UATES) x (NUD) x (1-FRR)

Where: Savings = kWh/year
UATES = Unit Annual Total Energy Savings
NUD = Number of Units Delivered
FRR = Free-ridership Rate

20. As page 15 of the *Guide* notes, a free-rider is a utility programme participant who would have installed a measure on his or her own initiative even without the programme.

21. In the above formula, the net kWh savings are reduced according to the percentage of participants who would have adopted the measure without the programme. This means that, the lower the free-ridership rate is, the greater the net kWh savings associated with a utility conservation programme will be. Therefore, everything else being equal, the lower the free-ridership rate is, the greater the net energy cost savings of a conservation programme will be.

22. As the OEB has noted, "free ridership is a function of program design". [*Guide*, Appendix A, p. 6] That is, the way a programme is designed can affect whether the free-ridership rate is higher or lower, and by varying the design of a programme, it is possible to reduce a programme's free-rider rate.

23. For example, assume that a residential electric heat pump costs $10,000 and that the heat pumps' existing market share is 5%. If a utility offers a $100 rebate on the purchase of a heat pump, the free-rider rate will probably be very high (e.g. 90%) since very few people are likely to be motivated to purchase a heat pump in response to a rebate which is only equal to 1% of its purchase price. That is, virtually the only people who will collect the rebate will be people who would have purchased the heat pump without the rebate.

24. However, if a utility offers a rebate of $8,000 per heat pump, it is reasonable to assume that the free-ridership rate will be very low (e.g. 10%) since the rebate constitutes a very high proportion of the total cost of the heat pump (80%) and since the pre-rebate market share of heat pumps was very low.

25. As a consequence, if the SSM is to motivate the utilities to maximize energy cost savings, it must motivate them to design and implement programmes that will keep the free-ridership rates as low as practically possible.

26. However, the *Guide* lists 103 free-ridership rates (for specific measures and custom projects) that the utilities can use to calculate the net energy cost savings of their conservation programmes (e.g. the free-rider rates for energy efficient refrigerators and air-conditioners) *irrespective* of their programmes' actual programme design or implementation procedures. For 101 of the 103 free-ridership rates, the rate is 10% or less. Under the *Guide*'s procedures, the utility can use the OEB-approved low free-ridership rates to calculate the bill savings of its conservation programmes even if the programmes' actual free-ridership rates are much higher (e.g. 90% or 100%).

27. Since the utilities under this approach can use the OEB approved rate even if their programme has much higher (i.e. worse) free-ridership rates, the utilities have virtually no financial incentive to minimize the actual free-ridership rates and thus maximize the *actual* net bill savings of their conservation programmes.

28. This flaw could lead to a significant net reduction in the *actual* bill savings that are produced by the electric utilities 2005 and 2006 conservation programmes. For example, assume that:

a) half of the utilities' total conservation budget, namely $81.5 million, is spent on customer side-of-the-meter conservation prorammes;[1]

b) the conservation programmes' ratio of net bill reductions to utility spending is 12 to 1;[2]

[1] To-date the OEB has approved over $163 million of conservation spending by Ontario's electric utilities over a three year period ending in September 2007. [Ontario Energy Board, *News Release*, "OEB Issues *Total Resource Cost Guide* for 2005 and 2006 Conservation and Demand Management Plans", September 8, 2005]

c) the programmes' actual free-rider rates are 90% (i.e. 90% of the participants would have adopted the conservation measure even without the programmes); and

d) the OEB's *Guide* allows the utilities to calculate their bill savings assuming a 10% free-rider rate.

29. Under this scenario, the utilities' conservation programmes will create an *actual* net bill savings for their customers of $97.8 million [$81.5 million x 12 x (1-0.9)]. However, since the OEB allows the utilities to assume that their free-rider rate is only 10%, their *calculated* bill savings will be $880.2 million [$81.5 million x 12 x (1 – 0.1)] and their SSM incentive will be $44.01 million [$880.2 million x 5%]. That is, the SSM incentive will equal 45% -- a large portion -- of the actual net bill savings in fact created by the utilities ($44.01 million/$97.8 million).

30. Alternatively, if the utilities develop and implement excellent programmes, whose actual free-rider rates are 10% (that is, 90% of the programme's participants would not have undertaken the measure in the absence of the programme), the actual net energy cost savings will be $880.2 million [$81.5 million x 12 x (1 – 0.1)], and , the actual net energy cost savings will rise by $782.4 million relative to a 90% free-ridership rate [$880.2 million - $97.8 million]. However, their SSM incentive will remain constant at $44.01 million.

31. If the *Guide*'s *a priori* free-rider rates system is used in the above two situations, the utilities and their shareholders will receive the *same* profit bonuses through the SSM calculations despite a large variation in actual net energy cost savings to customers. As a result, the utilities will have no financial incentive to increase

[2] Enbridge Gas Distribution is forecasting that its 2005 conservation programmes will have a ratio of net bill reductions to utility spending of 12 to 1. [EB-2005-0001, Ex. L, Tab 9, Sch. 1, Chris Neme,

their customers' energy cost savings (by $782.4 million in the discussed example) by adopting programme designs and procedures which will lower their actual free-rider rates from 90% to 10%.

32. In my opinion, the solution is for the *Guide* to change from an *a priori* or preset free-ridership rate system to an evidence-based system. That is, utilities must provide some evidence to back up the free-ridership rate they have used.

33. My **recommendations** are accordingly as follows:

a) The *Guide's* list of 103 *a priori* free-rider rates should be rescinded;

b) If a utility wishes to obtain approval for the free-rider rate(s) of one or more of its conservation programmes, prior to programme implementation, it must provide the OEB with evidence to support the reasonableness of its proposed free-rider rate(s); and

c) Alternatively, when a utility submits its SSM claim, after the end of its fiscal year, it must provide evidence to support the reasonableness of its estimated free-rider rates.

b) Attribution rates in joint programmes

34. In some cases, a conservation programme may be more effective if it is jointly carried out between an electrical LDC and some other organization.

35. For example, Natural Resources Canada (NRCan) has developed a number of excellent conservation programmes (e.g. ENERGY STAR for New Homes) which could be co-marketed by Ontario's electric utilities.

Implementing Enbridge's Role in Ontario's Conservation Culture, p. 2.]

36. If a conservation measure is co-marketed, the question arises as to how much of the results of the conservation programme should be credited to the utility and how much to the other organization. This is particularly relevant if the utility can claim a financial bonus under an OEB approved Shared Savings Mechanism for conservation savings the utility has achieved.

37. According to page 16 of the *Guide*, a utility can claim 100% of the net benefits associated with a conservation programme which the utility jointly markets with a non-rate regulated third party (e.g. NRCan).

38. It is my opinion that this rule will permit the utilities to earn excessive SSM incentives. In effect, the utilities may get a financial bonus for conservation which they did not bring about.

39. For example, assume that:

a) In the absence of any co-marketing by Utility A, NRCan's conservation programme will reduce the energy costs of Utility A's customers by $100 million; and

b) If the programme is co-marketed by Utility A, the programme will reduce the energy costs of Utility A's customers by $101 million.

40. Under this scenario, Utility A will receive an SSM incentive of $5.05 million ($101 million x 5%) for reducing its customers' energy costs by $1 million. That is, the company's SSM incentive will be more than 5 times greater than the actual energy cost savings that it has created for its customers.

41. My **recommendation** is accordingly that the *Guide's* attribution rule should be re-written as follows: A utility can claim 100% of the *incremental* net benefits

that it creates when it co-markets a conservation programme with a non-rate regulated third party.

42. If this recommendation is accepted by the OEB, Utility A would earn a SSM incentive of $50,000 ($1 million x 5%) in the example above for co-marketing NRCan's conservation programme.

F. Timeliness of Pollution Probe's Motion

43. The Ontario Independent Electricity System Operator ("IESO") released its *18-Month Outlook: An Assessment of the Reliability of the Ontario Electricity System* on September 27, 2005. Attached as Exhibit "C" is a copy of the report's Executive Summary. According to page iii of the IESO's report:

> The peak demand of 25,414 megawatts (MW) set in August 2002 was exceeded on seven separate occasions this past summer, resulting in a new Ontario peak demand record of 26,160 MW on July 13, 2005. Sustained high temperatures and humidity levels combined with limitations on supply, both from domestic generation and imports, presented a number of challenges for the IESO in managing the reliability of the electricity system...

44. As a result of the strain on the system, the IESO was required to repeatedly activate emergency control actions. These included issuing Public Appeals for customers to reduce their use of electricity on 12 days and implementing sustained five per cent voltage reductions on August 3 and August 4 in order to reduce demand and maintain power supplies to Ontario consumers.

45. In order to avoid persistent use of emergency control actions for future conditions similar to the summer of 2005, the IESO is pursuing a number of initiatives targeted to be in place before the summer of 2006.

46. The IESO also notes that conservation measures can make a difference:

> The government has set aggressive targets for energy conservation to reduce peak electricity consumption by 5 per cent by 2007. However, because the impact of new conservation initiatives is as yet difficult to forecast, the effects of these new conservation efforts are not reflected in the Ontario demand forecast used in this Outlook. These conservation efforts can make a significant difference.

47. The IESO report, and much of the information in it, was not available at the time of earlier considerations of the *Guide*. The IESO report highlights the possible importance of electricity conservation measures and the possible importance of implementing those conservation measures as soon as possible.

48. The previously discussed issues surrounding free-ridership rates and joint programme attribution rates could affect the conservation incentives applicable to a large number of Ontario utilities in the near future. As a result, these issues may affect the degree to which many utilities bring about electricity conservation in Ontario in the near future, which in turn may effect whether or not the serious negative possibilities described in the IESO report (e.g. "persistent use of emergency control actions") can be avoided. This is therefore probably a good time to take a fresh look at the aspects of the *Guide* previously discussed.

SWORN before me at)
the City of Toronto, in)
the Province of Ontario, on)
this 14th day of October, 2005)
)
)
)
)
)
A Commissioner for taking affidavits, etc.)
Basil Alexander.

JACK GIBBONS

Curriculum Vitae

This is Exhibit A referred to in the affidavit of Jack Gibbons sworn before me, this 14th day of October 20 05

A COMMISSIONER FOR TAKING AFFIDAVITS

Jack Gibbons

Experience

Principal, Public Interest Economics
2000 – Present

Director, Energy Programme, Pollution Probe
2000 – Present

Chair, Ontario Clean Air Alliance
1997 – Present

Commissioner, Toronto Hydro
1995 – 1997

Senior Economic Advisor, Canadian Institute for Environmental Law and Policy
1989 – 2000

Project Manager, Ontario Energy Board
1985 and 1986 - 1989

Economist, Energy Probe
1979 – 1982

Education

Graduate Studies, University of British Columbia
1982 – 1984

Master of Arts, Queen's University
1979

Bachelor of Arts (Honours), University of Toronto
1977

Testimony

Mr. Gibbons has testified before the Ontario Energy Board on approximately ten occasions.

Ontario Energy Board

Commission de l'Énergie de l'Ontario

This is Exhibit B referred to in the affidavit of Jack Gibbons sworn before me, this 14th day of October 20 05

A COMMISSIONER FOR TAKING AFFIDAVITS

TOTAL RESOURCE COST GUIDE

September 8, 2005

2.0 Adjustment factors in the TRC Test

In performing a TRC analysis, several adjustments must be made to the benefits side of the equation. These adjustments include:

- free ridership of participants;
- attribution of the benefits, and
- persistence of the measures.

2.1 Free Riders

Free rider adjustments are one of the key components for the TRC test. The standard definition of a free rider is "a program participant who would have installed a measure on his or her own initiative even without the program."[10]

Costs and benefits associated with free ridership should be assessed as part of the TRC analysis. In determining overall savings, these participants are excluded from the benefits attributed to the program. The equipment costs associated with these participants is similarly excluded from cost side of the equation. [11] However, it should be noted that all program costs associated with free riders must be included in the analysis. As such, programs that have high free ridership are self-evident in the marketplace (i.e. they do not rely on a LDC promotion) and therefore are less cost effective for the LDC to pursue since the program costs are included in the TRC calculation while the benefits are not. Free rider estimates are established through market studies and initial values have been provided in the Assumptions and Measures List.

2.2 Attribution

A fundamental issue for the evaluation of CDM programs is whether the effects observed after the intervention occurs can be attributed to the intervention under evaluation (otherwise known as causality).

Since it can be expected that there will be multiple delivery points of CDM, including other electric LDCs, gas LDCs, electric retailers, gas marketers, the Ontario Power Authority and various levels of government, it is important to understand the Board's guidelines for the attribution of benefits especially in light of a potential claim for shareholder incentive.

This section outlines the guidelines for attributing benefits between OEB regulated CDM delivery LDCs and for savings associated with other resources.

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[10] Violette, Daniel M. (1995) Evaluation, Verification, and Performance Measurement of Energy Efficiency Programs. Report prepared for the International Energy Agency.

[11] Eto, J. (1998) Guidelines for Assessing the Value and Cost-effectiveness of Regional Market Transformation Initiatives. Northeast Energy Efficiency Partnership, Inc.

While attribution is not a true adjustment to the TRC test, this issue is important for those LDCs that plan on seeking a shareholder incentive. The Board advises LDCs that they are allowed to claim 100% of the benefits associated with a CDM program in which they jointly market and deliver the program with a non-rate regulated third party.

The following discussion addresses the issue of attribution of benefits of a CDM program with respect to the potential claim of a shareholder incentive from ratepayers. In the case that a shareholder incentive is recovered, it must be paid by those ratepayers who are receiving the benefits of the program, therefore, guidelines have been established to attribute the benefits of a program along geographic and industry boundaries.

2.3.1 Attribution Guidelines for CDM Programs

The formula for determining savings associated with a CDM program is:

Savings = (UATES) x (NUD) x (1-FRR)

where;

Savings – kWh/yr and/or other resource measure;

UATES – Unit Annual Total Energy Savings

NUD – Number of Units Delivered

FRR – Free Ridership Rate

In order to estimate the savings attributable to the LDC program an attribution rate is added to the previous formula to get:

Attributable Savings = (UATES) x (NUD) x (1-FRR) x (AR)

where;

AR – Attribution Rate

In most cases, the attribution rate will be 1.0, indicating that the LDC should claim in its TRC calculation all of the benefits associated with the CDM program.

The following discussion illustrates three cases where attribution may be an issue.

Case 1- Programs delivered jointly by LDCs with single energy savings (i.e. electricity):

In this case, several LDCs work together to market and deliver a CDM program. Each participating LDC is allowed to claim the benefits associated with the program (electricity and water) in their service area. The determining factors are the location of the participants and the benefits associated with the program. Therefore, in this case, the Attributable Savings would be:

$$\text{Attributable Savings} = (\text{UATES}) \times (\text{NUD}_{SA}) \times (1\text{-FRR}) \times (\text{AR})$$

NUD_{SA} - number of units delivered in a LDC's service area.

AR = 1

Case 2 – Multi energy savings in cross sector (gas and electricity) jointly delivered CDM program:

In this case, a gas and electric LDC jointly market and deliver a CDM program. Each participating LDC is allowed to claim all of the benefits associated with the energy type they distribute (i.e. gas LDCs would claim the gas savings and electricity LDCs would claim the electricity demand and energy savings). Other benefits, such as water savings, need to be allocated between the gas and electric LDC partners proportionally based on the dollar value of gas and electric TRC savings (i.e. where electricity savings represent 60% of the TRC savings of a program, the electric LDC will claim 60% of the water savings).

Case 3 - Multi energy savings in an individually delivered DSM/CDM programs:

In this case, a LDC works independently to market and deliver a CDM program. The LDC's program may have energy savings additional to the primary energy savings targeted by the program. Common examples of these are Low Flow Shower Head and Programmable Thermostat programs. In these cases, the benefits of the programs will be electricity and other resource savings (i.e. gas and water). As in Case 1, the savings formula would be:

Attributable Savings = (UATES) x (NUD) x (1-FRR) x (AR)

Where UATES incorporate the savings of other energy sources.

2.4 Persistence

Persistence is a measure of how long a CDM measure is kept in place by the customer. Persistence is important for all energy efficiency interventions as a lack of persistence can have very significant effects on overall net program savings estimates. For example, if an energy efficient measure with a 15-year lifetime is removed after only two years, most of the savings thought to result from that installation will not materialize.

There is a compelling argument for accounting for persistence in the assessment of CDM cost effectiveness, especially for measures which are easily retrofitted such as compact fluorescent light bulbs. However, at this time, LDCs should assume 100% persistence in assessing CDM cost effectiveness unless otherwise updated by the Board.

5.0 Assumptions and Measures List

The Assumptions and Measures List data were developed using secondary research, augmented by expert input as required. All data points were cross-referenced with a minimum of two sources. Where possible, recent Canadian experience and data was used. All savings data were based on an understanding of average electricity loads in typical applications in each sector. Cost data were collected from a variety of sources including retailers and distributors. Free rider values are also provided for all measures.[13]

[13] While it is recognized that free ridership is appropriately applied at the program level, the Assumptions and Measures List provides an estimate to facilitate cost effectiveness analysis.

-Appendix A-

Board's Views on Stakeholder Comments on the *Draft Guide to Total Resource Cost Analysis*

Preamble:

Further to the Board's decision of December 10, 2004 (RP-2004-0203), in the Application by the Coalition of Large Distributors[1] for approval to recover funds to be invested in conservation and demand management (CDM), the Board has developed the Total Resource Cost (TRC) Guide. In the Decision, the Board stated that:

> *The methodology with respect to that cost-benefit analysis should be determined in advance, and the Board suggests that a working group be formed with Board Staff and representatives of each of these utilities, with possible involvement from the intervenor community involved in this case. We don't want to face an argument a year from now as to what the methodology should be for this cost-benefit analysis. So in the interim we should work out the methodology, but a year from now, the Board would like to receive from each of these utilities a cost-benefit analysis on the initiatives that have been conducted up until that date.*[2]

This condition of approval became standard to all approvals of LDC funds for CDM. Overall, the Board approved $163 million worth of CDM plans to be implemented by the electricity utilities over a three year period ending in September 2007.

