Ontario Energy Board

RP-2003-0144

Pollution Probe's Submissions With Respect to the January 23, 2004 OEB Staff Report on Demand-Side Management and Demand Response

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Overview

Since 1993, in response to policy directions from the Ontario Energy Board (OEB) and the Government of Ontario, Enbridge Gas Distribution and Union Gas have implemented innovative and cost-effective energy conservation and efficiency programs that are reducing their customers' bills by over \$1 billion.

On November 25, 2003, Ontario's Minister of Energy, the Honourable Dwight Duncan, announced that he will permit Hydro One and Ontario's municipal electric utilities to raise their rates by approximately \$225 million to finance their initial energy conservation and efficiency programs. It is Pollution Probe's submission that it is reasonable to assume that Minister Duncan's decision to make Ontario's electric utilities central players in the promotion of energy conservation is due, at least in part, to the success of the OEB-regulated natural gas utility energy conservation programs.

The aggressive and cost-effective promotion of energy conservation by Ontario's electric utilities will:

- Reduce the electricity bills of residential, commercial, institutional and industrial consumers. Enbridge's energy conservation programs have a ratio of net energy cost savings to utility spending of approximately 5.5 to 8.3. Therefore, the electric utilities' \$225 million budget may by able to reduce their customers' bills by up to \$1.8 billion or more.
- Reduce the risk of blackouts and brownouts.
- Help phase-out Ontario's coal-fired power plants. According to Enersource Corporation (formerly Hydro Mississauga), energy conservation programs could reduce Ontario's electricity demand by up to 3,800 megawatts (MW) by 2015. This is the equivalent of up to 50% of Ontario's coal-fired electricity generation capacity. [Pollution Probe et al., Making Everyone a Winner: Making Energy Conservation Profitable for Ontario's Electric Utilities]

On December 12, 2003, the OEB's Advisory Group on Demand-Side Management (energy conservation and efficiency) delivered its report to the Board. The report's chapter "Ontario Energy Board/Wires Companies DSM Framework" outlined a balanced and pragmatic recommended OEB regulatory framework that will motivate Ontario's electric utilities to develop and implement innovative and cost-effective energy conservation and efficiency programs.

On January 14, 2004, Minister Duncan released the report of the Electricity Conservation and Supply Task Force. The Task Force's report said that Ontario's electric utilities "have a central facilitating role to play, and that they can act as a

conduit for the delivery of conservation activities in partnership with private firms and the voluntary sector."

The Task Force also recommended that the OEB should make the promotion of energy conservation a profitable course of action for Ontario's electric utilities. [Tough Choices: Addressing Ontario's Power Needs: Final Report to the Minister, pp. 40, 41 & 45]

According to Minister Duncan the McGuinty Government "will use the report as a foundation for setting a new direction and developing a responsible and sustainable policy for Ontario's electricity sector." Minister Duncan also announced his commitment to creating a "conservation culture" in Ontario. [Ontario Ministry of Energy, *News Release*, "Electricity Conservation And Supply Task Force Report Confirms Need For New Direction In Ontario's Electricity Sector", January 14, 2004.]

On January 23, 2004 in a totally inappropriate and largely indefensible challenge to Minister Duncan's clearly stated policy objectives, OEB staff recommended that:

- 1. Hydro One and Ontario's municipal utilities (e.g., Toronto Hydro) should continue to be financially penalized for reducing their customers' bills by promoting energy conservation and efficiency.
- 2. Any utility-sponsored conservation and efficiency programs should be required to pass the very restrictive utility cost test (the hardly any winners test).
- 3. A new government bureaucracy should be created at Queen's Park to design and deliver cookie-cutter, province-wide electric and gas conservation programs.
- 4. The Enbridge Gas Distribution and Union Gas energy conservation programs, which to date are reducing customer bills by over \$1 billion, should be shut down.

As Board Staff are well aware, the *Ontario Energy Board Act* requires the OEB to promote energy conservation in a manner consistent with the policies of the Government of Ontario:

"To promote energy conservation, energy efficiency, load management and the use of cleaner energy sources, including alternative and renewable energy sources, in a manner consistent with the policies of the Government of Ontario."

Therefore, it is Pollution Probe's submission that the OEB does not have the authority to accept its staff's recommendations since they are directly contrary to the policy objectives of the Government of Ontario.

It is Pollution Probe's further submission that the Ontario Energy Board should:

- 1. Announce its unequivocal and firm support for the aggressive and cost-effective promotion of energy conservation and efficiency by Ontario's electric utilities;
- 2. Reconfirm its strong support for the aggressive and cost-effective promotion of energy conservation and efficiency by Enbridge Gas Distribution and Union Gas;
- 3. Announce its unequivocal and firm support for regulatory mechanisms that will make the aggressive and cost-effective promotion of energy conservation and efficiency a profitable course of action for Ontario's utilities; and
- 4. Adopt its Advisory Group's "Ontario Energy Board/Wires Companies DSM Framework" as its framework for the regulation of the electric utilities' energy conservation and efficiency programs.

Introduction

On January 23, 2004 the Ontario Energy Board Staff issued their report to the Board: *Demand-Side Management and Demand Response in the Ontario Energy Sectors* ("OEB Staff Report"). The Staff Report made the following four major recommendations that are directly contrary to government policy and/or the public interest.

- 1. Hydro One and Ontario's municipal utilities (e.g., Toronto Hydro) should continue to be financially penalized for reducing their customers' bills by promoting energy conservation and efficiency.
- Any utility-sponsored conservation and efficiency programs should be required to pass the very restrictive utility cost test (the hardly any winners test).
- 3. A new government bureaucracy should be created at Queen's Park to design and deliver cookie-cutter, province-wide electric and gas conservation programs.
- 4. The Enbridge Gas Distribution and Union Gas energy conservation programs, which to date are reducing customer bills by over \$1 billion, should be shut down.