Pursuant to that Decision the Board commissioned a consultant to prepare the Draft TRC Guide. The TRC analysis consists of the methodology of cost benefit analysis that will be required by the Board. The Draft Guide was posted on the Board's website on July 6, 2005 and the Board received comments from the stakeholder community on or about July 18, 2005.

The Board thanks all parties for their submissions on the *Total Resource Cost Guide*; stakeholder input was valuable in developing the final version of the Guide. The Guide is designed to be a practical tool for local distribution companies (LDCs) to perform Total Resource Cost (TRC) analysis.

The Board received submissions on the Guide from Appliance Recycling Canada Inc. (ARCI), Building Owners and Managers Association of the GTA (BOMA), Cornerstone Hydro Electric Concepts Association Inc. (CHEC), Electricity Distributors Association (EDA), Enbridge Gas Distribution Inc. (Enbridge), EnerSpectrum Group (EnerSpectrum), Guelph Hydro Electric System Inc. (Guelph Hydro), Hydro One Networks Inc. (Hydro One), Pollution Probe, Total Energy Advice and Management Ltd. (TEAM), Toronto Hydro Corporation (Toronto Hydro) and Vulnerable Energy Consumers' Coalition (VECC).

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1 The six distributors include; Enersource Hydro Mississauga Ltd., Hamilton Hydro Inc., Hydro Ottawa Ltd., PowerStream Inc., Toronto Hydro Electrical System Ltd. and Veridian Connections Ltd.
2 RP-2004-0203 Decision on the CDM applications by the Coalition of Large Distributors. December 10, 2005, Paragraph 83.

effectiveness of these programs. Simplifying assumptions must be made to manage the evaluation of projects practically.

With respect to Enbridge's submission, the guidelines regarding attribution of benefits are for the purposes of making a claim for lost revenue and/or a shareholder incentive. So long as the costs, lost revenue, and shareholder incentive are recovered from those ratepayers who receive the benefit of the CDM program with no-cross subsidization, parties are free to design partnership arrangements which achieve the greatest benefit. In regard to the issue addressed by Guelph Hydro, the Board feels the issue is addressed appropriately by the Guide. Collectively, the group of gas and electric LDCs will be allowed to claim 100% of the benefits of the program. Individually, each LDC will be allowed to claim the portion of the benefits that is within its service territory and of its energy type. This situation is addressed by Cases 1 and 2 in combination.

With respect to the submission by Pollution Probe and VECC, the Board recognizes there is a potential for LDCs to claim the benefits of a program in which their involvement was minimal. However, this situation would be the exception and the Board supports the development of partnerships with third parties to create efficiencies in the delivery of CDM programs. Further, the Board has the jurisdiction to make adjustments to the incentive awards to the LDCs through its rate cases.

Persistence of Measures

VECC submitted that using a 100% persistence factor will lead to overestimates of benefits since no other adjustments have been made to the measure assumptions.

View of the Board

While persistence is likely not 100% for most measures, for practicality the Board needs to make some simplifying assumptions. The assumption of 100% persistence may be revisited by the Board when better information becomes available.

Custom Project Free Rider Rate and Assessment Requirements

Many parties made submissions concerning the use of 30% as the default free rider rate for custom projects. The EDA submitted that while the Guide gives distributors flexibility to use other testing techniques or data, some distributors are concerned with the use of the default 30% free rider rate during this period of ramping up programs. BOMA submitted that since many custom projects are likely to include measures included in the Assumptions and Measures List, which have prescribed free riders, the default value of 30% appears to be inconsistent. CHEC submitted that the default value appeared high, especially where a program participant had not taken action prior to the distributors' intervention. Hydro One submitted that since the free rider rate was established from a market study conducted by Enbridge Gas Distribution Inc., it accepts the default value, but suggests it be reviewed once reliable data and information from electric utilities became available. Pollution Probe submitted that since the free rider rate is a function

of program design, the Board should examine the program design of each custom project before assigning the free rider rate.

Enbridge submitted that the requirement that the statement "it is expected that each custom project will incorporate a professional engineering assessment of the savings" in the Draft guide may not be practical in all cases and that other methods of assessing benefits are valid. Further, Enbridge submitted that it was not clear if the savings estimates signed off by an engineer would require further scrutiny in the audit. Hydro One submitted that given the audit requirements for custom projects, the Board may wish to stress the need for utilities to factor such costs into their program planning.

View of the Board

The Board recognizes that free ridership is a function of program design, *inter alia*, and for any individual custom project the issue of freerider ship is binary. The participant would either have undertaken the measure without the distributors' involvement or it would not have (i.e. either a free rider or not). However, studies commissioned by Enbridge Gas Distribution Inc.[3] and Union Gas Limited[4] indicate on average, the level of free ridership (not including spill-over) was 30% or greater. Without better information, the Board will be guided by these values. While the Board acknowledges that setting a default rate is not perfect, if a distributor feels that these values do not accurately reflect their influence on a particular project, the distributor is free to complete a custom project free rider evaluation and file it along with its cost benefit analysis. With respect to the submission by BOMA, the Board is of the view that custom projects are those that involved customized design and engineering, rather than a combination of several measures provided in the Assumptions and Measures List which have pre-assigned savings and cost values. With respect to Pollution Probe's submission, the Board does not have the resources to complete its own evaluation of each custom project.

With respect to the assessment requirements for custom projects, the Board recognizes that there are other feasible methods to estimate benefits, however, since these projects are likely to be customized solutions which are not presented in the Assumptions and Measures List, it seems practical to require a professional engineering assessment of the savings. Lastly, with respect to Hydro One's submission, the Board feels that the Guide gives distributors appropriate guidance with respect to the costs for monitoring and evaluation.

Avoided Costs

VECC made submissions concerning the use of avoided costs. VECC submitted that the Guide does not address the issue of uncertainty in the values provided by the Avoided Cost Study. VECC also submitted that Hydro One's avoided distribution

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3 Summit Blue Consulting LLC. (2003) *Assessment of DSM Evaluation Processes for Business Markets Projects and Free Ridership Evaluation: Custom Project Attribution Evaluation Final Report.*
4 Summit Blue Consulting LLC. (2005) *Research to Establish Free Ridership Rates Final Report*

22

18-MONTH OUTLOOK:

An Assessment of the Reliability of the Ontario Electricity System

From October 2005 to March 2007

This is Exhibit C referred to in the affidavit of Jack Gibbons sworn before me, this 14th day of October 2005

A COMMISSIONER FOR TAKING AFFIDAVITS

ieso

Power to Ontario. On Demand.

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Executive Summary

This 18-month Outlook provides the Independent Electricity System Operator's (IESO) assessment of the reliability of the Ontario electricity system from October 2005 to March 2007. The assessment incorporates the most up to date forecast information available as well as integrating experience gained from past operations, especially over the past summer.

The peak Ontario demand of 25,414 megawatts (MW) set in August 2002 was exceeded on seven separate occasions this past summer, resulting in a new Ontario peak demand record of 26,160 MW on July 13, 2005. Sustained high temperatures and humidity levels combined with limitations on supply, both from domestic generation and imports, presented a number of challenges for the IESO in managing the reliability of the electricity system. Coincident with the hot weather, available hydroelectric energy production was lower than forecast in the June 2005 Outlook, frequent temperature-related environmental limitations to generation production were encountered and the extension of a few planned outages to generation aggravated the energy situation. Similarly, with the transmission system operating at its limit to support the demand, numerous temperature related limitations were encountered.

As a result of the strain on the system, the IESO was required to repeatedly activate emergency control actions. These included issuing Public Appeals for customers to reduce their use of electricity on 12 days and implementing sustained five per cent voltage reductions on August 3 and August 4 in order to reduce demand and maintain power supplies to Ontario consumers.

In order to avoid persistent use of emergency control actions for future conditions similar to the summer of 2005, the IESO is pursuing a number of initiatives, targeted to be in place before the summer of 2006. These actions include the acceleration, where possible, of planned infrastructure projects, improving the capability of existing resources and establishing an Emergency Demand Response Program similar to those of neighbouring markets. Of particular importance is increasing the certainty of capacity and energy availability through day-ahead arrangements in the wholesale electricity market. When implemented, these arrangements will provide greater certainty of intertie transactions and internal resources and provide the IESO with improved planning capability with respect to potential energy limitations.

Under normal weather conditions Ontario is expected to be able to meet its capacity and energy needs. However, during periods when the supply and demand situation is tight, such as conditions experienced this past summer, or during extreme weather conditions, Ontario will need good performance from generation within Ontario and will rely on imports from neighbouring markets. The need for continued reliance on imports underscores the urgency to address limitations affecting the ability to import.

Increased supply scheduled to come into service over the 18-month timeframe of this Outlook is expected to slightly exceed forecast load growth over the same period.

Ontario Power Generation's plans to return Pickering A Unit 1 to service in the fourth quarter of 2005 will result in an increase of 515 MW to Ontario's electricity system. In addition, eight of the 10 projects from the provincial government's Request for Proposals for Renewable Generation are expected to be available. This includes approximately 350 MW of wind generation and 117 MW of gas-fired generation. Changes to nuclear unit capability will provide an additional 100 MW over the forecast period.

Hydro One's development of the second phase of the Parkway Transformer Station is scheduled for completion by the beginning of summer 2006 and will partially address the high loading of transmission facilities in the Greater Toronto Area (GTA) in the short term. However, additional transmission reinforcement and local generation capability is urgently required to avert the need to use emergency control actions and the increased risk of load shedding within the GTA.

The need for additional supply in the west GTA has reached a critical point with a minimum of 600 MW of new supply required before summer of 2007. Contingency plans are being prepared by the IESO to manage and contain the consequences of the problem until new generation is available.

Outside of the GTA, the transmission system is expected to be adequate to supply demand under the forecast conditions studied in this Outlook, with some exceptions. In those cases, the limitations experienced over the summer of 2005 must be addressed to minimize use of emergency control actions in the future. Limitations which need to be addressed include increasing the transfer capabilities in the Windsor area, northward into the Hamilton-Burlington area, and westward from St. Lawrence Transformer Station. Transmission in these areas limited the use of available Ontario generation and/or limited imports into the province during hot-weather, high-demand periods.

The government has set aggressive targets for energy conservation to reduce peak electricity consumption by 5 per cent by 2007. However, because the impact of new conservation initiatives is as yet difficult to forecast, the effects of these new conservation efforts are not reflected in the Ontario demand forecast used in this Outlook. These conservation efforts can make a significant difference.

The IESO demand forecast has been updated to reflect actual economic, demand and weather data through to the end of July 2005. Energy demand is expected to be 156.8 terawatt hours (TWh) for 2006, a 0.9 per cent increase over the projected energy demand for 2005 (155.5 TWh). The most significant change to the forecast is increased demand for the summer of 2006. The normal weather peak demand for the winter of 2006 is forecast to be 24,272 MW and the summer peak of 2006 is forecast to be 24,234 MW.

It is worth noting that the Ontario demand exceeded the 2006 normal weather summer peak forecast value (24,234 MW) on 18 days this past summer.

The following table summarizes seasonal forecast peak demands for the Outlook period.

Season	Normal Weather Peak (MW)	Expected Seasonal Peak (MW)	Extreme Weather Peak (MW)
Winter 2006	24,272	24,889	25,791
Summer 2006	24,234	25,926	27,378
Winter 2007	24,526	25,146	26,069

While extreme weather conditions have a lower probability of occurring, history shows that even seasonally average weather will include periods of more extreme conditions comparable to those experienced for long periods over the summer of 2005. Prudent planning dictates that the system be capable of operating reliably for these conditions without significant use of emergency control actions. This requirement drives many of the changes the IESO will be targeting to have in place before summer 2006 and in the longer term.

- End of Section -

Caution and Disclaimer

The contents of these materials are for discussion and information purposes and are provided "as is" without representation or warranty of any kind, including without limitation, accuracy, completeness or fitness for any particular purpose. The Independent Electricity System Operator (IESO) assumes no responsibility to you or any third party for the consequences of any errors or omissions. The IESO may revise these materials at any time in its sole discretion without notice to you. Although every effort will be made by the IESO to update these materials to incorporate any such revisions it is up to you to ensure you are using the most recent version

Ontario Energy Board

Commission de l'Énergie de l'Ontario

Ontario

EB-2005-0315

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

AND IN THE MATTER OF the Board's authority under ss. 19(4) of the *Ontario Energy Board Act,* 1998, ss. 12.2 of the Hydro One Networks Electricity Transmission Licence and ss. 13.2 of the Distribution Licences of Newmarket Hydro Ltd., Power Stream Inc., and Hydro One Networks Inc.(Distribution).

BEFORE: Howard Wetston Q.C.
Chair and Presiding Member

DECISION AND ORDER

1. THE WRITTEN PROCEEDING

1.1 Background

Demand for electricity in York Region has grown beyond the capacity of existing electricity infrastructure serving the Region. This has been recognized by the Independent Electricity System Operator ("IESO") in several of its *10 Year Outlooks*. In the 2003 *10 Year Outlook*, the IESO stated that the high rate of load growth in the municipalities of Newmarket, Aurora, Markham, Richmond Hill, and Vaughan requires that "necessary transmission reinforcements be placed in-service as soon as possible beginning no later than April 2005."[1] In its 2004 *10 Year Outlook*, the IESO confirmed that "the ability of the existing transmission facilities to supply the rapidly growing load in the Newmarket and Aurora areas" was still an issue of immediate concern.[2] More recently, the IESO's 2005 *10 Year Outlook* stated that "The rapid increases in the load within the Newmarket – Aurora area that have been experienced are taxing the capability of the existing double-circuit line between Claireville TS and Armitage TS."[3]

The *2004 10 Year Outlook* noted that, in 2003, the York Region LDCs (Newmarket, Aurora, Markham, Richmond Hill, and Vaughan and Hydro One Networks – Distribution) and Hydro One Networks – Transmission, jointly prepared a report entitled the "York Region Supply Study: Adequacy of Transmission Facilities and Transmission Supply Plan, 2003-2013" (the "Joint York Region Study"). The participants in the Joint York Region Study unanimously concluded that the failure to take steps to increase supply "is not acceptable." According to the Joint York Region Study, failing to act "will aggravate the existing overload situation. Equipment loading will continue to increase and supply reliability will be adversely impacted in case of a contingency."[4]

In early 2005, the Board directed the utilities serving York Region – Newmarket Hydro, Aurora Hydro Connections Limited, Power Stream Inc. (Markham, Richmond Hill, and Vaughan), and

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[1] IEMO *10 Year Outlook: An Assessment of the Adequacy of Generation and Transmission Facilities to Meet Future Electricity Needs in Ontario from January 2004 to December 2013*, p. iii.
[2] IEMO *10 Year Outlook: An Assessment of the Adequacy of Generation and Transmission Facilities to Meet Future Electricity Needs in Ontario from January 2005 to December 2014*, p. 25.
[3] IESO *10 Year Outlook: An Assessment of the Adequacy of Generation and Transmission Facilities to Meet Future Electricity Needs in Ontario from January 2006 to December 2015*, p. 25.
[4] York Region Supply Study: Adequacy of Transmission Facilities and Transmission Supply Plan, 2003-2013, p. 22.

Hydro One Networks Inc.(Distribution) – (the "York Region Utilities") and Hydro One Networks Inc.(Transmission) to identify the optimal transmission and/or distribution infrastructure investment to serve York Region. This direction was made in accordance with the York Region Utilities' distribution licences which provide that[5]:

> "In order to ensure and maintain system integrity or reliable and adequate capacity and supply of electricity, the Board may order the Licensee to expand or reinforce its distribution system in accordance with the Market Rules and the Distribution System Code, or in such a manner as the Board may determine."

By letters dated April 15 and June 29, 2005 to the Board the York Region Utilities, and Hydro One Networks Inc.(Transmission) identified three potential transmission and distribution options to serve York Region:

1. **The Transmission Proposal** -- Rebuilding the existing above ground transmission facilities between Parkway TS in Markham and Armitage TS in Newmarket.
2. **The Buttonville Proposal** -- Building a 230/44 KV transformer station (TS) at the site of Buttonville TS in the Town of Markham and constructing 44 KV feeders to the Aurora/Newmarket/Stoufville area.
3. **The Holland Junction Proposal** – Building a 230/44kV TS on the Claireville TS to Brown Hill TS right of way at the Holland Marsh Junction.

The York Region Utilities' indicated that the preferred solution is the Holland Junction Proposal. The attached location map in Appendix A depicts the general location of the proposed transformer station.

On July 29, 2005, the Board requested the Ontario Power Authority (the "OPA") to provide evidence on its evaluation of the above proposals. The OPA was brought into existence on January 1, 2005 with the statutory objective, among other things, "to engage in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario."[6] In addition, the OPA has the ability to enter into contracts for electricity supply, capacity and demand management. As a result, in addition to the three proposals outlined above, the OPA was asked to advise on whether it would be preferable for it to pursue a fourth option, covering either increased generation supply or demand reduction. This can be accomplished by use of a contract between the OPA and a generator for new supply or a consumer for capacity

[5] A similar provision is in ss. 12.2 of the transmission licence of Hydro One Networks Inc.
[6] *Electricity Act*, s. 25.2(1).

or demand reduction, the costs of which will be reviewed by the Board for recovery from electricity consumers.

The OPA conducted a consultation process that consisted of a series of public meetings, five full day sessions with a working group (consisting of municipal government representatives, residents, school board representatives, business community representatives, and public interest group representatives), an elected officials forum (with an open invitation to observe for the general public), and a website for written comments. The OPA also carried out a technical review that involved a review of existing infrastructure and its adequacy in light of demand forecasts. The OPA submitted its report to the Board on September 30, 2005.

The OPA's key conclusion was that the existing infrastructure to serve York Region has not kept up with the growth of the Region. Specifically, the Armitage Transformer Station in Newmarket has a planning limit of 317 MW. It has passed that capacity in 2002 and, since that time, it has been serving beyond its planning limit. According to the OPA, "Because additional transformation capability and feeders have been required since 2002, one new [150 MW] transformer station is required immediately. The actual peak load in the Armitage TS service area was 370 MW. With a transformer planning capacity of 317 MW, this represents an existing shortfall of 53MW."

As an immediate solution to this problem, the OPA recommended that the installation of a new transformer station at the Holland Junction in King Township and associated capacitators and distribution feeders – in other words, the OPA agreed with the York Region Utilities that the Holland Junction Proposal was the preferred solution to relieve the existing capacity shortfall.

At the same time, the OPA indicated that it will be pursuing conservation initiatives in York Region. Specifically, as indicated, the OPA has the authority to contract for conservation and demand management ("CDM"). It has been directed by the government to pursue 250 MW of CDM across Ontario. The OPA's evidence is that it will issue an RFP for 20 MW of CDM in York Region specifically. The OPA stated that the CDM initiatives are in addition to, not as an alternative to the Holland Junction Proposal. The effectiveness of the CDM initiatives will influence the length of time for which the Holland Junction Proposal will be sufficient to serve growing demand in the region.

According to the OPA, the combination of the Holland Junction Proposal and the OPA's demand management initiatives will ensure adequate supply to York Region until approximately 2011, and perhaps longer, depending upon future demand growth and the results of the OPA CDM initiatives.

The OPA stated that, in order to meet the new requirements in 2011, it may bring forward proposals to procure new electrical capacity or supply, or propose the reinforcement of a transmission line serving York Region. It should be noted in this regard that the OPA also has the statutory responsibility to assess the adequacy and reliability of electricity resources and to prepare a 20 year integrated power system plan ("IPSP"). The Board understands that the OPA plans on filing its initial IPSP in 2005. The result is that, by the time it is necessary to address new supply needs in 2011, the OPA may have a number of options and proposals available to it.

1.2 Notice of Written Proceeding

The Board published a Notice of Written Proceeding to determine whether to order Hydro One and the York Region Utilities to take steps to implement the Holland Junction Proposal. That Notice also requested parties to make submissions on the appropriateness of proceeding by a written hearing. See Appendix B listing the various daily and weekly newspapers in which the Notice was published.

The following parties made submissions in this proceeding: the Green Energy Coalition ("GEC"); Pollution Probe; Steven Shrybman representing Stop Transmission Lines Over People ("STOP"); Town of Markham; Newmarket Hydro; Power Stream Inc.; Toronto Hydro Corporation; Mr. Robert Thomas Lipscombe; Mr. J. Gummersall; Town of Aurora; Mr. Brad Robinson; Township of King; the Independent Electricity System Operator (the "IESO"); Ontario Nature – Federation of Ontario Naturalists; Lake Simcoe Region Conservation Authority ("LSRCA"); Ontario Power Authority ("OPA").

2.0 SUBMISSIONS AND FINDINGS

2.1 Issue and Submissions

The Issue in this proceeding is whether the Board should exercise its authority under the York Region Utilities distribution licences to direct these utilities to implement the Holland Junction proposal.

The municipalities of York Region, and their local LDCs requested the Board to require the implementation of the Holland Junction proposal.

The Town of Markham supported the Holland Junction proposal and Town Council passed a resolution to that effect on September 27, 2005. Markham also noted its opposition to the "contingency" transmission solution that the OPA identified as a.possible solution for new supply requirements in 2011.

Newmarket Hydro emphasized the immediate need for the proposed facilities and suggested that any delays in implementing the proposed Holland Junction TS will prolong the overloading of the existing transformer station at Armitage TS.

Power Stream (the distributor serving Markham, Richmond Hill, Vaughan and Aurora)[7] supported the Holland Junction proposal, and advised the Board that certain implementation issues and implications will require resolution prior to implementation.

The Town of Aurora passed a Council Resolution in support of the preferred "integrated solution" as recommended by the OPA report, including the Holland Junction Proposal.

The IESO submitted that the Board should order the York Region Utilities to proceed with the timely development and implementation of a project plan for the Holland Junction Proposal.

The Township of King submitted a letter supporting the Holland Junction proposal, subject to a number of qualifications. The qualifications include mitigation of environmental impacts, ongoing monitoring of the OPA's CDM projects and limiting the size of the proposed transformer station to 150 MW.

Three residents opposed the proposal. Mr. John Gummersall, of the Town of Newmarket, submitted that he has many concerns regarding the proposed Holland Junction proposal regarding environmental impacts including removal of trees to accommodate construction of distribution feeders, electro-magnetic field impacts, visual impacts, noise pollution, and impacts on his property value. He advocates holding a public hearing based on his claim that the local residents did not participate in the OPA process. Mr. Brad Robinson, of of the Town of Newmarket indicated that he raises concerns on behalf of a small community just north of the proposed Holland Junction

[7] Aurora Hydro Connections Limited is now included in Power Stream Inc.

location. The expressed concerns cover electro-magnetic field impacts, increased noise levels, impact on property values, possible interference with satellite reception for televisions. Mr. Robert Thomas Lipscombe, who did not provide a return address, made a submission advocating renewable energy solution as a substitute for the proposed transformer station.

The Holland Junction Proposal was also criticized by Ontario Nature – Federation of Ontario Naturalists. It advised the Board of its property located in the vicinity of Dufferin and Miller Side Road and that this property is operated as the Cawthra Mulock Nature Reserve. Ontario Nature stated that it was not involved in the consultation process through which the OPA developed its recommendation, and that it was not informed directly by the Board in this proceeding. Ontario Nature stated that the installation of a transformer station on Hydro One's right of way may compromise the environmental surroundings of the area.

The Green Energy Coalition ("GEC") indicated that its primary interest is to ensure an optimal level of CDM in York Region. In particular, GEC argued that the Board has authority to require additional CDM efforts of the local distribution companies ("LDCs") and should require the LDCs to take additional steps.

Pollution Probe submitted in that it prefers an Oral Hearing in order to advocate aggressive promotion of CDM to help meet the electricity service needs of York Region.

Stop Transmission Lines Over People (or STOP) requested that the Board consider the OPA's report in its entirety, and not just the Holland Junction proposal. Specifically, STOP argued that the Board should have a hearing on the overall strategy or plan described by the OPA.

In response to GEC, Pollution Probe and STOP, the OPA repeated its view that CDM in York Region is out of scope of the proceedings and indicated that, in any event, it is "moving quickly to procure 20 MW of demand reduction" and that it expects to be executing contracts in February, 2006.

Toronto Hydro requested an observer status in the proceeding, and made no submissions.

The Lake Simcoe Region Conservation Authority advised the Board that it wishes to be involved in this proceeding.

2.2 Board Findings

To reiterate, the York Region Utilities' licences provide:

> "In order to ensure and maintain system integrity or reliable and adequate capacity and supply of electricity, the Board may order the Licensee to expand or reinforce its distribution system in accordance with the Market Rules and the Distribution System Code, or in such a manner as the Board may determine."

The issues in this proceeding are therefore (i) whether there is a threat to reliable and adequate capacity and supply of electricity in York Region; (ii) if so, can and should the Board direct the York Region Utilities to reinforce their systems; and (iii), if so, should the Board require the implementation of the Holland Junction proposal along with installation of capacitors on the transmission system of Hydro One Networks Inc. at the proposed Holland Junction site as described in the Phase I of the OPA report.

(i) Is there a Threat to Reliable and Adequate Supply?

As indicated earlier, the inadequacy of energy infrastructure serving York Region has been recognized by studies of the IESO and the York Region Utilities since 2003. The OPA's evidence in this case clearly demonstrates the urgency of this need. York Region is currently served by the Armitrage Transformer Station. According to the OPA:

> "Presently at Armitage TS there is transformation capability of 317 MW and the capacity to serve up to 16 feeder lines. The planning limits for the transformers have been exceeded since 2002, and there is a need for four new feeders and no positions are available. As a result, a new transformer station is required immediately, which will provide 150 MW of new capacity and eight feeder positions."

On the basis of the above, the Board is persuaded that there is a current and definite threat to the reliability and adequacy of supply in York Region.

(ii) Can and should the Board Direct the York Region Utilities to Reinforce their Systems?

The Board's authority in the face of the current and definite threat to the reliability and adequacy of supply is limited by its statutory authority. As is described in greater detail below, the Board (a) has the authority to direct transmitters and distributors to reinforce

their systems; (b) does not have the authority to direct the OPA to construct new generation or engage in conservation activities; and (c) has rate making authority to review the prudence of LDC investments through the authority of rate making. Each of these will be addressed in turn.

(a) Reinforcement of Transmission and Distribution

The York Region Utilities' licence provision excerpted above is expressly authorized by s. 70(1) (j) of the *OEB Act, 1998*, which provides that the Board may include a licence provision "requiring the licensee to expand or reinforce its transmission or distribution system in accordance with the market rules in such a manner as the IMO [now "IESO"] or the Board may determine."

(b) The OPA's Generation and Demand Management Activities

With respect to generation or demand management, the Board's authority is more limited. For example, on the generation side, the Board licences generators, but cannot compel anyone to build generation facilities. The OPA has the statutory power to enter into contracts relating to the "adequacy and reliability of electricity supply", the "procurement of electricity supply and capacity" and the "procurement of reductions in electricity demand and the management of electricity demand".[8]

As a consequence, the OPA has both the mandate to support adequacy, reliability and security of supply and the ability to enter into contracts to support new supply or demand reduction. Where the OPA enters into contracts for electricity procurement, capacity or demand management in accordance with a Board approved procurement process, or under the direction of the Minister of Energy, the OPA may recover the costs of such contracts from ratepayers without Board review. Where the OPA enters into such contracts outside of the procurement process, or in the absence of a Ministerial directive, its expenditures are reviewed by the Board.

In this case, the OPA has received a directive from the government. On June 15, 2005, the Minister directed the OPA to contract for "250 MW or more of demand side management and/or demand response initiatives across the province." In this regard,

[8] *Electricity Act*, s. 25.2(5).

the OPA's evidence states that, in accordance with this directive, it is "pursuing a target of 20 MW of demand response in addition to the aggressive pursuit of as much CDM as is economic." The OPA noted in its evidence that, "In acting under the authority of this directive, no OEB approval of the costs related to such contracts will be required."

(c) LDC Rate Making

The Board's authority respecting LDCs' CDM activities is with respect to rates. Under the Ontario Energy Board Act, 1998, the Board sets LDC rates for distribution and retail supply. The Board's current approach to rate recovery for CDM inistiatives is discussed in greater detail below. For present purposes, the key point is that rate setting authority addresses the prudence of expenditures. It does not extend to ordering LDCs to engage in specific demand management activities.

The parameters of the Board's rate making authority are set out in legislation. As indicated, the Board may direct LDCs to reinforce their distribution systems pursuant to s. 70(2)(j) of the OEB Act, 1998 and their individual licences. There is no similar provision in the Act or in their licences that provides the Board with the authority to direct LDCs to engage in CDM activities.

Instead, LDCs, like the OPA have the specific authority to engage in specific CDM activities on a voluntary basis pursuant to s. 29.1 of the Electricity Act, 1998 and s. 71 of the OEB Act, 1998. These provisions are largely identical. The former provides:

"Subject to section 71 of the Ontario Energy Board Act, 1998 and such limits and criteria as may be prescribed by the regulations, a transmitter, distributor or the OPA may

provide services that would assist the Government of Ontario in achieving its goals in electricity conservation, including services related to,

(a) the promotion of electricity conservation and the efficient use of electricity;
(b) electricity load management; or
(c) the promotion of cleaner energy sources, including alternative energy sources and renewable energy sources" (emphasis added).

As a result, like the OPA, LDCs have the ability to provide a number of CDM services at their discretion. Also like the OPA, LDCs do not require prior Board approval, and the Board does not have the authority to direct them to do so.

The Board does have extensive authority in its review of LDC expenditures for the rate making purposes. Specifically, in considering LDC distribution rates, the Board may address recovery of amounts invested in CDM initiatives. What this means is that the Board reviews CDM expenditures for prudence and cost effectiveness. In carrying out this review, the Board clearly has the legal authority to consider whether alternative CDM programs should be considered - whether they involve higher or lower expenditures than those proposed by an LDC.

For the purposes of setting rates for 2006, the Board has issued a Report that indicates that the Board would not mandate a minimum expenditure target of LDC spending on CDM programs. The Board is holding a generic proceeding to determine whether the Board should order an LDC to spend money on CDM programs in an amount that is different from the amount proposed by an LDC in a test year. This is different from requiring LDCs to engage in specific CDM activities.

In light of this, and with respect to the submissions of those who would like to see a more vigorous approach to CDM in York Region, the Board is not persuaded that an oral hearing into this matter is justified. The OPA is pursuing CDM activities in accordance with governmental direction. Moreover, as indicated above, the Board does not have the authority to order either the OPA or the LDCs to take greater measures. The Board therefore finds that an oral hearing is not required to address any CDM aspects.

In conclusion, the most effective way for the Board to address the shortage of supply in York Region is to order the reinforcement of distribution and transmission systems. As a result, given the urgent need, and given the Board's authority under its Act and the York Region Utilities' licences, the Board is satisfied that it is appropriate to direct the York Region Utilities to reinforce their systems in order to ensure and maintain system integrity or reliable and adequate capacity and supply of electricity.

(iii) Should the Board Require the Implementation of the Holland Junction Proposal?

The Board has found that there is a risk to reliability and adequacy of supply of electricity to York Region and that the appropriate response to this is an order to the York Region Utilities to reinforce their systems in accordance with their licences. The final issue is whether the Holland Junction Proposal is the best way to proceed.

The Holland Junction Proposal emerged from the Board's direction to the York Region Utilities and Hydro One Networks Inc. (Transmission) to identify possible solutions to meet the supply shortage in York Region. It was initially put forward by the York Region Utilities and Hydro One Networks Inc. (Transmission) as one of three proposals – the others being the Transmission Option and the Buttonville Option. The Board then requested the OPA to provide evidence that evaluated these three options as well as the option for the OPA to contract for purchase of electricity, capacity or demand management. The OPA's evidence is that the preferred solution is the Holland Junction Proposal. The Holland Junction Proposal will provide a solution to approximately 2011. The time frame for this solution is dependent on load growth, which will be influenced by the effectiveness of the OPA's demand management alternatives.

The OPA identified the advantages and disadvantages of the Holland Junction Proposal as follows:

> "There are several advantages to the Holland Junction TS option. The first is the availability of a site beneath the existing transmission lines allowing the station to be built quickly. The second advantage is the fact that the station would connect to the existing 230 kV Claireville to Minden lines at a point 'upstream' of the eight kilometre line tap to Armitage TS. Connecting to the 230 kV lines at this point avoids using up the capability of the line tap and results in a shorter line length to the station from the main supply point at Claireville TS. This will reduce the effects of voltage drop at the station, therefore lessening the risk of
>
> voltage collapse. The station is centrally located to growing loads and offers reasonable feeder lengths and losses. A final and very important advantage of providing this station is that it enhances the load meeting capability of the existing 230 kV lines by offering an ideal location for new capacitor banks that will support the line voltage.
>
> There are some disadvantages associated with the Holland Junction option. One being that it does not provide a new route for the additional
>
> power to Northern York Region, and therefore does not contribute significantly to diversity of supply. It does, however, offer a degree of diversity by virtue of its strategic location. Depending on switching capability, the station can be independent of the Armitage TS line tap and can be supplied from either the north or south should a major transmission line failure occur."

In addition to the physical advantage identified by the OPA, the cost of the Holland Junction proposal is significantly less than the other proposals. The York Region

Utilities' June 28, 2005 response to the Board's information request indicated that the distribution capital cost of the Holland Junction Proposal is estimated to be $13.7 million. By contrast, distribution capital costs for the Buttonville Proposal was estimated to be in the range of $46.9 to $57.3 million. The cost of the Transmission Proposal was in the range of $50 to $112 million, depending upon whether transmission lines were overhead or buried underground.

The Holland Junction proposal is supported by the municipalities and the distributors serving the region as well as the IESO.

Apart from the issue of limiting the capacity of the transformer station to 150 MW, in the Board's view, all the other concerns expressed by persons that made submissions are largely environmental in nature. As is clear from the Board's legislative mandate, and as has been confirmed by the Board on a number of occasions, the Board does not have the legal authority to review environmental issues in considering the approval of electricity projects. The environmental issues are entirely within the authority of the Ministry of Environment under the *Environmental Assessment Act*. Section 12.2(2) of that *Act* provides that "No person shall issue a document evidencing that an authorization required at law to proceed with the undertaking has been given until the proponent receives approval under this Act to proceed with the undertaking." As a result, any order or direction provided by the Board does not authorize proceeding with an undertaking until all necessary environmental approvals have been obtained.

In response to Ontario Nature's statement that it was not informed directly by the Board of this proceeding, the Board points out that the OPA's public consultation was very extensive and the Notice for this proceeding was published in eight publications covering daily and weekly newspapers including five local publications such as the Citizen which has its distribution in the Township of King and in the City of Vaughan. The Board is satisfied that the Notice and its circulation have been appropriate and sufficient.

THE BOARD THEREFORE ORDERS THAT:

1. The York Region Utilities and Hydro One Networks Inc. (Transmission) proceed, as soon as possible, with the implementation of the Holland Junction transformer station, the installation of distribution feeders as indicated in the submission to the Board dated June 29, 2005 by the York Region Utilities , and the installation

of the static capacitors at this station as set out in the OPA's report - Phase I dated September 30, 2005.