In this submission Pollution Probe will explain why the Staff Report's recommendations are contrary to government policy and/or the public interest and outline a properly constituted regulatory framework to encourage the aggressive and cost-effective promotion of energy conservation and efficiency by Hydro One and Ontario's municipal utilities.

Staff Recommendation #1: Hydro One and Ontario's municipal utilities should continue to be financially penalized for reducing their customers' bills by promoting energy conservation and efficiency

Under the OEB's status-quo regulatory rules, the profits of Hydro One and Ontario's municipal utilities are linked to their electricity sales. As a result, energy conservation programs that reduce a utility's electricity sales will also reduce the utility's profits. It is the OEB Staff recommendation that this perverse and counter-productive incentive structure should continue.

Direct Challenge to Minister Duncan

This OEB Staff recommendation is a direct challenge to Minister Duncan, who announced on November 25, 2003 that he has approved an initial energy conservation budget of \$225 million for Ontario's electric utilities. Minister Duncan approved the \$225 million conservation budget to help customers reduce their electricity bills, help reduce the risk of blackouts and brownouts and to help protect public health by achieving a coal phase-out by 2007.

Enbridge's energy conservation programs have a ratio of net energy cost savings to utility spending of approximately 5.5 to 8.3. Therefore, if the electric utilities develop conservation programs that are as aggressive and cost-effective as Enbridge's, the resulting reduction in their customers' bills could be \$1.8 billion or more.

Aggressive and cost-effective energy conservation programs will also reduce the risk of blackouts and brownouts and help the Government of Ontario to achieve its goal of phasing-out the coal-fired power plants by 2007. Specifically, according to Enersource Corporation (formerly Hydro Mississauga), energy conservation programs could reduce Ontario's electricity demand by up to 3,800 megawatts (MW) by 2015. This is equivalent to up to 50% of Ontario's coal-fired electricity generation capacity. [Pollution Probe et al., *Making Everyone a Winner*]

However, if the Board Staff's recommendation is accepted and the electric utilities continue to be penalized for promoting energy conservation, the utilities will have no incentive (and, in fact, a large disincentive) to develop aggressive or cost-effective energy conservation programs. Specifically, if the Board Staff's recommendation is accepted, it would be in the financial self-interest of the electric utilities to minimize their conservation-induced lost revenues and profits by wasting their \$225 million energy conservation budget by using this budget to develop high-cost, unattractive and ineffective energy conservation programs.

As the OEB Staff is well aware, the OEB's experience with gas utility-sponsored energy conservation programs has clearly demonstrated that utilities will not develop aggressive and cost-effective energy conservation programs if they are contrary to their financial self-interest.

For example, from 1995 to 1998 Enbridge Gas Distribution had no incentive to aggressively and cost-effectively promote energy conservation. Not surprisingly, as Table 1(see next page) reveals, from 1995 to 1998 Enbridge failed to achieve its energy conservation targets by 19% to 70%.

However, in 1998 the OEB established a Shared Savings Mechanism (SSM) that commenced in 1999. The SSM linked Enbridge's profits to its success at reducing its customers' bills by promoting energy conservation. As Table 1 shows, after the SSM was established, Enbridge exceeded its energy conservation targets by 21% to 67% from 1999 to 2001. (Independent audits of Enbridge's 2002 and 2003 results have not yet been completed.)

Unlike Enbridge, Union Gas does not have an SSM. As a consequence, the positive impact of a linking a utility's profits to its success at promoting energy conservation can also be seen by comparing Enbridge's and Union's forecast energy conservation savings for 2004. Despite the fact that Union Gas is Ontario's largest natural gas utility, its energy efficiency targets for 2004 are dramatically lower than those of Enbridge. Specifically, the forecast energy cost savings for Union's 2004 conservation

Table 1: Enbridge's Energy Conservation Performance*

Year	Targeted Savings (million cubic metres)	Actual Savings (million cubic metres)	Variance
1995	12.8	3.9	-70%
1996	29.0	18.8	-35%
1997	47.3	18.6	-61%
1998	44.6	36.2	-19%
1999	31.2	52.0	67%
2000	42.0	58.9	40%
2001	67.9	82.4	21%

^{*} OEB Docket No. RP-2003-0048, Ex. A, Tab 8, Sch. 1, p. 9; Updated: 2003-06-30.

programs are 56% less than those of Enbridge (\$79.4 million for Union versus \$180.4 million for Enbridge.) [Ontario Energy Board Docket No. RP-2003-0063, Ex. M11.2, Tab 1; Ex. N11.3; and Transcript Volume 11, paragraphs 577, 598, 599, 662 and 663.]

Therefore if the Board Staff's recommendation is accepted by the Board, it will frustrate the achievement of at least three key objectives of the Government of Ontario, namely:

- 1. Obtaining the maximum possible bill reductions from energy conservation;
- 2. Minimizing the risk of blackouts and brownouts; and
- 3. Protecting public health by phasing-out the coal plants by 2007.

According to paragraph 6 of section 1 of the *Ontario Energy Board Act*, the OEB is required to promote energy conservation in a manner consistent with the policies of the Government of Ontario:

"To promote energy conservation, energy efficiency, load management and the use of cleaner energy sources, including alternative and renewable energy sources, in a manner consistent with the policies of the Government of Ontario."