2. Hydro One Networks Inc.(Transmission) and the York Region Utilities submit to the Board, by Tuesday, December 7, 2005 a detailed implementation plan for the Holland Junction transformer station described in paragraph 1. The implementation plan shall provide a description of the scope and estimated cost of the work required by Hydro One Networks Inc.(Transmission) and by each of the York Region Utilities as well as a schedule, showing expected completion dates for key milestones.

Dated at Toronto, November 22, 2005

Original Signed By

Howard Wetston Q.C.
Chair and Presiding Member

ERRATUM SHEET

Page 5 correction:

Paragraph 2, line 6, replace 2005 with 2006

Ontario Energy Board Act, 1998

S.O. 1998, CHAPTER 15
SCHEDULE B

Notice of Currency:* This document is up to date.

*This notice is usually current to within two business days of accessing this document. For more current amendment information, see the Table of Public Statutes – Legislative History Overview.

Amended by: 1999, c. 6, s. 48; 2000, c. 26, Sched. D, s. 2; 2001, c. 9, Sched. F, s. 2; 2002, c. 1, Sched. B; 2002, c. 17, Sched. F, Table; 2002, c. 23, s. 4; 2003, c. 3, ss. 2-90; 2003, c. 8; 2004, c. 8, s. 46; 2004, c. 17, s. 32; 2004, c. 23, Sched. B; 2005, c. 5, s. 51.

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.

Board's powers, general

Power to determine law and fact

19. (1) The Board has in all matters within its jurisdiction authority to hear and determine all questions of law and of fact. 1998, c. 15, Sched. B, s. 19 (1).

Order

(2) The Board shall make any determination in a proceeding by order. 1998, c. 15, Sched. B, s. 19 (2); 2001, c. 9, Sched. F, s. 2 (1).

Reference

(3) If a proceeding before the Board is commenced by a reference to the Board by the Minister of Natural Resources, the Board shall proceed in accordance with the reference. 1998, c. 15, Sched. B, s. 19 (3).

Additional powers and duties

(4) The Board of its own motion may, and if so directed by the Minister under section 28 or otherwise shall, determine any matter that under this Act or the regulations it may upon an application determine and in so doing the Board has and may exercise the same powers as upon an application. 1998, c. 15, Sched. B, s. 19 (4).

Exception

(5) Unless specifically provided otherwise, subsection (4) does not apply to any application under the *Electricity Act, 1998* or any other Act. 1998, c. 15, Sched. B, s. 19 (5).

Jurisdiction exclusive

(6) The Board has exclusive jurisdiction in all cases and in respect of all matters in which jurisdiction is conferred on it by this or any other Act. 1998, c. 15, Sched. B, s. 19 (6).

Conditions of orders

23. (1) The Board in making an order may impose such conditions as it considers proper, and an order may be general or particular in its application. 1998, c. 15, Sched. B, s. 23.

(2) Repealed: 2003, c. 3, s. 22.

Orders by Board, electricity rates
Order re: transmission of electricity

78. (1) No transmitter shall charge for the transmission of electricity except in accordance with an order of the Board, which is not bound by the terms of any contract. 2000, c. 26, Sched. D, s. 2 (7).

Order re: distribution of electricity

(2) No distributor shall charge for the distribution of electricity or for meeting its obligations under section 29 of the *Electricity Act, 1998* except in accordance with an order of the Board, which is not bound by the terms of any contract. 2000, c. 26, Sched. D, s. 2 (7).

Rates

(3) The Board may make orders approving or fixing just and reasonable rates for the transmitting or distributing of electricity and for the retailing of electricity in order to meet a distributor's obligations under section 29 of the *Electricity Act, 1998*. 1998, c. 15, Sched. B, s. 78 (3).

Annual rate plan and separate rates for situations prescribed by regulation

(3.1) The Board shall, in accordance with rules prescribed by the regulations, approve or fix separate rates for the retailing of electricity,

(a) to such different classes of consumers as may be prescribed by the regulations; and

(b) for such different situations as may be prescribed by the regulations. 2004, c. 23, Sched. B, s. 14 (1).

Same

(3.2) The first rates approved or fixed by the Board under subsection (3.1) shall remain in effect for not less than 12 months and the Board shall approve or fix separate rates under subsection (3.1) after that time for periods of not more than 12 months each or for such shorter time periods as the Minister may direct. 2004, c. 23, Sched. B, s. 14 (1).

Rates to reflect cost of electricity

(3.3) In approving or fixing rates under subsection (3.1),

(a) the Board shall forecast the cost of electricity to be consumed by the consumers to whom the rates apply, taking into consideration the adjustments required under section 25.33 of the *Electricity Act, 1998* and shall ensure that the rates reflect these costs; and

(b) the Board shall take into account balances in the OPA's variance accounts established under section 25.33 of the *Electricity Act, 1998* and shall make adjustments with a view to eliminating those balances within 12 months or such shorter time periods as the Minister may direct. 2004, c. 23, Sched. B, s. 14 (1).

Forecasting cost of electricity

(3.4) In forecasting the cost of electricity for the purposes of subsection (3.3), the Board shall have regard to such matters as may be prescribed by the regulations. 2004, c. 23, Sched. B, s. 14 (1).

Imposition of conditions on consumer who enters into retail contract

(3.5) A consumer who enters into or renews a retail contract for electricity after the day he or she becomes subject to a rate approved or fixed under subsection (3.1) is subject to such conditions as may be determined by the Board. 2004, c. 23, Sched. B, 14 (1).

Rates

(4) The Board may make an order under subsection (3) with respect to the retailing of electricity in order to meet a distributor's obligations under section 29 of the *Electricity Act, 1998* even if the distributor is meeting its obligations through an affiliate or through another person with whom the distributor or an affiliate of the distributor has a contract. 1998, c. 15, Sched. B, s. 78 (4).

(5) Repealed: 2004, c. 23, Sched. B, s. 14 (2).

Same, obligations under s. 29 of *Electricity Act, 1998*

(5.0.1) In approving or fixing just and reasonable rates for the retailing of electricity in order to meet a distributor's obligations under section 29 of the *Electricity Act, 1998*, the Board shall comply with the regulations made under clause 88 (1) (g.5). 2003, c. 8, s. 1.

Same, Hydro One Inc. and subsidiaries

(5.1) In approving or fixing just and reasonable rates for Hydro One Inc. or a subsidiary of Hydro One Inc., the Board shall apply a method or technique prescribed by regulation for the calculation and treatment of transfers made by Hydro One Inc. or its subsidiary, as the case may be, that are authorized by section 50.1 of the *Electricity Act, 1998*. 2002, c. 1, Sched. B, s. 8; 2003, c. 3, s. 52 (2).

Same, statutory right to use corridor land

(5.2) In approving or fixing just and reasonable rates for a transmitter who has a statutory right to use corridor land (as defined in section 114.1 of the *Electricity Act, 1998*), the Board shall apply a method or technique prescribed by regulation for the treatment of the statutory right. 2002, c. 1, Sched. B, s. 8; 2003, c. 3, s. 52 (3).

Conditions, etc.

(6) An order under this section may include conditions, classifications or practices applicable to the transmission, distribution or retailing of electricity, including rules respecting the calculation of rates. 1998, c. 15, Sched. B, s. 78 (6).

Deferral or variance accounts

(6.1) If a distributor has a deferral or variance account that relates to the commodity of electricity, the Board shall, at least once every three months, make an order under this section that determines whether and how amounts recorded in the account shall be reflected in rates. 2003, c. 3, s. 52 (4).

Same

(6.2) If a distributor has a deferral or variance account that does not relate to the commodity of electricity, the Board shall, at least once every 12 months, or such shorter period as is prescribed by the regulations, make an order under this section that determines whether and how amounts recorded in the account shall be reflected in rates. 2003, c. 3, s. 52 (4).

Same

(6.3) An order that determines whether and how amounts recorded in a deferral or variance account shall be reflected in rates shall be made in accordance with the regulations. 2003, c. 3, s. 52 (4).

Same

(6.4) If an order that determines whether and how amounts recorded in a deferral or variance account shall be reflected in rates is made after the time required by subsection (6.1) or (6.2) and the delay is due in whole or in part to the conduct of a distributor, the Board may reduce the amount that is reflected in rates. 2003, c. 3, s. 52 (4).

Same

(6.5) If an amount recorded in a deferral or variance account of a distributor is reflected in rates, the Board shall consider the appropriate number of billing periods over which the amount shall be divided in order to mitigate the impact on consumers. 2003, c. 3, s. 52 (4).

Same

(6.6) Subsections (6.1), (6.2) and (6.4) do not apply unless section 79.6 has been repealed under section 79.11. 2003, c. 3, s. 52 (4).

Fixing other rates

(7) Upon an application for an order approving or fixing rates, the Board may, if it is not satisfied that the rates applied for are just and reasonable, fix such other rates as it finds to be just and reasonable. 1998, c. 15, Sched. B, s. 78 (7).

Burden of proof

(8) Subject to subsection (9), in an application made under this section, the burden of proof is on the applicant. 1998, c. 15, Sched. B, s. 78 (8).

Order

(9) If the Board of its own motion, or upon the request of the Minister, commences a proceeding to determine whether any of the rates that the Board may approve or fix under this section are just and reasonable, the Board shall make an order under subsection (3) and the burden of establishing that the rates are just and reasonable is on the transmitter or distributor, as the case may be. 1998, c. 15, Sched. B, s. 78 (9).

Standards, targets and criteria

83. (1) The Board may establish standards, targets and criteria for evaluation of performance by generators to whom section 78.1 applies, transmitters, distributors and retailers. 1998, c. 15, Sched. B, s. 83 (1); 2004, c. 23, Sched. B, s. 27 (1).

Regard for standards, targets

(2) The Board may have regard to the standards, targets and criteria referred to in subsection (1) in exercising its powers and performing its duties under this or any other Act in relation to generators to whom section 78.1 applies, transmitters, distributors and retailers, including establishing the conditions of a licence. 1998, c. 15, Sched. B, s. 83 (2); 2004, c. 23, Sched. B, s. 27 (2).

Ontario

Dalton McGuinty
Premier of Ontario

SPEECH

Remarks by
Dalton McGuinty, Premier of Ontario
Building A Culture Of Conservation
Statement to the Legislative Assembly

April 19, 2004 -- CHECK AGAINST DELIVERY

Mr. Speaker:

For most of our history, Ontarians have enjoyed an abundant supply of cheap, reliable energy.

All the power we wanted was right at our fingertips & at the flick of a switch.

Today, we can no longer take our energy supply for granted.

If we don't act soon & we will face an energy crisis.

Our province is growing, with more homes and businesses being built every day.

Our high-tech economy is thriving, meaning that our industries, our homes, our hospitals and our schools all need more electricity than ever before.

But at the same time, our ability to produce power is falling behind.

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Many of our nuclear plants are nearing the end of service.

Despite advances in clean, renewable energy, Ontario continues to rely on dirty sources of energy like coal.

Mr. Speaker, Ontario cannot grow a strong, 21st century economy by relying on obsolete sources of energy.

That's why our government is committed to replacing the dirty coal plants that are polluting our air and damaging our health.

After all, Mr. Speaker, one coal-fired unit at Nanticoke emits as much pollution as 160,000 cars. The eight-unit Nanticoke facility represents the equivalent of the exhausts of 1.3 million cars.

Replacing coal is the kind of real, positive, overdue change that our government ran on, and Ontarians voted for.

Unfortunately, Mr. Speaker, previous governments failed to plan ahead.

As our energy reserves shrank, so too did the political will to do anything about the problem.

Because previous governments failed to act, we're faced with an enormous challenge.

We will need to refurbish, rebuild, replace or conserve 25,000 megawatts worth of generating capacity by the year 2020.

To put that in perspective -- that's more than 80 per cent of Ontario's current electricity generating capacity.

To meet these goals through increased generation alone, we would need generation capacity about 11 times the size of Niagara Falls.

Mr. Speaker, our government has already announced plans to put 2,500 megawatts of generation capacity and demand management initiatives in place no later than 2007.

And there's more on the way.

But, clearly, producing more electricity is only part of the answer.

We also have to slow the endless spiral of increasing demand.

It's simply not sustainable.

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So we're asking Ontarians to stop the spiral of demand -- and we will give Ontarians the information and tools they need to save money on their bills, as they save electricity.

When it comes to electricity, Mr. Speaker, it's much cheaper for our province to conserve it, than to generate it ... and it's much cheaper for our consumers to save it than to pay more for it.

Some other jurisdictions have aggressively pursued conservation -- but this province hasn't been as aggressive as it should have been, and that has wasted time and money and electricity.

California, for example, has conserved to the point that the average per-capita consumption of electricity there has increased only one per cent since 1975.

Here in Ontario, it's up 25 per cent.

There are steps that we can all take right now.

For instance, if each of Ontario's 4.5 million households replaced four 60-watt light bulbs with compact fluorescents, the energy savings would allow us to shut down one unit at a coal burning plant.

Compact fluorescent bulbs seem more expensive on the store shelves, but because they last years longer, and use up to 75 per cent less energy than conventional bulbs, they can save you four times what they cost.

People with electric water heaters can save between 200 and 1,400 kilowatt-hours per year simply by fixing leaky taps, insulating their water heaters and switching to more efficient showerheads.

Real gains can be made by doing things as simple as turning off the light or TV or stereo when you leave the room, unplugging appliances when you're not using them, or not using that large, mostly empty freezer, you might have sitting in the basement.

That old, inefficient beer fridge in the basement may seem like your best friend at playoff time -- but every time you open the door it's "pay-up time," because that fridge can be costing you about $150 a year in extra electricity -- electricity we can't afford to waste.

There is so much we all can do:

- Taking a five-minute shower instead of a bath uses half as much energy.

- Turning down the water heater when you're away, and turning it down a few degrees all the time, can pay big dividends.

- Setting the fridge at cool -- instead of almost-frozen -- and turn down your furnace, even a few degrees, at night, when you're under the covers.

- Keeping appliances clean so they're efficient -- the coils on the back of the fridge, the lint screen in the dryer, the air filter on your furnace and air conditioner all need regular cleaning.

You can also get an energy audit for your home. These audits provide specific steps you can take that could reduce their energy bills by up to one-third.

These are the kinds of steps we're asking Ontarians to take.

In return, our government will make it possible for Ontarians in every home, business and government office to save energy, save their hard-earned money and save our environment.

Our government is taking bold action to help make Ontario a North American leader in conservation.

Mr. Speaker, I'm not talking about approaches that have been used in the past & such as introducing a few government programs or printing glossy brochures.

I am talking about nothing less than creating a profound shift in the culture of this province.

About moving from a culture of inefficiency to a culture of innovation.

About moving from a culture of waste to a culture of conservation.

Our plan will give consumers, businesses, utilities and government the tools they need to use less energy -- and use energy more wisely.

Together we will make a real change in the way we use energy in this province.

Our government's goal is ambitious: to reduce electricity use by five per cent across the province by 2007.

But our government will also do our part.

In fact, we will hold ourselves to an even higher standard.

We will cut electricity consumption in all government operations by 10 per cent over the same period.

To help reach those targets, Minister Duncan has already announced the creation of a Conservation Secretariat, headed by a Chief Conservation Officer.

Our government has also appointed MPP Donna Cansfield to lead the Conservation Action Team, which will promote our conservation initiatives for the province.

We will provide the leadership that creates opportunities for savings, but it's up to Ontarians -- from all walks of life -- to make good decisions about how they use energy.

Right now, most customers don't get a break on their bill if they use energy during off-peak hours, when demand is lower.

That's because old-fashioned energy meters only record how much energy is being used, not when it is being used.

Smart meters, together with more flexible pricing, would allow Ontarians to save money if they run appliances in off-peak hours.

That's why we will direct the Ontario Energy Board to develop a plan to install a smart electricity meter in 800,000 Ontario homes by 2007 & and in each and every Ontario home by 2010.

Mr. Speaker, we will also expand and encourage the practice of net metering.

Net metering will enable homeowners and businesses generating renewable electricity to receive credit for the excess energy they produce.

This will provide additional electricity supply from clean, renewable sources such as wind and solar power.

And we will launch provincewide consultations to allow people to participate directly in Ontario's new culture of conservation.

Leading the way in this new culture of conservation will be our young people.

We will ensure that our primary and secondary school students have the resources they need to learn about conservation.

After all, the decisions we make today will have a tremendous impact on the future they inherit.

That future is already beginning to look brighter, Mr. Speaker.

Innovative steps like smart meters and net metering are already being used in our province.

Net metering is already an option in some Ontario communities.

Milton Hydro is already pressing ahead with its own smart metering project.

Our plan will see pockets of innovation like these expand across the province in a few short years -- allowing more Ontarians to see real savings.

But the benefits of a culture of conservation go beyond what people will see on their monthly bills.

A culture of conservation will help Ontario build a high-skills, high-tech, high-performance economy by rewarding and encouraging innovation.

This, in turn, will help stimulate investment, create jobs and build a stronger, more sustainable economy.

And an economy we can be proud of.

Mr. Speaker, there can be no doubt that Ontario faces a real challenge in meeting its energy needs, but our government is seizing the opportunity to promote a genuine conservation culture -- in communities, businesses and homes.

We will also engage local distribution companies, the private sector and community organizations.

Together, we can make Ontario a leader in energy efficiency.

Together, we can help create more jobs in an innovative economy, ensure stronger communities and provide cleaner air to breathe.

A culture of conservation will ensure that Ontario has an electricity supply that is the envy of our competitors -- and a magnet for our investors.

An Ontario where consumers have both the stability they want -- and the reliability they demand and deserve.

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An Ontario where the energy that comes through the wires stimulates the energy that makes us great -- the energy that stimulates our growth as an economy and a society: the innovation of our businesses, the success of our schools, the compassion that marks our health care system, the cleanliness of the air we breathe and the water we drink.