Therefore, it is Pollution Probe's submission that the Board is obliged to reject the Staff's recommendation since it is inconsistent with the policy objectives of the Government of Ontario.

Contrary to development of a conservation culture

On January 14, 2004, Minister Duncan announced his commitment to creating a "conservation culture" in Ontario. Moreover, on January 16, 2004, Minister Duncan stated that a conservation culture "is essential given our long-term electricity supply needs. Through this initiative, the McGuinty government is reinforcing our commitment to make conservation, demand management and demand response strategies a cornerstone of Ontario's long-term energy future." [Ontario Ministry of Energy, *News Release*, "McGuinty Government Takes Action on Conservation", January 16, 2004.]

It is Pollution Probe's submission that making conservation in the self-interest of Ontario's electric utilities is a prerequisite for the creation of a conservation culture in Ontario. However, if the Board Staff's recommendation is accepted, a conservation culture will be highly contrary to the financial self-interest of the 93 electric utilities that distribute electricity in the province of Ontario.

Therefore, once again, it is Pollution Probe's submission that the Board is obliged to reject Staff's recommendation since it is inconsistent with the policy objectives of the Government of Ontario.

Contrary to financial best interests of Government of Ontario and Ontario's municipalities Hydro One is owned by the Government of Ontario and its profits are used by the Ontario Electricity Financial Corporation (OEFC) to pay down the \$20 billion stranded nuclear debt incurred by the former Ontario Hydro.

Ontario's municipal utilities are owned by Ontario's municipalities and their profits are used to finance municipal services (e.g., police, fire, municipal swimming pools).

If Hydro One and Ontario's municipal utilities are financially penalized for promoting conservation, the OEFC's ability to pay down the stranded nuclear debt will be impaired as will be the ability of Ontario's municipalities to finance essential municipal services.

The Government of Ontario has no desire to impair the ability of the OEFC to pay down the nuclear debt, nor does it wish to impair the ability of Ontario's cashstrapped municipalities to finance essential public services.

Therefore, once again, it is Pollution Probe's submission that the Board is obliged to reject Staff's recommendation since it is inconsistent with the policy objectives of the Government of Ontario.

Contrary to public opinion

Board Staff's recommendation that Ontario's utilities should be financially penalized for promoting energy conservation is also contrary to public opinion.

According to a 1,000-person public opinion poll, conducted in Toronto in December 2001, 95% of voting age residents believe that Toronto Hydro should promote energy conservation.

Specifically, residents were asked:

At present, residents and businesses in Toronto obtain approximately 25% of their electricity from coal-fired power plants. In your opinion, should Toronto Hydro promote energy conservation in order to help reduce pollution from coal-fired electricity generating stations?

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In response, 95 percent (95%) said yes; 3% said no; and 2% had no opinion.

In addition, 79% of the eligible voters said that energy conservation should be profitable for Toronto Hydro.

Specifically, residents were asked:

As a result of rules established by the Ontario Energy Board, Enbridge Consumers Gas' profits can rise if its energy conservation programs reduce its customers' gas bills. On the other hand, Toronto Hydro is not provided with the same incentives.

Do you believe that the Ontario Energy Board should provide Toronto Hydro with financial incentives for promoting energy efficiency among its customers?

In response, 79% said yes; 12% said no; and 9% had no opinion. [Ontario Clean Air Alliance, *Questionable Air: A Survey of Environmental Issues in the City of Toronto*, December, 2001, pp. 36, 37; URL: http://www.cleanair.web.ca/pollresults.pdf]

Contrary to the Electricity Conservation and Supply Task Force Report

Board Staff's recommendation that Ontario's electric utilities should be financially penalized for promoting conservation is also contrary to the recommendations of the Government's blue-chip Electricity Conservation and Supply Task Force.

According to the Task Force's report, Ontario's electric utilities (local distribution companies or LDCs) are favourably positioned to provide conservation programs:

"Local distribution companies are favourably positioned to provide conservation programs. They are close to their customers, understand their local market conditions and may be able to better target certain programs. Goodwill exists and utilities are generally considered to enjoy strong customer trust, loyalty and brand recognition. LDCs have existing marketing relationships with delivery partners, for example, with builders or HVAC (heating, ventilation and air conditioning) contractors. In the case of some of the larger commercial and industrial customers, LDCs may provide important technical expertise.

We think that local distribution companies have a central facilitating role to play, and that they can act as a conduit for the delivery of conservation activities in partnership with private firms and the voluntary sector." [pp. 40, 41]

Moreover, the Task Force noted that the OEB's status-quo rules (which are favoured by Board Staff) penalize electric utilities that wish to promote energy conservation:

"In the current market, Ontario's local distribution companies have little incentive to promote conservation and face financial barriers to doing so. LDCs face the risk of delivering conservation programs and losing revenue because of lower volume throughput. In the natural gas industry, where conservation is delivered by Ontario's gas distributors, financial incentives – for example, funding to deliver programs, compensation for lost volume revenues, variance accounts to manage under- or over-spending, and sharing in cost savings – are provided and recovered

through rates. Similar mechanisms are used to encourage conservation by electric utilities in the United States.

The current regulatory structure which requires that LDCs and transmitters to act as "wires companies" whose core business is to distribute electricity, earning revenues on the amount of electricity flowing through their system, does not allow for the provision of conservation programs." [p. 40]

According to the Task Force's report, these barriers should be removed:

"The Task Force believes that action should be taken to help LDCs overcome these barriers." [p. 40]

Contrary to Select Committee On Alternative Fuel Sources Report

The OEB Staff's recommendation that Ontario's electric utilities should continue to be financially penalized for promoting energy conservation is also directly contrary to the unanimous recommendation of the Ontario Legislature's all-party Select Committee On Alternative Fuel Sources Report:

"The Ontario Energy Board shall require all local electrical distribution companies to operate demand-side management programs in their own operations and for their customers by July 1, 2003. A system of incentives and penalties identical to those for the natural gas industry shall be put in place." [p. 46]

Making Conservtion Profitable for Ontario's Electric Utilities

As noted previously, the *Ontario Energy Board Act requires* the OEB to promote energy conservation and efficiency in a manner consistent with the policies of the Government of Ontario. It is Pollution Probe's submission that this objective can best be achieved by making the aggressive and cost-effective promotion of energy conservation a profitable course of action for Hydro One and Ontario's municipalities.

As the Board is well aware, its historic 1998 decision to link Enbridge's profits to its success at promoting energy conservation and efficiency is providing enormous bill savings (approximately \$725 million) for its residential, commercial and industrial customers. [RP-2002-0133, Ex. L, Tab 10, p. 1; Updated: April 3, 2003; and RP-2003-0063, Ex. M11.2, Tab 1; Ex. N11.3; and Transcript Volume 11, paragraphs 577, 598, 599, 662 and 663.]

Specifically, it is Pollution Probe's submission that the OEB should adopt its Advisory Group's "Ontario Energy Board/Wires Companies DSM Framework" to motivate Ontario's electric utilities to aggressively and cost-effectively promote energy conservation. [Report of the Advisory Group on Demand-Side Management and Demand Response in Ontario, pp. 49 - 58.] The Advisory Group called for the establishment of a Lost Revenue Adjustment Mechanism (LRAM), a Demand Side Management Variance Account (DSMVA) and a Shared Savings Mechanism (SSM), all of which should be adopted by the Board in our view.

LRAM

According to the *Advisory Group* each "wires company that has a DSM [demand side management or energy conservation] program would have a symmetrical LRAM to ensure that its energy conservation and efficiency programs do not reduce its total wires revenues."

DSMVA

According to the *Advisory Group* each "utility would have a DSMVA to ensure that unspent DSM budget dollars are returned to its customers and that the utility can recover DSM overspending (so long as it is TRC [Total Resouce Cost] cost-effective, up to 20% of the total DSM budget) from its customers. The DSMVA would be cleared annually, subject to true up post audit."

SSM

According to the *Advisory Group* each "utility would be eligible for an annual incentive reward equal to a fixed percentage (e.g., 2%) of the net present value of the TRC benefits achieved by each year's DSM programs. This shared savings mechanism (SSM) would be distinct from the utility allowed return on equity for supply-side rate base.

The fixed percentage of TRC would be set by the OEB at a level that is deemed adequate to trigger aggressive and cost-effective DSM. The incentive rate can be reconsidered as part of the tri-annual PBR process. The Board may also consider thresholds, below which no incentive is awarded at that time. Additionally, a utility/intervenor could ask the OEB to establish a different or more sophisticated incentive for a specific utility.

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An appropriate incentive will motivate wires companies to aggressively and cost effectively implement DSM programs that will reduce their customers' energy costs. Moreover, the appropriate incentive will not lead to an undue increase in the wires companies' after-tax return on equity."

Consistency with the Task Force's recommendations and the Enbridge Model

The *Advisory Group's* proposed energy conservation incentive mechanisms for Ontario's electric utilities are consistent with the recommendations of the *Electricity Conservation and Supply Task Force's* Report and the energy conservation incentive mechanisms that the OEB has implemented and refined for Enbridge Gas Distribution since 1995. In addition, as the *Task Force* noted, "Similar mechanisms are used to encourage conservation by electric utilities in the United States."

Board Staff's Objections to an LRAM, a DSMVA and a SSM The Board Staff's report gives two reasons why Ontario's electric utilities should be penalized for promoting energy conservation.

First, according to Board Staff, an LRAM, a DSMVA and a SSM will create benefits for the electric utilities at the expense of Ontario's consumers:

"If a utility is to pursue energy efficiency for social benefits, then the utility may need to get large incentive payments and revenue protection to overcome business conflicts. This compensation comes directly from consumers." [p. 16]

Second, according to Board Staff, establishing an LRAM, a DSMVA and an SSM would create more work for the Board:

"In Ontario's gas sector, regulatory oversight of these payments has proven to be complex and controversial. This regulatory complexity may be compounded by the number and variety of electricity distributors." [p. 16]

Pollution Probe's response to Board Staff Objection #1

As noted above, according to Board Staff, an LRAM, a DSMVA and a SSM will create benefits for the electric utilities at the expense of Ontario's consumers. It is Pollution Probe's submissions that Board Staff's objections are simplistic and fatally flawed.

The promotion of energy conservation and a conservation culture is a top priority of the Government of Ontario. Moreover, the promotion of energy conservation,

whether it is accomplished by Ontario's electric utilities, through minimum appliance efficiency standards or by the centralized bureaucratic agency favoured by Board Staff, will, everything else being equal, lead to lost revenues for Ontario's electric utilities. These lost revenues must be returned to Ontario's electric utilities unless it is a new policy of the Ontario Energy Board that Ontario's electric utilities should be denied a fair rate of return on their capital.

Second, the design and delivery of energy conservation programs will cost money whether this function is performed by Ontario's electric utilities or a centralized bureaucracy at Queen's Park. The purpose of a DSMVA is simply to allow the utilities to recover all their prudently incurred energy conservation expenses and ensure that the utilities do not increase their profits at the expense of their customers by underspending their conservation budgets. Therefore, a DSMVA will not benefit the utilities at the expense of their customers. It will simply permit the utilities to recover their prudently incurred energy conservation expenses – nothing more and nothing less.