An Ontario with a standard of living -- and a quality of life -- that are second to none.

That Ontario, Mr. Speaker, is ours to deliver.

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Minister's Speeches

Ministry of Ene

Notes for Remarks by
The Honourable Dwight Duncan
Minister of Energy

"CHOOSING WHAT WORKS FOR A CHANGE"

The Empire Club
Toronto, Ontario

April 15, 2004

Thank you, John, for that kind introduction.

I must confess that I am a bit overwhelmed by the size and composition of the crowd. Recognizing the perilous nature of my responsibilities, I am reminded of something Churchill once said.

When one of his friends asked "Aren't you impressed to see so many people gather to hear you speak?" he replied, "No ? because ten times as many would come to see me hanged."

Today, I will outline a plan for the electricity sector that will encourage the development of new reliable supply, promote a culture of conservation, lessen the environmental footprint of our undertakings, produce stable prices for small consumers, afford large consumers the benefits of a competitive market, and enhance Ontario's competitiveness in electricity pricing.

Beyond all else, we will create stability in a sector that has been rocked too often. This plan recognizes the need to create a climate that welcomes private investment, but understands that for a sector to flourish, small consumers must embrace it.

Finally, the plan I will outline recognizes that ratepayers must pay the true cost of the electricity they consume. Price caps, which have been in place for much of the last decade, must end. They didn't work in California, and they haven't worked here. We are dangerously close to an unforgiving precipice, which threatens to undermine Ontario's continued prosperity.

Our policy will not be bound by ideology, but rather by what works.

Our reforms will chart a new direction in Ontario's history, by establishing the foundation for our energy future.

* * * * *

Albert Einstein once said that "we have to divide up our time between our politics and our equations?

our equations are far more important, for politics are only a matter of present concern."

Well here's one equation that desperately needs solving.

Ontario now has about 30,500 megawatts of generation capacity.

Between now and 2020, factoring in the growth of our economy, approximately 25,000 megawatts of our electricity capacity needs to be replaced.

There is a matrix of possible solutions and problems. Risk can be measured exponentially if the wrong choices are made.

You don't have to be an Einstein to see that the arithmetic in this equation is complicated.

* * * * *

For more than a generation, our electricity sector has been buffeted between extremes, and fraught with reversals, indecision, and malaise. Successive governments seemed to follow Yogi Berra's famous advice that "when you come to a fork in the road?take it".

No more extremes.

No more reversals.

No more indecision.

No more malaise.

Before I move on to the direction we've chosen, let me tell you what we've rejected.

We looked at the old Ontario Hydro model, but that put us $38 billion in debt. Some want to move back to that model. I reject it. I want to move forward.

We've looked at moving to a fully competitive market, but couldn't find one that worked?anywhere.

We studied other jurisdictions to benchmark best practices. But you know what ? there is no "right" way.

So we've chosen what we think is the best way.

A balanced approach.

An approach that recognizes the balance between conservation and adequate supply.

An approach that recognizes the need to balance public leadership with private investment.

An approach that will outlive this Minister and this government.

An approach that will begin to make up for over a decade lost in Ontario's electricity sector.

* * * * *

We have acted decisively already:

- We replaced the previous government's 4.3 cent price cap. In doing so, we signaled that prices should be set by an independent regulator, not by politicians.
- We've demonstrated that we are serious about conservation. We will cut overall demanc the government will cut its own consumption, so that we can lead by example. We're goi be a world leader in conservation.
- We remain committed to replacing coal-fired electricity generation in the province. In s doing, we will never put Ontario consumers in jeopardy, and will be totally satisfied tha adequate alternatives are in place before we replace coal.
- We've announced that we will be seeking proposals for 2,500 megawatts of new electric capacity through either generation or demand-side management initiatives. We're the fi government in Ontario's history to put demand management on an equal footing with generation, and we expect the call for proposals to be ready in the next few weeks.
- We also announced that we would be seeking proposals for 300 megawatts of renewabl generation, which will help us meet our target of 1,350 megawatts of new renewables by 2007. This is just a first step in what will be an extremely important part of our energy future. We expect to initiate this call for proposals as early as next week. Again, we inter be a world leader in the use of renewable energy.

We have moved quickly, boldly and prudently to stabilize Ontario's electricity sector.

* * * * *

As with the electricity grid itself, which precisely balances supply and demand, reforms to the electricity sector must be a matter of finding the right balance between our goals.

Balance between the need for prices that reflect the true cost of electricity, and consumers' need for affordable and predictable prices.

Balance between the need for private investment in supply, and the recognition that electricity is a fundamental public need.

And balance, I would remind you, lies in the centre, not in extremes.

And so, in June, we will be introducing legislation for sweeping institutional reform that would see a combination of a fully regulated and a competitive electricity sector. There would be a split between regulated prices for electricity coming from major nuclear and baseload hydro generation assets, and a healthy, competitive market for all other generation. This combination of pricing mechanisms would result in a blended cost for consumers.

OPG's nuclear and baseload hydroelectric assets would be regulated by the Ontario Energy Board, who would set regulated prices, while the wholesale price for other electricity generated in the province would be set by the market, which would continue to operate as it does now.

Fixed prices for a large part of the energy consumed in the province would keep the overall blended price for electricity relatively stable.

* * * * *

One of the biggest challenges the McGuinty government faces is balancing the needs of small and large volume electricity consumers.

Residential and small business consumers make up the vast majority of ratepayers in the province, but consume only 50% of Ontario's electricity. Their priority is stability. My constituents in Windsor neither know nor likely care about the subtleties of electricity markets. But they do know that they want a price for electricity that they can depend on, and they deserve no less.

There are far fewer large volume consumers ? many of you in this room represent companies that fall into this category - but they consume the other 50% of electricity in the province. Their priority is flexibility, so they can organize themselves to be as competitive as possible.

It is crucial to the McGuinty government that our reforms meet the needs of both groups of consumers in Ontario.

To that end, residential and small business consumers in Ontario would be offered a standard rate plan. Not a price, a plan .

It would be adjusted periodically to ensure people pay the true cost of electricity over time, but the plan would remain stable over the course of each year. The Ontario Energy Board would approve the plan, and guarantee public input and fairness.

It would also ensure that consumers can take advantage of time-of-use rates so that they would have the opportunity and incentive to shift consumption from periods of high demand and prices to periods of lower demand and prices.

Consumers and small businesses that do not wish to participate in the regulated rate plan would be free to purchase their electricity from energy retailers or directly through the market.

Our aim is not to limit options, but in fact to improve them. No one will be forced to put up with the gross instability of the market, but at the same time, the annual rate plan option would not be forced on people interested in taking advantage of other opportunities.

Medium and large businesses will continue to have flexibility. Large consumers would continue to have all of the options afforded to them by the market. This flexibility includes having the opportunity and information to pursue co-generation or distributed generation opportunities.

Distributed generation, which is also attractive from a security perspective, holds significant promise for the environment, as it suggests an electricity system that minimizes massive transmission networks, and focuses resources only where they are absolutely necessary. Our desire is to help Ontarians unlock the potential for efficient electricity generation that is around them, and we will remove barriers, free up resources and bring new thinking and new ideas to the challenges that lie before us.

* * * * *

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Our next actions are focused on ensuring long-term supply adequacy in the province.

Given the long lead times required to bring new capacity on-line, and the need to create stability in the electricity sector, we need to reorganize our institutions in order to ensure efficient management of the sector over the long-term, and to attract new investment to Ontario.

Changing the way electricity is priced is simply not enough.

Our model includes a strong public leadership role, clear accountability, and a coordinated approach to addressing the growing gap between electricity supply and demand.

We estimate that in order to meet the looming supply-demand gap, an investment of $25 to $40 billion will likely be required to keep the lights on over the next 15 years. This is one of the largest peace-time investments in Canadian history.

To that end, we propose to establish a new independent body called the Ontario Power Authority. It is our intent to have this new institution in place and operational by early next year.

The Power Authority would have the obligation to ensure long-term supply adequacy in Ontario, so that never again will we find ourselves in the predicament we're in today.

It would forecast resource needs, and prepare an integrated system plan for conservation, generation and transmission. Everyone would know what generation we need, and where it's necessary. Moreover, if transmission might provide the solution to a supply problem, then a single authority would be responsible for making that determination.

However, if this information and transparency is not enough to drive the private sector to invest in Ontario, then the Power Authority would have the responsibility and tools to call on the private sector to build new generation capacity or deliver additional demand management. A competitive and transparent procurement process would foster innovation and creative approaches to meeting our supply needs.

The continued existence of the market is a crucial incentive for private investors to enter Ontario and support the construction of the thousands of megawatts of electricity generators that we need to build over the next 15 years. It's important that private sector investments made in Ontario's power supply be encouraged.

The recent turmoil in our electricity market has shaken investor confidence. We must send a clear and unambiguous message that Ontario is a good place to invest, and that politics will not impair the private sector's ability to earn a fair return on their investment.

In other words, the requests for proposals our government has announced for 2,500 megawatts of new capacity or demand management initiatives, and 300 megawatts of renewables, would be just the first of many future opportunities for the private sector to help us close the looming gap between supply and demand in the province.

Ladies and gentleman, Ontario's electricity sector will become a great place in which to invest, and earn a fair return.

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* * * * *

Having a fully functioning electricity sector is not only about generating raw power. The government must also be concerned with conservation, the use of renewable energy and the security and diversity of the electricity supply in Ontario.

Therefore, explicit directive power would be given to the Ministry of Energy with respect to targets for conservation, the use of renewable energy, and the overall supply mix of electricity in the province. The Ontario Power Authority would be charged with achieving these and other targets set by the government, and would include them in its system planning.

Our plan will help build a conservation culture, which the McGuinty government believes is a cornerstone of Ontario's long-term energy future.

A megawatt saved is every bit as good as a megawatt built.

Therefore, a new Conservation Secretariat, headed by a Chief Conservation Officer, would be established as part of the Ontario Power Authority. The Conservation Secretariat would lead Ontario's efforts to engage and empower consumers across the province, and would develop province-wide programs that provide real incentives for Ontario's homes and businesses to conserve, and to save money. It would also monitor the progress we are making.

Our sector reforms would also support conservation at the local level. The Ontario Energy Board would also establish a framework to help local distribution companies deliver energy conservation programs as appropriate. The current disincentives for local distribution companies would be removed, and LDC's would benefit from empowering their customers to conserve electricity and making their own systems more efficient.

We believe that LDCs can and should be agents of change at the local level to promote conservation. LDCs are extremely well placed to encourage conservation and energy efficiency in the communities they serve, and we will need all their expertise, ingenuity and leadership to help build that conservation culture in Ontario.

It should be clear to everyone that our government doesn't see conservation as a flash in the pan, or a fad of the moment ? we see it as a real opportunity to help Ontarians prosper, and as a valuable strategy to enhance the competitiveness of our province.

The Premier and I had the opportunity to review this speech earlier. As he informed me that he would do the speech outlining our conservation initiatives, I was reminded of Margaret Thatcher's famous missive that "I don't mind how much my Ministers talk, as long as they do what I say."

Seriously though, Premier McGuinty has made the rebuilding of our electricity sector, and conservation, cornerstones of his government's agenda. He believes strongly as I do, that our success in this endeavour will be an important component of this Province's future economic development.

Do not underestimate his determination to fix these problems, fix them right, and fix them fast.

* * * * *

The changes I have just described would be a major step forward in delivering his government's vision of the electricity sector.

However, this is no easy undertaking. In addition to the legislation we will introduce, there will be many complex and technical regulations that will need careful and thorough attention.

Accordingly, the legislation I will be introducing in June will be sent to Committee for full study and evaluation over the summer, and we are hopeful that it will receive passage this fall.

We will address transmission and distribution issues over the next 12 months. Without a thorough examination of the network side of our electricity infrastructure, it will be impossible to bring about the changes that are needed to develop a safe, secure supply for Ontarians.

The composition of that supply will be the subject of an announcement later this year. In it, we will lay out the government's view of where our supply will come from.

* * * * *

The last piece of this complex puzzle is the future of Ontario Power Generation.

As the custodian of over 70 per cent of the province's existing generation capacity, the government must set the course and direction for OPG. We recognize the mismanagement that the company has suffered over the past five years, and we intend to set it right.

Today, I'm pleased to announce that Jake Epp, who has been interim Chair of OPG has agreed to become its permanent Chair. Jake has done an outstanding job, and has brought wisdom, insight, and unshakeable calm to a role that very few others would have accepted. He has the utmost confidence of the McGuinty government, and we thank him for working so tirelessly over the past several months.

At the same time, we are immediately commencing a search for 9 new members of OPG's Board of Directors. Within the next few weeks I will begin to announce these appointments. It is our intention to de-politicize the Board of Directors of this corporation. It is our intention to find directors who have expertise in corporate restructuring, change management and yes, running nuclear operations. Their job, along with the shareholder, will be to set the future direction of the company, to make recommendations and decisions about its structure and its future, and to get the old 800 pound gorilla off your backs.

Today I'm also announcing that we are immediately beginning the search for a new CEO. Before I give you more details, I want to take a moment to thank Richard Dicerni, who stepped in to this position at probably one of the lowest moments in both OPG and Ontario Hydro's history. He has served in this capacity as he has served in other public capacities ? with great integrity, sound judgment and always with the interest of the province at heart. We are grateful for his help to date.

The process for selecting a new CEO and Board will be open and transparent. The days of untendered contracts rewarded to political friends are over. Today marks the beginning of a new era of corporate responsibility at OPG.

The government, with the Board, will develop a new Shareholder's Agreement, which will make explicit its performance expectations for OPG, and better define the relationship between the government and

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the company. We will make this public as soon as it is prepared and the new Board is fully in place.

Just as we're taking the politics out of electricity pricing, we're taking the politics out of OPG.

There is no question that getting OPG back on the rails will not be an easy task. There are big decisions to make, and we're making them.

* * * * *

As does every other aspect of life, public policy involves many variables, some probabilities, and very few certainties.

But this we know for certain: all else remaining constant, if Ontario's electricity system were left on the course it has been following, it would cease to serve us, cease to power our economy, and cease to be the great enabler it has been for a century.

That's a certainty neither you nor I, nor anyone in this province, can live with.

We know we will need the ongoing benefit of the ideas, expertise and dedication of those in the electricity sector to meet the challenges that face us.

If we work together, we can build an Ontario that has an electricity supply that is the envy of our competitors -- and a magnet for investors.

We can build an Ontario where consumers have both the stability they want -- and the reliability they demand and deserve.

We can build an Ontario where the energy that comes through the wires stimulates the energy that makes us great -- the energy that stimulates our growth as an economy and a society...I'm talking about the innovation of our businesses, the success of our schools, the compassion that marks our health care system, the cleanliness of the air we breathe and the water we drink.

An Ontario with a standard of living and a quality of life -- that's second to none.

That Ontario, my friends, as the Premier often says... that Ontario is ours to deliver.

Thank you.

Click here to return to list of available speeches.

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Overview of C&DM practices in North America and potential alternatives for Ontario

Prepared for the Ontario Energy Board

December 20, 2004

LONDON ECONOMICS

London Economics International LLC ("LEI") was retained by the Ontario Energy Board to assist the Board in identifying options for a ratemaking framework that will account for electricity distributor conservation and demand management (C&DM) in 2006 electricity distribution rates. Our mandate was to present alternatives; recommending which alternative is most appropriate is not within the scope of work which we were assigned. This memo presents four hypothetical models for regulating C&DM. Each model varies by degree of administrative complexity and cost-benefit efficiency. We compare the models on the basis of five key criteria: administration, rate impact, regulatory consistency, incentive compatibility, and universality. Our hypothetical C&DM models are based on our experience designing innovative ratemaking methods, a survey of existing C&DM frameworks, and the literature surrounding best practices. We have included some practical examples of how the different mechanisms function, the benefits and drawbacks of each, and the issues that need to be addressed.

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- The percentage reduction in electricity cost is often much greater than the percentage increase in electricity price caused by C&DM programs;

- Even if C&DM is very inexpensive or the utility faces very high avoided costs, the tradeoff between costs and prices remains. In special cases where the cost per kWh of C&DM programs is very low, both prices and costs can be reduced;

- C&DM programs are cost effective even if the utility has excess capacity and slow load growth. This occurs because C&DM programs offset not just the operating costs of existing assets, but also reduce the other costs of operating the utility system, defer construction of new transmission and distribution facilities, and, in the long term, defer the construction and operation of new power plants (even if those power plants would have been built by another entity);

- Having customers share in the costs of the C&DM program implemented by the utility reduces the size of the tradeoff between costs and prices by reducing the maximum cost of conserved electricity paid by the utility. Such an approach, however, would reduce the value of savings to customers achieved by the programs.

Other studies have confirmed to some extent the findings of the ORNL report. Steven Nadel and Miriam Pye reviewed data from ten existing studies on the rate impacts of C&DM programs and found that C&DM program rate impacts varied between -2.8% and 9.4% with a median rate impact of 1.7%.[3] Such studies, however, should never be taken as universal. Other factors may serve to alter the impact on rates. One factor is the relative size of the C&DM program and its cost-effectiveness. Another is the relative energy/peak load impact of the particular C&DM programs being implemented. Many of today's C&DM programs are relatively small and taking these factors into account will provide a more detailed picture of the magnitude of the impact of any particular C&DM program on a utility.

2.2 Treatment of operating and capital costs

There are generally two different treatments for operating and capital costs associated with C&DM programs. Utilities can choose to either capitalize or expense these costs. The main difference between the methods is in their impact of rates. Typically, when a utility decides to expense these costs, they are immediately reflected in rates and rates therefore increase immediately as well. On the other hand, when a utility decides to capitalize these costs over a number of years, the general tendency is that the costs will not affect rates as dramatically as if they were expensed. Figure 1 and
Figure 2 present examples of C&DM spending by utilities across North America. CD&M spending as a proportion of revenue is a function of whether the utility is integrated or not;

[3] Aspects of Nadel and Pye's research can be found in "*Partnerships: Redefining the Relationship between Utilities and Industry C&DM Program Design.*" American Council for an Energy Efficient Economy. 1996.

those which are have larger revenues due to the inclusion of the generation business unit. This in turn can make C&DM spending appear proportionately smaller.

Capitalizing operating and capital costs allows the utility to spread costs over the period of time that matches that of the C&DM program that is being implemented. FortisBC is a good example of how a utility capitalizes C&DM costs. The BCUC requires FortisBC to capitalize all expenditures associated with C&DM. FortisBC is also required to amortize these expenditures at the straight-line rate of 12.5% subject to certain conditions:

- That C&DM costs capitalized be net of income taxes
- That FortisBC file semi-annual demand side management reports
- That C&DM projects be evaluated economically, where the customer and FortisBC's cost components are added together and tested using TRC

Other utilities have been allowed to expense the cost of their C&DM programs such as NSTAR Gas & Electric. In Ontario, the approach traditionally used in the gas industry has been to determine an approved budget for C&DM spending, and then to track variance around that amount. Variance accounts have the advantage of allowing for precise tracking of expenditure; however, they can be administratively burdensome for the utility. Generally speaking, it is sensible for regulators to allow for overspending of such accounts if the impact of the overspending leads to TRC benefits; underspending, however, should result in refunds to ratepayers of unspent amounts.

Figure 1. Examples of integrated utility C&DM spending in 2002/2003

	DSM Spending	Gross Revenue	DSM Spending (% of Gross Revenue)
AEP Texas Central Company(2002)	$ 2,339,000	$ 1,605,334,000	0.15%
Alabama Power Co(2002)	$ 25,828,000	$ 3,710,533,000	0.70%
BC Hydro(2003)	$ 63,000,000	$ 2,553,000,000	2.47%
Consolidated Edison Co-NY Inc (2002)	$ 5,547,000	$ 6,390,560,000	0.09%
Florida Power & Light(2003)	$ 150,000,000	$ 8,293,000,000	1.81%
Florida Power Corp(2002)	$ 62,046,000	$ 3,082,733,000	2.01%
Fortis BC(2003)	$ 2,455,000	$ 245,500,000	1.00%
Idaho Power(2003)	$ 1,208,036	$ 780,382,000	0.15%
Northern States Power Co(2002)	$ 38,920,000	$ 2,391,345,000	1.63%
Public Service Co of Colorado(2002)	$ 10,885,000	$ 3,385,176,000	0.32%
Tampa Electric Co(2002)	$ 16,717,000	$ 1,582,937,000	1.06%
Virginia Electric & Power Co(2002)	$ 6,684,000	$ 4,888,033,000	0.14%
Wisconsin Power & Light Co(2002)	$ 25,878,000	$ 782,837,000	3.31%

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Figure 2. Examples of distribution companies C&DM spending in 2002/2003

	DSM Spending	Gross Revenue	DSM Spending (% of Gross Revenue)
Baltimore Gas & Electric Co(2002)	$ 16,679,000	$ 1,966,013,000	0.85%
Connecticut Light & Power Co(2002)	$ 56,695,000	$ 2,507,036,000	2.26%
Fitchburg Gas & Electric(2003)	$ 1,600,000	$ 60,500,000	2.64%
Hydro-Quebec Distribution*(2003)	$ 41,000,000	$ 8,700,000,000	0.47%
Jersey Central Power & Lt Co(2002)	$ 27,002,000	$ 2,304,832,000	1.17%
Massachusetts Electric Co(2002)	$ 50,852,000	$ 1,682,499,000	3.02%
Nstar(2003)	$ 63,219,000	$ 2,914,131,000	2.17%
Oncor Electric Delivery Company(2002)	$ 21,643,000	$ 1,994,434,000	1.09%
Public Service Elec & Gas Co(2002)	$ 146,554,000	$ 3,959,033,000	3.70%
Unitil Energy Systems(2003)	$ 2,700,000	$ 130,400,000	2.07%

*assuming the $123 million budgeted over 3 years will be spent evenly over that period

Source: Idaho Power, Nstar, HQ, Fortis BC, BC Hydro, FPL, EIA

The accounting treatment of C&DM program costs has consequences for utility revenue requirements and electricity prices. The ORNL study cited in Section 2.1 modeled the impact of the accounting treatment on rates and costs. These results are summarized in Figure 3.

Figure 3. Summary of results for cases with C&DM resources purchased up to 4.5c/kWh for the base utility and different financial treatment of C&DM expenses

Summary Statistics, 1990-2010	Percentage change relative to the supply-only case:		
	Expense	10-year depreciation	15-year depreciation
Net present value (million $)			
Revenue requirements	-4.7	-5.3	-5.6
Environmental costs	-2.4	-2.3	-2.2
Average electricity price (c/kWh)	1.1	1.1	0.7
Average electric bill ($/customer)	-5.9	-6.6	-7.1

Source: ORNL

The modeling was done in 1991 and projected the impacts of various cost allocation scenarios over 20 years. It showed that expensing C&DM program costs rather than capitalizing them, reduces the cost and price benefits of these programs (for both the TRC and RIM tests). In other words expensing the costs of C&DM programs raises electricity prices in the short term, whereas capitalizing these costs over 15 years defers the price increase for several years.

2.3 Rate design and cost allocation

The allocation of C&DM costs to customers can be a difficult issue. While C&DM has the potential to lower electricity costs for all customers, there is some concern over non-participant

Exhibit L
Tab 9
Schedule 1

BEFORE THE ONTARIO ENERGY BOARD

EB-2005-0001

Implementing Enbridge's Role in Ontario's Conservation Culture

Prepared By

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For
The Green Energy Coalition
David Suzuki Foundation
EnerAct
Greenpeace Canada
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JUNE 30 2005

II. HISTORY OF ENBRIDGE DSM

Enbridge now has nearly a decade of experience with DSM. Though I explain later that there is substantial room for improvement, the Company's efforts to date have still been enormously beneficial to its ratepayers and the Ontario economy.

A. Large Economic Benefits

As Table 1 shows, over the ten year period between 1995 and 2005, Enbridge will have provided net energy and other resource cost savings of about a billion dollars.[1] If environmental benefits are added total net benefits increase to roughly $1.5 billion.[2]

Table 1: Enbridge DSM Program Results

Fiscal year	O&M DSM Spending (constant 2005 dollars) (1)	Financial Net Benefits (TRC) (constant 2005 dollars) (2)	Annual Gas saved (10^6m^3) (3)	TRC Savings / O&M Spending
F1995	$ 2,641,338	$ 5,764,403	3.9	$ 2.18
F1996	$ 3,449,620	$ 28,865,546	18.8	$ 8.37
F1997	$ 3,438,133	$ 27,994,898	18.6	$ 8.14
F1998	$ 4,166,820	$ 63,928,012	36.2	$ 15.34
F1999	$ 7,487,497	$ 62,765,515	45.7	$ 8.38
F2000	$ 10,401,968	$ 64,671,494	48.6	$ 6.22
F2001	$ 13,444,127	$ 84,081,236	65.4	$ 6.25
F2002	$ 11,759,096	$ 147,013,328	74.5	$ 12.50
F2003	$ 12,215,437	$ 129,420,693	78.0	$ 10.59
F2004	$ 13,913,977	$ 185,258,830	73.9	$ 13.31
F2005	$ 18,500,000	$ 221,979,534	96.1	$ 12.00
Totals	$ 82,918,014	$ 1,021,743,490	559.8	

Notes:

1. O&M spending from Exh. I/T9/S6; adjusted for inflation.

2. TRC values 1995-1998 from RP2001-0032, Ex I/T1/S50; 1999 from RP-2000-40, A/T16/S1 Table 8, adjusted to 30% Custom free riders. 2000/2001 values based on Audit-adjusted values. 2002 from Audit Committee final Reconciliation Report (I/T18/S50, Attachment B). 2003 from unaudited Evaluation Report. 2004 and 2005 TRC are Board-approved Budget amounts, recalculated post-ADR.

3. Gas savings from A7/T2/S1 Table 4 and based on audit-adjusted values for 1999 through 2002. 2003 from unaudited Evaluation Report, 2004 from A7/T2/S1 Table 4. 2005 is Board-approved Target set in ADR. Custom savings based on 30% free riders from 1999 on.

4. 2003 spending, gas and financial savings from 2003 Evaluation Report A7/T12/S1.

5. All 2004 values based on the post-ADR DSM Plan, except gas savings which is from A7/T2/S1, Table 4.

6. All 2005 values based on Board-approved post-ADR DSM Plan, and is for 15 months (ADR Plan plus 25%).

B. No Adverse Rate Impacts

Enbridge has estimated that its proposed 2006-2008 DSM plan will actually reduce rates over the life of the efficiency measures promoted by about 0.2%.[3] Last year the company reached a similar conclusion regarding its 2005 DSM plan, suggesting that it would reduce rates by 0.1%.[4] Comparable assessments are not available for all previous years of Company DSM efforts. However, it is at least plausible that cumulative rate impacts from the entire past decade of DSM have been negative. Even if there have been small increases in rates, any such increases have been mitigated, at least in the residential sector, by the fact that a large majority of at least some

---

1 This may understate total economic benefits as the Company has not always computed and claimed all electric benefits associated with its DSM programs.

2 In 2005, the Company reported the SCT value of its Plan at $183 million, or roughly 150% of the TRC value. (See RP2003-0203, Ex L/T11 S1, p.1)

3 Exh I, Tab 9, Schedule 3.

4 RP-2003-0203, Exh I, Tab 11, Schedule 3.

-Appendix A-

Board's Views on Stakeholder Comments on the *Draft Guide to Total Resource Cost Analysis*

Preamble:

Further to the Board's decision of December 10, 2004 (RP-2004-0203), in the Application by the Coalition of Large Distributors[1] for approval to recover funds to be invested in conservation and demand management (CDM), the Board has developed the Total Resource Cost (TRC) Guide. In the Decision, the Board stated that:

> *The methodology with respect to that cost-benefit analysis should be determined in advance, and the Board suggests that a working group be formed with Board Staff and representatives of each of these utilities, with possible involvement from the intervenor community involved in this case. We don't want to face an argument a year from now as to what the methodology should be for this cost-benefit analysis. So in the interim we should work out the methodology, but a year from now, the Board would like to receive from each of these utilities a cost-benefit analysis on the initiatives that have been conducted up until that date.*[2]

This condition of approval became standard to all approvals of LDC funds for CDM. Overall, the Board approved $163 million worth of CDM plans to be implemented by the electricity utilities over a three year period ending in September 2007.

Pursuant to that Decision the Board commissioned a consultant to prepare the Draft TRC Guide. The TRC analysis consists of the methodology of cost benefit analysis that will be required by the Board. The Draft Guide was posted on the Board's website on July 6, 2005 and the Board received comments from the stakeholder community on or about July 18, 2005.

The Board thanks all parties for their submissions on the *Total Resource Cost Guide*; stakeholder input was valuable in developing the final version of the Guide. The Guide is designed to be a practical tool for local distribution companies (LDCs) to perform Total Resource Cost (TRC) analysis.

The Board received submissions on the Guide from Appliance Recycling Canada Inc. (ARCI), Building Owners and Managers Association of the GTA (BOMA), Cornerstone Hydro Electric Concepts Association Inc. (CHEC), Electricity Distributors Association (EDA), Enbridge Gas Distribution Inc. (Enbridge), EnerSpectrum Group (EnerSpectrum), Guelph Hydro Electric System Inc. (Guelph Hydro), Hydro One Networks Inc. (Hydro One), Pollution Probe, Total Energy Advice and Management Ltd. (TEAM), Toronto Hydro Corporation (Toronto Hydro) and Vulnerable Energy Consumers' Coalition (VECC).

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1 The six distributors include; Enersource Hydro Mississauga Ltd., Hamilton Hydro Inc., Hydro Ottawa Ltd., PowerStream Inc., Toronto Hydro Electrical System Ltd. and Veridian Connections Ltd.
2 RP-2004-0203 Decision on the CDM applications by the Coalition of Large Distributors. December 10, 2005, Paragraph 83.

effectiveness of these programs. Simplifying assumptions must be made to manage the evaluation of projects practically.

With respect to Enbridge's submission, the guidelines regarding attribution of benefits are for the purposes of making a claim for lost revenue and/or a shareholder incentive. So long as the costs, lost revenue, and shareholder incentive are recovered from those ratepayers who receive the benefit of the CDM program with no-cross subsidization, parties are free to design partnership arrangements which achieve the greatest benefit. In regard to the issue addressed by Guelph Hydro, the Board feels the issue is addressed appropriately by the Guide. Collectively, the group of gas and electric LDCs will be allowed to claim 100% of the benefits of the program. Individually, each LDC will be allowed to claim the portion of the benefits that is within its service territory and of its energy type. This situation is addressed by Cases 1 and 2 in combination.

With respect to the submission by Pollution Probe and VECC, the Board recognizes there is a potential for LDCs to claim the benefits of a program in which their involvement was minimal. However, this situation would be the exception and the Board supports the development of partnerships with third parties to create efficiencies in the delivery of CDM programs. Further, the Board has the jurisdiction to make adjustments to the incentive awards to the LDCs through its rate cases.

Persistence of Measures

VECC submitted that using a 100% persistence factor will lead to overestimates of benefits since no other adjustments have been made to the measure assumptions.

View of the Board

While persistence is likely not 100% for most measures, for practicality the Board needs to make some simplifying assumptions. The assumption of 100% persistence may be revisited by the Board when better information becomes available.

Custom Project Free Rider Rate and Assessment Requirements

Many parties made submissions concerning the use of 30% as the default free rider rate for custom projects. The EDA submitted that while the Guide gives distributors flexibility to use other testing techniques or data, some distributors are concerned with the use of the default 30% free rider rate during this period of ramping up programs. BOMA submitted that since many custom projects are likely to include measures included in the Assumptions and Measures List, which have prescribed free riders, the default value of 30% appears to be inconsistent. CHEC submitted that the default value appeared high, especially where a program participant had not taken action prior to the distributors' intervention. Hydro One submitted that since the free rider rate was established from a market study conducted by Enbridge Gas Distribution Inc., it accepts the default value, but suggests it be reviewed once reliable data and information from electric utilities became available. Pollution Probe submitted that since the free rider rate is a function

of program design, the Board should examine the program design of each custom project before assigning the free rider rate.

Enbridge submitted that the requirement that the statement "it is expected that each custom project will incorporate a professional engineering assessment of the savings" in the Draft guide may not be practical in all cases and that other methods of assessing benefits are valid. Further, Enbridge submitted that it was not clear if the savings estimates signed off by an engineer would require further scrutiny in the audit. Hydro One submitted that given the audit requirements for custom projects, the Board may wish to stress the need for utilities to factor such costs into their program planning.

View of the Board

The Board recognizes that free ridership is a function of program design, *inter alia*, and for any individual custom project the issue of freerider ship is binary. The participant would either have undertaken the measure without the distributors' involvement or it would not have (i.e. either a free rider or not). However, studies commissioned by Enbridge Gas Distribution Inc.[3] and Union Gas Limited[4] indicate on average, the level of free ridership (not including spill-over) was 30% or greater. Without better information, the Board will be guided by these values. While the Board acknowledges that setting a default rate is not perfect, if a distributor feels that these values do not accurately reflect their influence on a particular project, the distributor is free to complete a custom project free rider evaluation and file it along with its cost benefit analysis. With respect to the submission by BOMA, the Board is of the view that custom projects are those that involved customized design and engineering, rather than a combination of several measures provided in the Assumptions and Measures List which have pre-assigned savings and cost values. With respect to Pollution Probe's submission, the Board does not have the resources to complete its own evaluation of each custom project.

With respect to the assessment requirements for custom projects, the Board recognizes that there are other feasible methods to estimate benefits, however, since these projects are likely to be customized solutions which are not presented in the Assumptions and Measures List, it seems practical to require a professional engineering assessment of the savings. Lastly, with respect to Hydro One's submission, the Board feels that the Guide gives distributors appropriate guidance with respect to the costs for monitoring and evaluation.

Avoided Costs

VECC made submissions concerning the use of avoided costs. VECC submitted that the Guide does not address the issue of uncertainty in the values provided by the Avoided Cost Study. VECC also submitted that Hydro One's avoided distribution

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3 Summit Blue Consulting LLC. (2003) *Assessment of DSM Evaluation Processes for Business Markets Projects and Free Ridership Evaluation: Custom Project Attribution Evaluation Final Report.*
4 Summit Blue Consulting LLC. (2005) *Research to Establish Free Ridership Rates Final Report*

capacity costs are likely to be materially higher than those of other LDCs in the province.

View of the Board

While the Board acknowledges that there are uncertainties in the avoided cost values for energy, generation, transmission and distribution capacity, it is more important to have a set of avoided cost estimates that distributors can use in planning and testing CDM measures. While Hydro One's avoided capacity cost values are likely to be higher than most in the province, it is not likely that the difference between a distributors actual avoided capacity costs and the deemed avoided capacity will create a material difference in benefit estimates. It is more important to ratepayers that distributors put effective conservation and demand management measures in place immediately, using the best information available, rather than delay for further study. Further, the Board has indicated that where distributors have better information, they are invited to use it as long as they provide supporting evidence to the Board.

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For immediate release

September 8, 2005

OEB Issues *Total Resource Cost Guide* for 2005 and 2006 Conservation and Demand Management Plans

Toronto –Today the Ontario Energy Board issued the *Total Resource Cost Guide* (the Guide) for conservation and demand management plans.