Third, let's now examine the costs of a SSM. Enbridge's 1995 to 2004 energy conservation programs are forecast to reduce their customers' bills by approximately \$725 million. Enbridge's SSM payouts to date have been \$12.9 million. Enbridge's requested SSM payouts for 2002 and 2003 are \$139,000 and \$511,000 respectively. [RP-2003-0203, Ex. A8, Tab 3, Sch. 1, p. 1; Filed: 2004-01-09] Therefore the evidence to-date from the OEB's experience with Enbridge Gas Distribution indicates that customers are receiving approximately 98% of the benefits of Enbridge's conservation programs and that the shareholders are receiving approximately 2% of the benefits.

It is Pollution Probe's submission that an incentive structure that provides 98% of the benefits to the customers and only 2% to the shareholders is not prejudicial to Enbridge's customers.

However, even the 2% cost figure overstates the true cost of the SSM to Enbridge's ratepayers. As noted above, the SSM has motivated Enbridge to pursue energy conservation much more aggressively and cost-effectively than it did when it did not have an SSM. Furthermore, as noted above, the SSM has motivated Enbridge to pursue energy conservation much more aggressively than Union Gas, which does not have a SSM. As a result, the SSM has produced incremental bill savings for Enbridge's customers that are greater than Enbridge's SSM rewards. That is, the SSM has led to a huge net cost saving for Enbridge's customers.

It is Pollution Probe's submission that a well-designed SSM for Ontario's electric utilities will also lead to a huge net reduction in their customers' energy bills.

Pollution Probe's Response to Board Staff Objection #2

According to Board Staff, regulatory oversight of the gas utilities LRAM, DSMVA and SSM payments has "proven to be complex and controversial. This regulatory com-

plexity may be compounded by the number and variety of electricity distributors."

It is true that the regulatory review of Enbridge's 2000 and 2001 SSM payments was "complex and controversial." However, as Board Staff is well aware, this was due to the fact that clear rules for the calculation of the SSM payments had not been established in advance. Fortunately, this deficiency in the Enbridge process has now been rectified. Clear rules for Enbridge's audit process and the calculation of its SSM payments were established during Enbridge's F2003 alternative dispute resolution (ADR) process. It is also important to note that the clearance of Union Gas' LRAM payments has never been a contested issue at a Union Gas rate hearing.

The OEB's *Advisory Group* has recommended an evaluation and auditing process for the electric utilities that will minimize regulatory burden and controversy. Specifically, the *Advisory Group* is recommending that the OEB hire an independent auditor to audit the evaluation reports of all of the utilities and that the principles and the terms of reference for the audit should be established and standardized to the greatest extent possible at the beginning of the process to ensure a timely and streamlined process.

"The OEB would be responsible for the auditing process. The DSM evaluation reports would be audited by an independent external auditor, retained and funded by the OEB, with assistance from a small advisory audit committee. The OEB would appoint and fund the small multi-stakeholder audit advisory committee (e.g., 1 Board Staff and 3 interveners). The costs for the auditor and the advisory committee would be assessed against all the wires companies and recovered in their rates.

Large DSM portfolios would be audited annually, whereas smaller portfolios would undergo audits covering a multi-year period at least every three years. Portfolios would be considered "large" (i.e., require an annual audit) if the SSM, budget or LRAM exceeds predetermined financial thresholds set by the OEB.

The OEB may choose to conduct spot audits. Audit reports would be made publicly available.

The principles and the terms of reference for the audit should be established and standardized to the greatest extent possible at the beginning of the process, i.e., before program delivery begins, to avoid after-the-fact disputes over the auditor's role and findings, and to ensure a timely and streamlined audit process. Stakeholder input should be considered in the establishment of the audit principles and terms of reference.

Where the auditor finds uncertainty in inputs or measurement, the auditor shall provide suitable values to enable clearance of the variance accounts. Avoided costs will have already been determined on a provincial basis (see section 5.2.1.6). If any

party does not accept the findings of the audit it could seek to challenge that finding before the OEB. The OEB would determine the appropriate process for such appeals (e.g. written hearing, leave required, constrained oral hearing or generic proceeding) depending on the materiality, the nature and frequency of such appeals and the Board's resources." [pp. 55, 56]

It is Pollution Probe's submission that the Board should accept the Advisory Group's recommendations with respect to the evaluation and auditing of the utilities' energy conservation programs.

Staff Recommendation #2: Any utility-sponsored conservation and efficiency programs should be required to pass the very restrictive utility cost test (the hardly any winners test).

Enbridge Gas Distribution and Union Gas use the total resource cost (TRC) test to evaluate the cost-effectiveness of their energy conservation programs. This test recognizes that customers do not purchase electricity or gas as distinct consumer goods. Rather, electricity and gas are purchased to fulfill consumers' needs for energy services such as heating, lighting or cooking. This test evaluates the impact of energy conservation programs on the total customer bill for energy services, including both participants and non-participants.

According to the TRC test, Enbridge's and Union's energy conservation programs are reducing the aggregate energy bills of their customers by more than \$1 billion.

The OEB Staff are now advocating that Ontario's electric and gas utilities should use the utility cost test to evaluate their energy conservation programs (p. 21). The utility cost test assumes that the utility's objective is to minimize its revenue requirements, not to minimize its customers' bills.

If a municipal utility (e.g., Toronto Hydro) were to use the utility cost test to evaluate its energy conservation programs, it would only promote energy conservation if an energy conservation program could cost-effectively reduce its *incremental local distribution costs* (e.g., the need for an additional distribution line or an additional transformer). That is, the use of this test by a municipal utility would ignore 85% to 90% of the direct financial benefits to customers of energy conservation programs (i.e., avoided Hydro One transmission costs and avoided electricity generation costs).