The Guide was prepared to help electricity utilities meet the filing requirements of their 2005 conservation and demand management (CDM) approval and to make applications for incremental CDM funding in 2006 distribution rates.

On December 10, 2004, the Board approved applications by certain utilities to invest in CDM on the condition that the applicants file quarterly and annual reports including a cost benefit analysis on their CDM initiatives.

This condition of approval became standard to all approvals of electricity utility funds for CDM. Overall, the Board approved over $163 million worth of CDM plans to be implemented by the electricity utilities over a three year period ending in September 2007.

This Guide outlines the required analysis and techniques for utilities to perform the cost benefit analysis.

The Guide consists of a document explaining how to undertake a TRC cost benefit analysis, including supporting information, specific direction on key issues, and the mathematical formulae and recommendations related to data requirements and collection techniques.

The Ontario Energy Board regulates the province's electricity and natural gas sectors in the public interest. It envisions a healthy and efficient energy sector with informed consumers, and works towards this vision through regulatory processes that are effective, fair and transparent.

For more information on the Board or this announcement, please visit our web site at www.oeb.gov.on.ca or contact the Consumer Relations Centre at 416-314-2455 or toll-free at 1-877-632-2727.

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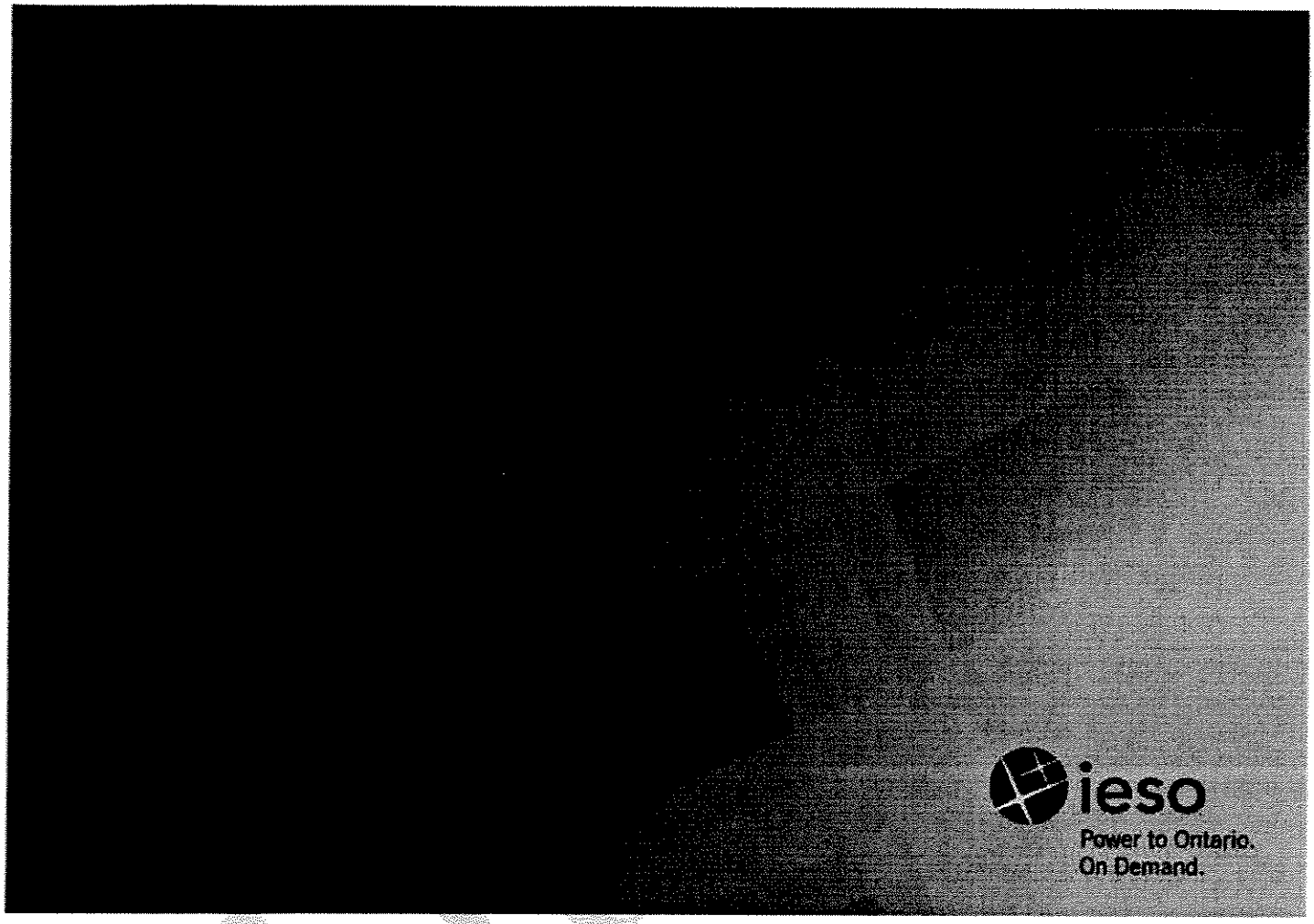
For more information contact:

Vanda Wall
Ontario Energy Board
416-440-8149



IESO Reliability Measures 2006

Proposed Reliability Demand Response Program

November 22, 2005

Overview

This document provides a description of a proposed emergency demand response program referred to as the Reliability Demand Response Program, (RDRP). The RDRP will be discussed with stakeholders at an open workshop, scheduled for December 8th, 2005. For more information on that event, please refer to the Stakeholder Engagement web pages at http://www.ieso.ca/imoweb/consult/consult_drrp.asp

The RDRP is intended to enhance reliability of the power system for the summer of 2006. RDRP will form part of the IESO Emergency Operating State Control Action (EOSCA) list for responding to emergency situations. RDRP will be implemented early on the EOSCA list, in order to avoid when possible voltage reductions, requesting Ontario generators to apply for environmental variances, and emergency energy purchases. When the IESO foresees an emergency event, either one day ahead, or on the day at hand, the IESO would request RDRP participants to indicate how much load curtailment they would be willing to provide. In exchange for a commitment to reduce that amount of load, RDRP participants would be paid a standby payment until activation, at which time they would be paid for any actual measured and verified reductions.

The following draft program outline was developed with input from participants of a working group session on November 3, 2005. The working group session focused on identifying barriers to participation in a reliability demand response program and potential measures to increase participation. The program development recognized that the emergency control actions this program is addressing[1] have typically occurred on business days and lasted between 2 to 4 hours.

DESIGN DESCRIPTION

The proposed terms of RDRP are outlined below:

1. Eligibility

- Participation in RDRP is not limited; any demand response capability meeting the program criteria is eligible to participate.
- RDRP participation should be of interest to following entities:
  - Wholesale market participant loads
  - Individual embedded loads
  - Aggregators
- Participant registration in RDRP does not necessarily preclude participation in other Ontario demand response program
- Participant registration in RDRP is required, but does not represent any assumed demand response; RDRP participants voluntarily submit demand response capability when requested by the IESO.
- RDRP is available to interruptible loads & emergency backup generation that can operate as per their certificate of approval.

[1] Specifically voltage reductions, environmental variance and emergency energy purchase.

- Loads must already be authorized participants in IESO-administered markets, or must become authorized prior to providing demand response under the RDRP.

2. Demand Response Criteria – Quantity, Duration and Applicable Hours

- MW demand reduction capability as denoted hourly on a submitted RDRP demand reduction form (form design under development), must not be part of any other demand response program in Ontario for the hours of the day that a participant voluntarily commits MWs to RDRP. In other words, a RDRP form submission represents an agreement that the MWs will not be concurrently accounted as hourly demand response reduction in any other Ontario demand response program. IESO reserve the right to audit MW demand response capability and apply penalties accordingly.
- The minimum level of demand reduction for which compensation will be provided is 1 MW.
- Demand reductions must be measurable and verifiable.
- Once activated, the duration of demand reduction must be either 2, 3 or 4 consecutive hours.
- RDRP will be in effect from 9:00 – 20:00 EST, on business days (Business day means any day other than Saturday, a Sunday or a holiday as defined in section 29 of the *Interpretation Act* (Ontario).
- One demand response activation per participant per day.

3. Notification and Activation

Notification for RDRP support may be either day ahead or day at hand. Response to the notification by RDRP participants is voluntary. More specifically, the decision to submit a RDRP demand reduction form in response to any separate IESO notification resides with each RDRP participant.

Day Ahead Notification and Activation

- By 16:00 EST day-ahead, IESO notifies participants that activation might be required for the following day.
- By 8:00 am EST day at hand, RDRP participants willing to provide demand reductions, voluntarily submit a single demand reduction form via the market participant interface (MPI).
- IESO receipt of demand reduction form constitutes mandatory reduction from participants upon activation by IESO. Financial penalties will be imposed for participant non-compliance of activation. Non-compliance is defined as not achieving +/- 10% of the indicated demand reduction for the time specified.
- Demand reduction form allows participants the flexibility to indicate MW reductions per hour that they are willing to reduce if activated between hours 9:00-20:00.
- Participants choose their single demand reduction to be 2, 3 or 4 consecutive hours under activation by IESO. The choice to implement program with a single activation of 2, 3 or 4 consecutive hours ensures that the program is practical to implement.
- IESO activation for demand reductions will be provided to the participants at least 1 hour prior to the start of the required reduction hour via an automated system.

Day at Hand Notification and Activation

- By 9:00 EST, IESO notifies participants that activation might be required for day at hand.
- By 10:45 am EST day at hand, RDRP participants willing to provide demand reductions, submit a single demand reduction form (form design under development) via the market participant interface (MPI).
- IESO receipt of demand reduction form constitutes mandatory reduction from participants upon activation by IESO. Financial penalties will be imposed for participant non-compliance of activation. Non-compliance is defined as not achieving +/- 10% of the indicated demand reduction for the time specified.
- Demand reduction form allows participants the flexibility to indicate MW reductions per hour that they are willing to reduce if activated between hours 12:00-20:00.
- Participants choose their single demand reduction to be 2, 3 or 4 consecutive hours under activation by IESO. The choice to implement program with a single activation of 2, 3 or 4 consecutive hours ensures that the program is practical to implement.
- IESO activation for demand reductions will be provided to the participants at least 1 hour prior to the start of the required reduction hour via an automated system.

4. Calculation and Payments for Demand Response

- Participants receive an hourly "standby" payment for each submitted MW reduction until the top of the required reduction hour as activated by IESO.
    - The standby payment price is currently under review but price considerations are ranging between $1.50/MWh to $7.00/MWh. A standby price discussion will follow at our open workshop schedule for December 8, 2005.
- Upon activation and subject to measurement and verification of actual demand reduction, participants receive payments based on the greater of HOEP and
    - $400/MWh for 2 hours of consecutive reduction,
    - $500/MWh for 3 hours of consecutive reduction, or
    - $600/MWh for 4 hours of consecutive reduction.
- Standby payments will be calculated by IESO and appear on the preliminary settlement for the last day of each month.
- Participants will be required to a submit measurement and verification form (form design under development) with baseline data and actual load during activation hours in order to receive payment for actual demand reduction.

OGILVY RENAULT

LLP / S.E.N.C.R.L., s.r.l.

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SENT BY FAX

Toronto, November 7, 2005

Mr. John Zych
Board Secretary
Ontario Energy Board
P.O. Box 2319, 26th Floor
2300 Yonge Street
Toronto, Ontario, Canada
M4P 1E4

Dear Mr. Zych:

RE: Pollution Probe Motion requesting amendments to the Board's *Total Resource Cost Guide*

I have been asked by the Electricity Distributors Association to express concern about the motion recently filed by Pollution Probe. In that motion, Pollution Probe seeks an order amending certain provisions in the Board's *Total Resource Cost Guide* (the TRC Guide), which was released by the Board on September 8, 2005.

The motion has been filed under RP-2004-0188, which is the docket number the Board used for the purpose of developing the 2006 Electricity Distribution Rates Handbook. That process was not a formal decision making process, as evidenced by the fact that it resulted in a Report of the Board rather than a decision with reasons. The purpose of that consultative process was to develop a filing guideline for electricity distributors to use when filing applications for 2006 rates.

In its Report, the Board specifically addressed the issues raised in the motion. The Board's report noted that Pollution Probe supported the pre-approval of TRC inputs and proposed that the Board should develop those inputs. The Board said it would do so and has done so in the TRC Guide. Now that the Board has established free ridership rates, it appears that Pollution Probe has either changed its position or forgotten that this is meant to be a transitional approach, to be revisited as distributors gain experience with conservation programs. One of the main reasons

for pre-approving the TRC inputs was to provide regulatory certainty for distributors as they embark upon such programming. This is a point that Jack Gibbons, whose affidavit has been filed in support of the motion, noted in his testimony in RP-2004-0188, as reflected in the Board's Report.

The Board also said in its Report that in this transitional period, a simple approach would be best and more complex approaches could be considered in future years. That simple approach has been adopted by the Board in its Total Resource Cost Guide. In light of the position that was taken by Pollution Probe, and which was accepted by the Board and which has been relied upon by distributors as they prepared and filed their 2006 rates applications, it is highly problematic at this stage for Pollution Probe to change its position and seek changes to the TRC Guide.

From a strict procedural perspective, Pollution Probe has no right to bring such a motion, since motions are interlocutory matters that occur in decision making processes, which RP-2004-0188 was not. Therefore, there is no obligation on the Board to adjudicate on the motion.

Given the consultative nature of the RP-2004-0188 Handbook process, it is unclear why Pollution Probe is pursuing the issues it raises in the motion under that docket number. Further to the Board's decision on the application brought by the Coalition of Large Distributors in RP-2004-0203, the Board set up a consultation process specifically for the purpose of producing the TRC Guide. Pollution Probe participated in that process and addressed the issues it now seeks to raise in its motion, for the third time.

The Board specifically considered the issues raised by Pollution Probe, as can be seen in Appendix A to the TRC Guide. On the issue of attribution of benefits, the Board said:

> With respect to the submission by Pollution Probe and VECC, the Board recognizes there is a potential for LDCs to claim the benefits of a program in which their involvement was minimal. However, this situation would be the exception and the Board supports the development of partnerships with third parties to create efficiencies in the delivery of CDM programs. Further, the Board has the jurisdiction to make adjustments to the incentive awards to the LDCs through its rate case.

On the issue of free rider rates, the Board said:

> The Board recognizes that free ridership is a function of program design, *inter alia*, and for any individual custom project the issue of free ridership is binary. The participant would either have undertaken the measure without the distributors' involvement or it would not have (i.e. either a free rider or not). However, studies commissioned by Enbridge Gas Distribution Inc.[3] and Union Gas Limited[4] indicate on average, the level of free ridership (not including spill-

over) was 30% or greater. Without better information, the Board will be guided by these values. While the Board acknowledges that setting a default rate is not perfect, if a distributor feels that these values do not accurately reflect their influence on a particular project, the distributor is free to complete a custom project free rider evaluation and file it along with its cost benefit analysis. With respect to the submission by BOMA, the Board is of the view that custom projects are those that involved customized design and engineering, rather than a combination of several measures provided in the Assumptions and Measures List which have pre-assigned savings and cost values. With respect to Pollution Probe's submission, the Board does not have the resources to complete its own evaluation of each custom project.

There have been two consultative processes on these issues and Pollution Probe seeks the commencement of a third one.

The EDA is strongly concerned that electricity distributors will have to devote additional resources to issues that the Board has already addressed at a time when the Board's own resources are already engaged in a significant number of applications currently pending before the Board.

Yours very truly,

Ogilvy Renault LLP

Patrick Moran

PJM/

c.c. D. Steggles
B. Hawkins
M. Klippenstein

File No. RP-2004-0188

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 the preparation of a handbook for electricity distribution rate applications [2006 Electricity Distribution Rate Handbook].

NOTICE OF MOTION
by Pollution Probe

Re: Free-ridership rates and joint programme attribution in the *TRC Guide*

Motion returnable on a date to be set by the Board

Pollution Probe requests that the Ontario Energy Board set a date and time for a motion to be heard by the Board at 2300 Yonge Street, Toronto, Ontario, in the Board's hearing room on the 25th floor.

THE MOTION IS FOR:

1. An Order that the *Total Resource Cost Guide* (the "*Guide*") issued by the Ontario Energy Board on September 8, 2005 be modified in its treatment of free-ridership rates and joint programme attribution, to provide:

   a) With respect to free-ridership rates, that:

      i) The *Guide's* list of 103 *a priori* free-ridership rates be rescinded; and

      ii) The *Guide* be revised to provide that if a utility wishes to obtain approval

for the free-rider rate(s) of one or more of its conservation programmes, it must provide the OEB with evidence to support the reasonableness of its proposed free-rider rate(s) prior to programme implementation, or alternatively, it must provide evidence to support the reasonableness of its estimated free-rider rates when it submits its SSM claim after the end of its fiscal year.

b) With respect to joint programme attribution rates, that

i) The *Guide*'s rule that a utility can claim 100% of the net benefits associated with a conservation programme which it jointly markets with a non-rate regulated third party be rescinded; and

ii) The *Guide* be revised to provide that a utility can claim 100% of the *incremental* net benefits that it creates when it co-markets a conservation programme with a non-rate regulated third party.

THE GROUNDS FOR THE MOTION ARE:

Background

1. On September 8, 2005, the Ontario Energy Board issued its *Total Resource Cost Guide*, ("*TRC Guide*") to help electricity local distribution companies ("LDCs") meet the filing requirements for their 2005 and 2006 conservation and demand management ("CDM") programmes. The *TRC Guide* sets out on a general basis (and subject to individual Board determinations in individual cases) how the Board expects the LDCs to undertake Total Resource Cost ("TRC") Test cost-benefit analyses of their conservation and demand management programmes.

2. As part of its guidelines, the *TRC Guide* describes how the Board will generally deal with the specific areas of: 1) free-ridership rates in conservation programmes; and 2) the way in which conservation programme benefits will be attributed when the programmes are jointly operated by a utility and a non-rate regulated third party.