If the Board were to require all utility energy conservation programs to pass the utility cost test, virtually no energy conservation programs would proceed and the bill reductions for the utility's customers would be miniscule. This is why the appropriate name for the utility cost test is the "hardly any winners test" since its use would guarantee that the utilities' conservation programs will produce hardly any winners.

The Advisory Group's proposed framework for utility-sponsored energy conservation programs, "Ontario Energy Board/Wires Companies DSM Framework", recommends that the Total Resource Cost (TRC) Test should be used to evaluate the cost-effectives of conservation programs.

It is Pollution Probe's submission that the OEB should direct Ontario's electric utilities to use the TRC Test to evaluate their energy conservation programs. In addition, it is Pollution Probe's submission that the OEB should continue its policy of requiring Ontario's gas utilities to use the TRC Test to evaluate their conservation programs.

Board Staff Recommendation #3: A new government bureaucracy should be created at Queen's Park to design and deliver cookie-cutter, province-wide electric and gas conservation programs.

The Board Staff's recommendation that a new government agency should be created to design and deliver energy conservation programs in inconsistent with government policy and the public interest.

On November 25, 2003, Ontario's Energy Minister Dwight Duncan clearly signaled that the new Government of Ontario wants Ontario electric utilities to play a very major role in the design and delivery of energy conservation programs across Ontario. Specifically, Minister Duncan announced that the Government of Ontario will permit Ontario's electric utilities to raise their rates by \$225 million, effective March 1, 2005, to finance their initial energy conservation programs. This initial energy conservation budget is more than 10 times greater than the combined annual energy conservation budgets of Enbridge Gas Distribution and Union Gas. Moreover, if the electric utilities' energy conservation programs are as cost-effective as Enbridge's programs, they will reduce their customers' bills by up to \$1.8 billion or more.

Minister Duncan's announcement is simply not consistent with a policy that would see the creation of a new government agency to perform the function that the minister has decreed should be performed by Ontario's electric utilities. Therefore the OEB Staff's proposal that a centralized government agency should be created to perform a function that the Government has decided should be performed by the electric utilities is a direct and inappropriate challenge to the authority of Minister Duncan and the Government of Ontario. Once again, as the Board is well aware, the *Ontario Energy Board Act* explicitly states that the OEB must "promote energy conservation...in a manner consistent with the policies of the Government of Ontario."

As a matter of public policy, it simply does not make sense to create a new government agency to design and deliver energy conservation programs given that it is reasonable to assume that this function can be better and more cost-effectively performed by Ontario's electric utilities. As the Government's blue-chip Electricity Con-

servation and Supply Task Force has noted, Ontario's electric utilities are favourably position to deliver energy conservation.

"Local distribution companies are favourably positioned to provide conservation programs. They are close to their customers, understand their local market conditions and may be able to better target certain programs. Goodwill exists and utilities are generally considered to enjoy strong customer trust, loyalty and brand recognition. LDCs have existing marketing relationships with delivery partners, for example, with builders or HVAC (heating, ventilation and air conditioning) contractors. In the case of some of the larger commercial and industrial customers, LDCs may provide important technical expertise.

We think that local distribution companies have a central facilitating role to play, and that they can act as a conduit for the delivery of conservation activities in partnership with private firms and the voluntary sector." [pp. 40, 41]

Moreover, the extremely cost-effective and successful energy conservation programs that have been developed and implemented by Enbridge Gas Distribution and Union Gas, under the direction and encouragement of the OEB, clearly demonstrate that OEB-regulated utilities are excellent energy conservation delivery agencies. Pollution Probe simply cannot understand why Board Staff would suggest that this model, which is one of the finest achievements in the history of the OEB, should now be abandoned.

In addition, it is Pollution Probe's submission that the recent unfortunate history of Ontario Hydro and Ontario Power Generation raises serious questions about the effectiveness of a centralized conservation agency that is not accountable to the OEB or to municipal or private shareholders for its performance. It is Pollution Probe's submission that it is not reasonable to assume that a single, non-profit, centralized conservation agency would be as innovative, aggressive, cost-effective and customer-focused as multiple, decentralized, profit-driven conservation companies.

As part of their justification for creating a centralized agency to deliver energy conservation, Board Staff raise three objections to utility-sponsored energy conservation programs.

Board Staff Objection #1 to the promotion of energy conservation by Ontario's electric utilities

According to Board Staff, the promotion of energy conservation by multiple electric utilities is not in the public interest because it will not deliver uniform, cookie-cutter energy conservation programs across the province.

"Energy efficiency programs should be province-wide for consistent coverage. The patchwork coverage through utilities tends to result in a confusing variety of programs for consumers." [p. 15]

Uniform, cookie-cutter energy conservation programs might be in the public interest if Ontario were a small, homogeneous province. However, the reality is that Ontario is a large and very diverse province. Ontario's demographics and industries vary dramatically from Stratford to Atikokan to Toronto's Jane & Finch to Oakville to Cornwall. Ontario's multiple electric utilities can develop more customer-focused, and hence more beneficial, energy conservation programs than civil servants at Bay and Wellesley.

Pollution Probe's Submissions With Respect to the January 23, 2004 OEB Staff Report on Demand-Side Management and Demand Response

While Pollution Probe believes that diversity and innovation should be encouraged, it is also important to note that the Advisory Group's proposed "Ontario Energy Board/ Wires Companies DSM Framework" provides Ontario's electric utilities with a financial incentive to develop uniform, regional or province-wide energy conservation programs where appropriate.

Board Staff Objection #2 to utility-sponsored conservation programs

According to Board Staff, Ontario's electric utilities are inappropriate energy conservation delivery agencies since they will integrate their energy conservation and efficiency programs with their marketing programs.

"Utilities often integrate their DSM/DR programs into marketing strategies for building load and retaining customers. These competing goals subordinate the goal of conservation." [p. 15]

It is Pollution Probe's submission that it is actually in the public interest for Ontario's electric utilities to integrate energy conservation programs into their marketing programs for the following reasons.

- 1. It is in the public interest for Ontario's electric utilities to promote the wise and efficient use of electricity.
- 2. By integrating the promotion of energy conservation into their marketing programs, electric utilities can achieve very significant economies of scale and scope with respect to the promotion of energy conservation.
- 3. The OEB has directed Enbridge Gas Distribution and Union Gas to integrate their energy conservation and marketing programs in order to achieve the above noted benefits.
- 4. If the Board Staff's proposal were to be accepted, a centralized bureaucracy would be promoting energy conservation and Ontario's 93 electric utilities would be promoting electricity consumption. This would be counter-productive and self-defeating.

Finally, it is important to note that, if the OEB makes energy conservation a profitable course of action for Ontario's electric utilities, their energy conservation programs will not be subordinate to their marketing and load building activities.

Board Staff Objection #3 to the promotion of energy conservation by Ontario's electric utilities

According to Board Staff, electric utilities should not be asked to promote energy conservation because:

- a) it is inconsistent with the OEB's status-quo rules;
- b) it would give the utilities an unfair advantage over other companies; and
- c) the smaller utilities would probably outsource the promotion of energy conservation to a larger company.

"The utility model is inconsistent with the restriction on business activities that attempts to make distributors neutral to market forces. Other market players believe that utility-based administration is a conflict of interest for the utility that gives it an unfair advantage in the energy services market. There is relatively little experience in DSM with the electricity distributors. That inexperience and the resources required would likely lead those distributors to outsource to a larger third party." [p. 17]

It is Pollution Probe's submission that all of these Board Staff objections are without merit.

First, under the OEB's status-quo rules, the utilities are not neutral in the face of market forces. Specifically, under the OEB's rules, it is in their financial self-interest to promote excessive electricity consumption and to thwart efforts to promote conservation (e.g., installation of individual metering in apartments). Given Minister Duncan's desire to create a conservation culture in Ontario, the OEB's rules should be changed to encourage utilities to promote conservation.

Second, Pollution Probe acknowledges that the promotion of energy conservation by Ontario's electric utilities is contrary to the financial self-interest of power generators and electricity marketers. However, Pollution Probe does not accept the fallacy that this entails that the promotion of energy conservation is contrary to the public interest or the interests of Ontario's electricity consumers.

It is Pollution Probe's submission that the electric utilities, like Enbridge and Union Gas, should work with private and community sector trade allies (e.g., HVAC contractors, Johnson Controls, Electric City, Green\$aver) to increase the market share of high-efficiency goods and services. The purpose of utility-sponsored conservation programs is not to displace existing companies and community groups that are promoting energy conservation. On the contrary, it is to work with them to help bring the market to a higher level of energy efficiency and conservation.

The Advisory Group's "Ontario Energy Board/Wires Companies DSM Framework" is designed to achieve this objective. Specifically, the proposed Shared Savings Mechanism (SSM) will only reward utilities for actions that increase the overall energy efficiency of the Ontario economy. The SSM will not reward the utilities for an action

that increases market share of a utility affiliate at the expense of another company or a community group. In regulatory jargon, the SSM will not provide the utilities with a financial reward that is linked to the bill savings of free-riders.

Third, according to Board Staff, utilities should not be asked to promote energy conservation since the smaller utilities will contract out some or all of their program delivery to a larger organization. As the OEB is well aware, Ontario has many small electric utilities. Specifically, while Hydro One and Ontario's seven largest municipal utilities serve 67% of Ontario's consumers; the 44 smallest utilities serve only 5% of the province's electricity consumers.

It is Pollution Probe's submission that it is not unreasonable to permit Ontario's electric utilities to contract out some or all of their energy conservation program delivery to another organization (e.g., an Electric Distributors Association affiliate, Hydro One, a neighbouring municipal utility, an Enbridge Gas Distribution affiliate, etc.) if the third party organization can deliver better or more cost-effective conservation programs. In fact, the Advisory Group's "Ontario Energy Board/Wires Companies DSM Framework" explicitly recommends that Hydro One should be the default energy conservation delivery agency for municipal utilities that do not want to develop their own conservation programs. Pollution Probe strongly endorses the Advisory Group's recommendation.

Board Staff Recommendation #4: The Enbridge Gas Distribution and Union Gas energy conservation programs, which to date are reducing customer bills by over \$1 billion, should be shut down.

OEB Staff are recommending that Enbridge and Union Gas' energy conservation programs, which to-date are reducing their customers' bills by over \$1 billion, should be shut down. They are also proposing that the OEB should re-introduce its pre-mid 1990s rules, which financially penalized Enbridge and Union for promoting energy conservation. [pp. 19 – 22]

It is Pollution Probe's submission that Board Staff's baffling and counterproductive proposals in this area are:

- 1. contrary to the policies of Premier McGuinty and to the policies of former Premiers Peterson, Rae, Harris and Eves;
- 2. contrary to every OEB decision on this issue since July 1993;
- 3. contrary to the public interest and financial self-interest of every residential, commercial, institutional and industrial gas consumer in the province; and
- 4. contrary to fair and responsible public utility regulation.