Free-Ridership Rates

3. Free-ridership rates are the percentage of participants in a conservation programme who would have adopted the measure even without the programme (i.e. the incentive or benefit provided to the customer through the programme was not necessary in their case), and hence they are "free-riders". Resources spent in a conservation programme which end up benefiting free-riders are in a sense "wasted" since the free-riders did not need to be persuaded to adopt the conservation measure as they would have done so on their own. In general, the lower the free-rider rate achieved by a programme, the more efficient the programme is in achieving and maximizing conservation, and the less "waste" (in the sense of misdirected resources) in the programme.

4. In the case of conservation programmes, an estimate of the net savings achieved by the programme (that is, the net energy cost savings to the customers) is calculated in part by allowing for estimated free-riders. This free-rider estimate and deduction is done so that the utility is not given credit for conservation which would have happened anyway.

5. The estimated energy cost savings from conservation programmes can be used for several purposes. These purposes include: a) selection of which programmes to pursue; and b)

benchmarking best practices in the context of inter-utility comparisons. The savings estimates will also be used in the Board's financial incentive structure (the Shared Savings Mechanism) to allocate a small percentage of the savings to the utilities' shareholders as a profit bonus for having saved customers money through conservation.

6. Pollution Probe is concerned that the *Guide* adopts standardized free-ridership rates for 102 conservation measures and all custom projects. Pollution Probe is particularly concerned since "free ridership is appropriately applied at the program level" and "free ridership is a function of program design".

7. Pollution Probe is concerned about inaccuracy that can arise from using standardized free-ridership rates.

8. For one, if the standardized estimated percentage of free riders is too low (i.e. there are in fact more free-riders in the programme than the standardized estimate), then the programme's success is being overestimated, and the utility will receive a larger profit bonus than it deserves.

9. In addition, if the free-rider rate is fixed beforehand, the utility has no financial incentive to use its best efforts to carefully channel its programme resources to where they are really needed – away from the customers who are going to adopt the measure anyway and as much as possible towards customers who need "persuasion". Since the free-ridership rate to be used for the calculation is fixed beforehand (rather than being based on actual

results achieved in the programme), there is no financial incentive for the utility to reduce the free-ridership rate through the best possible programme design, or through the use of the utility's special knowledge about its particular franchise area and customers.

10. In short, Pollution Probe is concerned that a "standardized" free-ridership rate, to be automatically used for all LDCs, could dramatically undercut the incentive for an LDC to design the most efficient conservation programme possible, and could thereby undermine the effectiveness of the programme.

11. Furthermore, the use of "standardized" free ridership rates to calculate the LDC's share of savings means that LDCs could become entitled to profit bonuses that are excessive relative to the actual, as opposed to the reported, savings that the LDC has obtained for its customers.

Joint Programme Attribution Rates

12. There may be occasions when conservation programmes are more effective when jointly operated by an electrical LDC and some other organization.

13. The *TRC Guide* provides that a utility can claim 100% of the net benefits associated with a conservation programme which the utility jointly markets with a non-rate regulated third party.

14. Pollution Probe is concerned that this rule will permit the utilities to earn excessive SSM profit bonuses relative to the incremental benefits that their participation has created.

Rules Relied Upon

15. Pollution Probe relies upon Rules 7, 8, 42, 43, 44, 2.01, and 2.02 in the Board's *Rules of Practice and Procedure.*

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

1. The affidavit of Jack Gibbons, dated October 14, 2005, and exhibits attached thereto; and

2. Such other Affidavits as Pollution Probe may submit.

October 14, 2005

KLIPPENSTEINS
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Murray Klippenstein, LSUC #26950G
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Solicitors for Pollution Probe

TO: Ontario Energy Board
Licenced Electricity Distributors
All Interested Parties
Ontario Power Authority

File No. EB-2005-0523

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1988*, S.O. 1998, C.15, Schedule B.

AND IN THE MATTER OF a proceeding initiated by the Ontario Energy Board to make certain determinations respecting conservation and demand management ("CDM") by Local Distribution Companies ("LDC") activities as described in the Electric Distribution Rates ("EDR") Handbook and Total Resource Cost ("TRC") Guide pursuant to sections 19(4) and 78 of the *Ontario Energy Board Act, 1998.*

AFFIDAVIT OF TODD WILLIAMS

I, **TODD WILLIAMS**, of the City of Kingston in the Province of Ontario, **MAKE OATH AND SAY**:

A. Introduction

1. I am an engineer and consultant with Navigant Consulting Ltd. I have previously provided evidence on matters related to the DSM framework for Enbridge Gas Distribution at an OEB hearing. Attached as Exhibit "A" is a current copy of my *curriculum vitae*.

2. I am a Director of Kingston Electricity Distribution Limited and, through my work with Navigant Consulting, have provided independent advice to a variety of Ontario electric Local Distribution Companies (LDCs), their Boards of Directors and their shareholder on various strategic, operational and regulatory matters, including conservation and demand management in the past eight years. This evidence reflects the insights gained through my provision of this independent advice.

3. Except where I have obtained information from other sources, I have personal knowledge of the matters discussed here. I declare that I verily believe all information to be true.

26. The Total Resource Cost Guide (TRC Guide) issued by the Board is a key element of the CDM framework for LDCs. Among other things, the TRC Guide specifies free ridership levels and other characteristics, such as summer peak kW reduction, for a variety of CDM measures.

27. Specifying and "locking-in" free ridership and other measure characteristics up front provides some certainty regarding cost recovery, lost revenue recovery and potential shareholder incentives. It also encourages LDCs to focus their CDM efforts on maximizing the number of program participants while keeping within their overall CDM budget.

28. Certainty with respect to the CDM framework and measure characteristics is important for LDCs. Retrospective changes to the CDM framework or measure characteristics create considerable risk for LDCs. Plans can be adjusted and optimized to reflect changes made on a prospective basis that would apply in the future, but it is impossible to change plans after the fact to reflect retrospective changes.

29. The issue of retrospective versus prospective changes is not unique to Ontario's electricity LDCs. I have seen the DSM framework for Ontario's gas utilities evolve gradually over time from one with considerable retrospective adjustments to one with a much greater emphasis on "locking in" key program parameters where new information is used prospectively, not retrospectively. This is also the case for the CDM frameworks governing utility incentive mechanisms in many other jurisdictions – new information is generally applied prospectively, not retrospectively.

30. Given this desire for greater certainty and concerns about retrospective adjustments, if LDCs were required to demonstrate free ridership on a program by program basis, it would be prudent for them to 1) develop these estimates up-front and 2) secure Board approval for the free ridership levels in advance of any significant program implementation activity. Otherwise, they would be exposed to considerable risk regarding cost recovery, lost revenue recovery and potential shareholder incentives. Hydro One estimates that it would take at least six months to estimate and secure Board approval for free ridership levels for all of its CDM programs and I expect it would take about the same time for most other LDCs. This would not only delay their program implementation but would also divert funds from CDM implementation. Considering the number of LDCs in Ontario and the number of CDM programs they are offering, the funds diverted to this effort would be significant.

31. In essence, I expect that requiring LDCs to demonstrate free ridership on a program by program basis will delay implementation of CDM programs and divert funds from program implementation. Both of which will reduce the level

of customer savings, which could also jeopardize realization of the government's CDM targets.

32. The Board has recognized the tension between implementing CDM now using available information or waiting for better information when it stated in Appendix A of the TRC Guide that: *"It is more important to ratepayers that distributors put effective conservation and demand management measures in place immediately, using the best available information, rather than delay for further study."*[7] This is fully consistent with the transitional nature of the third tranche CDM funding and associated framework. The framework may not be perfect, but it's a start and can be improved and refined over time.

33. As an example of such improvement and refinement, I expect that information from LDCs' future CDM evaluation efforts will provide valuable information regarding program-specific free ridership and other characteristics. This new information could then be used on a prospective basis for future CDM program and reporting activities.

34. Lastly, I think that most LDCs fully recognize that, in spite of the "locked-in" nature of the free ridership levels in the TRC Guide, the Board retains the option to address any significant discrepancies related to free ridership and other characteristics through its rate-setting process. As stated by the Board in Appendix A of the TRC guide: *"... the Board has the discretion to make adjustments to the incentive awards to the LDCs through the rate cases.*[8]" So, the TRC Guide provides some valuable certainty to LDCs in terms of free ridership, but the Board retains ultimate authority to decide whether or not to make adjustments in the future.

E. Whether the Board should order that an LDC should only be entitled to claim incremental benefits associated with participation in a CDM program with a non-rate regulated third party?

35. The third issue -- whether the Board should order that an LDC should only be entitled to claim incremental benefits associated with participation in a CDM program with a non-rate regulated third party - is closely related to the second issue. This is not surprising since free riders and "incremental" benefits are closely related - one being essentially the opposite of the other. As with the issue

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[7] Page 7, Appendix A, Total Resource Cost Guide, Ontario Energy Board, September 8, 2005.

[8] Page 5, Appendix A, Total Resource Cost Guide, Ontario Energy Board, September 8, 2005.

NAVIGANT CONSULTING

PLANNING AND BUDGETING FOR ENERGY EFFICIENCY/DEMAND-SIDE MANAGEMENT PROGRAMS

PREPARED FOR:

UNION GAS LIMITED

OCTOBER 26, 2005

PRESENTED BY:

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NAVIGANT CONSULTING

Table 5: 2006 DSM Budget Breakdown

Program	Target (103m3)	Budget ($000)
Residential	8,872	2,332
Residential Low Income	1,360	461
Commercial	27,337	3,891
Distribution Contract Customers	50,950	3,304
Research	-	760
Evaluation	-	300
Administration	-	65
Salaries and Other Overhead	-	2,630
Total	**88,519**	**13,743**

This level of spending represents about 0.8% of Union's revenues[23] and an increase of almost 50% over 2005 DSM spending and 100% over 2003 DSM spending.

Note that given recent increases in the price of natural gas, the net TRC benefits per m^3 saved and total net TRC benefits realized are expected to increase significantly compared with Union's previous DSM plans. Any such increase would be automatically addressed through the recommended incentive mechanism discussed in the next section.

Incentive Mechanism

Navigant Consulting recommends that the DSM incentive mechanism for Union should reflect 1) the TRC benefits realized through Union's DSM efforts and 2) its DSM performance relative to its m^3 target. Based on this overarching principle, the other key parameters of the incentive mechanism are as follows:

- The incentive rate should be set such that the incentive achieved at 100% of Union's m^3 target rate should equal 50% of Union's DSM budget
- The Minimum Performance Level at which Union would become eligible for an incentive should be 50% of its m^3 target

[23] Union's 2004 gas sales and distribution revenue was $1.635 billion and forecast 2005 gas sales and distribution revenue are approximately $1.8 billion. Hence, Union's average annual revenue over the past two years is approximately $1.72 billion.

File NO. EB 2005-0523

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 proceeding initiated by the Ontario Energy Board to make certain determinations respecting conservation and demand management ("CDM") by Local Distribution Companies ("LDC") activities as described in the Electric Distribution Rates ("EDR") Handbook and Total Resource Cost ("TRC") Guide pursuant to subsection 19(4) and 78 of the *Ontario Energy Board Act, 1998*

AFFIDAVIT OF DAVID HEENEY

I, **DAVID WESLEY HEENEY** of the City of Toronto, Province of Ontario, **MAKE OATH AND SAY:**

1. I am the President of IndEco Strategic Consulting Inc. ("IndEco"). IndEco is a management consulting firm specializing in energy and the environment, and with special expertise in energy conservation and demand management ("CDM"). Attached as Exhibit "A" to my affidavit is a copy of my *curriculum vitae.*

2. I have personal knowledge of the matters herein discussed, except where I have specifically indicated that I have obtained information from other sources. I declare that I verily believe all such information to be true.

3. By way of Notice of Proceeding and Hearing, dated November 11, 2005, (the "Notice") the Ontario Energy Board (the "OEB" or the "Board") commenced a proceeding on its own motion to make certain determinations respecting LDC CDM activities as described in the EDR Handbook and TRC Guide.

4. In particular, the Board asked parties to this proceeding to prepare evidence and submissions on the following matters:

4.1 Whether the Board should order an LDC to spend money on CDM programs in an amount that is different from the amount proposed by an LDC in a test year and if so, under what circumstances;

4.2 Whether the Board should require LDCs to demonstrate free-ridership levels for all CDM programs on a program-by-program basis; and

4.3 Whether the Board should order that an LDC should only be entitled to claim incremental benefits associated with its participation in a CDM program with a non-rate regulated third party.

5. The Notice stated that parties leading evidence in this proceeding may do so by filing affidavit evidence with the Board and the registered intervenors, and all other LDCs by December 2, 2005.

6. The Low Income Energy Network ("LIEN") is a party in this proceeding. LIEN is an organization of more than 40 member groups from across Ontario including, energy, public health, legal tenant/housing, education and social and community organizations. As a network representing the intersection of interests related to low-income customers, and energy and the environment. LIEN's focus is on:

6.1 reducing the electricity bills of all low-income consumers (at least to a level lower than what the bills would have been absent the CDM program, given the environment of rising electricity prices);

6.2 ensuring low-income customers have access to conservation programs and technologies; and

6.3 realizing environmental, energy and economic benefits that are associated with the more efficient use of energy.

7. IndEco has been retained by LIEN to prepare a report in connection with the specific matters the Board requested to be dealt with in this proceeding. Attached as Exhibit "B" to my affidavit is a copy of the report prepared by IndEco for LIEN (the "IndEco Report").

8. The IndEco Report concludes that:

8.1 Where an LDC proposes no or inadequate CDM programs directed at low-income customers, and does not provide an explanation, satisfactory to the Board, as to why there is no need for such CDM programs, the Board should

order the utility to spend money on low-income CDM programs in an amount that is different from the amount proposed by the LDC in the test year.

8.2 The Board should not require LDCs to demonstrate free-ridership levels for all CDM programs on a program-by-program basis.

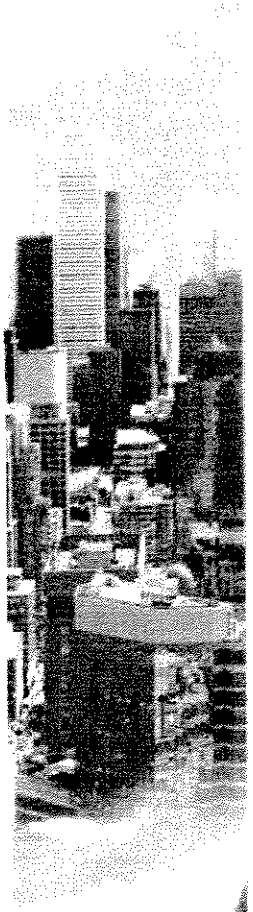
8.3 The Board should not order that an LDC should only be entitled to claim incremental benefits associated with its participation in a CDM program with a non-rate regulated third party.

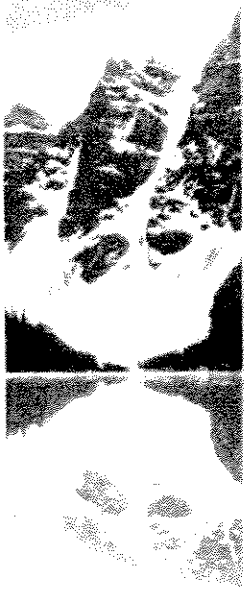
9 The specific background and rationale for these conclusions is more specifically set out in the IndEco Report.

SWORN before me at the City of Toronto, in the Province of Ontario this 2nd day of December 2005

A commissioner etc.

David Wesley Heeney





CDM, free riders and attribution of benefits

Prepared for the Low-Income Energy Network involvement in OEB proceeding EB-2005-0523

This is Exhibit A referred to in the affidavit of David Wesley Heeney sworn before me this 2nd day of December, 2005.

A Commissioner etc.

INDEC

Allocation of benefits

The OEB, in its Notice of Proceeding (EB-2005-0523), posed the following question related to the EDR Handbook and TRC Guide to which parties were invited to prepare evidence and make submissions:

Should the Board order that an LDC should only be entitled to claim incremental benefits associated with its participation in a CDM program with a non-rate regulated third party?

The Board should not order that an LDC should only be entitled to claim incremental benefits associated with its participation in a CDM program with a non-rate regulated third party.

The provincial government has a policy of encouraging partnerships and synergies between LDCs and other non-regulated third parties. If the utility can only claim the incremental benefits, there is no incentive to partner with these non-rate regulated third parties. It is difficult to study and prove any benefits that result from the group synergies and the cost of trying to try to do so may outweigh the benefit of conducting those studies, especially for smaller programs. Therefore, in order to encourage these partnerships, the utilities should have an incentive to do so.

The default option for the attribution of savings for partnerships with third-parties should be based on the relative spending of the partners. In order to encourage such partnerships, as requested by the Minister in his instructions to LDCs on developing CDM programs, LCDs should be entitled to claim credit for TRC benefits based on their share of spending plus some increment, such as 20%. Thus if the LDC is an equal partner, then it would be entitled to claim (50% x 1.2=) 60% of net TRC benefits created. As is the principle in the TRC Guide now, if an LDC wishes to establish why it deserves more benefits than the default option for a particular case, it is free to do so.

In some cases, due to the partner having different objectives, different accounting methods, or for other reasons, the partner's contribution may be unavailable, or not readily available. In these cases the LDC should develop and explain the rationale used to allocate benefits, preferably at the plan stage.

Where the program involves a partnership with *rate-regulated* third parties, the total benefits allocated among the partners shall not exceed 100% of the estimated benefits.

In future, the Board should require LDCs to assign benefits in these types of partnership programs up front when designing the CDM program. This will give LDCs certainty going forward, and enable them to put greater attention on achieving savings.