Contrary to the policies of every Ontario Premier from Peterson to McGuinty and contrary to every OEB Decision since 1993

On August 28, 1989, Ontario's then-Minister of Energy, Lyn McLeod, co-chaired the Federal-Provincial-Territorial Conference of Ministers of Energy. The Conference urged Ontario's electric and natural gas utilities to promote energy efficiency.

"Ministers underlined the key role of electric and natural gas utilities in encouraging energy efficiency. In particular, they noted that there exists scope for significant action by utilities to develop demand management programs and welcomed the first steps of some utilities in this area. They strongly encouraged all utilities to develop aggressive programs in this area." [Federal-Provincial-Territorial Conference of Ministers of Energy, Communique, (Toronto, August 28, 1989), p. 6.]

In 1989, Energy Probe intervened in the E.B.R.O. 462 Union Gas rates case and argued that the OEB should direct Union Gas to promote energy conservation and efficiency. Moreover, Energy Probe filed a letter from the then Minister of Energy, Lyn McLeod, in support of the promotion of energy efficiency by Ontario's gas utilities. In response to submissions from Energy Probe and Board Staff, the OEB decided to hold a generic hearing to examine this issue. The docket number for this generic hearing was E.B.O. 169-III.

On July 23, 1993, the OEB issued its E.B.O. 169-III *Report Of The Board*, which established a generic regulatory framework for the promotion of energy conservation and efficiency by Ontario's natural gas utilities. The Board's report stated that it expected the gas utilities to aggressively promote energy conservation and efficiency. [Para. 10.3.4] However, the OEB also explicitly refused to link Ontario's gas utilities' profits to their success at reducing their customers' bills by making them more energy efficient. That is, the Board decided to maintain its status quo regulatory framework, which financially penalized the gas utilities for promoting conservation and efficiency. According to the *Report*:

"The Board accepts the reasoning that underpins the theoretical perception of a disincentive. However, the Board also observes that the evidence indicates that the disincentive does not appear to be dissuading the utilities from promoting demand-side measures at this time." [Para. 10.3.1]

This was a major mistake. As Table 1 indicates from 1995 to 1998 Enbridge failed to achieve its energy conservation targets by 19% to 70%.

Table 1: Enbridge's Er	nergy Conservation	Performance*
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Year	Targeted Savings (million cubic metres)	Actual Savings (million cubic metres)	Variance
1995	12.8	3.9	-70%
1996	29.0	18.8	-35%
1997	47.3	18.6	-61%
1998	44.6	36.2	-19%
1999	31.2	52.0	67%
2000	42.0	58.9	40%
2001	67.9	82.4	21%

^{*} OEB Docket No. RP-2003-0048, Ex. A, Tab 8, Sch. 1, p. 9; Updated: 2003-06-30.

However, in 1998 the OEB learned from its mistake and linked Enbridge's profits, starting with its fiscal year 1999, to its success in reducing its customers' bills by making them more energy efficient effective. As Table 1 shows, after this link was made Enbridge exceeded its energy conservation targets by 21% to 67%.

In 1998, the Mike Harris Government amended the *Ontario Energy Board Act* to give the OEB, for the first time, explicit authority to facilitate energy conservation. According to the revised *Ontario Energy Board Act*, the Board, in carrying out its responsibilities, shall:

"facilitate opportunities for energy efficiency consistent with the policies of the Government of Ontario."

In a July 22, 2002 letter from the Minister of Environment and Energy to the Chair of the OEB, the Minister confirmed the Government's support for the promotion of energy conservation by Ontario's gas utilities.

"The government believes that conservation and load management contribute to meeting Ontario's energy needs and protecting the environment. The government is also of the view that, properly structured, DSM can further the interests of consumers by mitigating market volatility and contributing to system reliability and market efficiency. The Government of Ontario welcomes activities undertaken or supported by energy utilities that help customers to conserve energy or move energy use from peak to off peak time periods.

In short, DSM has been a component of natural gas regulation for several years and the Government would welcome its introduction into the regulatory framework of the electricity sector."

Later in 2002 the Ernie Eves Government further amended the *Ontario Energy Board Act* to increase the Board's obligation to promote energy conservation and efficiency. According to the revised *Act*, the Board shall:

"promote energy conservation and efficiency in a manner consistent with the policies of the Government of Ontario."

On November 25, 2003, Ontario's 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 reinvest "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.]

According to the Minister, this initiative will create an initial energy conservation budget of approximately \$225 million for Ontario's electric utilities. [Legislative Assembly of Ontario, Official Report of Debates (Hansard), Tuesday 9 December 2003, Standing Committee on Justice and Social Policy, page J-6.]

It is Pollution Probe's submission that the Minister's announcement was at least partly due to, and hence an implicit endorsement of, the very cost-effective energy conservation programs that have been developed by Ontario's gas utilities under the leadership and direction of the OEB.

Contrary to the public interest and financial self-interest of every residential, commercial, institutional and industrial gas consumer in the province

The continuation of the Enbridge and Union Gas energy conservation programs are in the best interests of Ontario's gas consumers and the broader public interest for many reasons.

- 1) To date, the gas utilities' conservation programs are reducing their customers' bills by over \$1 billion. The continuation and expansion of these programs will lead to even greater bill savings in the future.
- 2) The gas utilities' conservation and efficiency programs are increasing the competitiveness of Ontario's economy and creating jobs.
- 3) The gas utilities conservation programs are reducing smog-causing nitrogen oxides emissions.
- 4) The gas utilities conservation programs are one of Ontario's and Canada's most cost-effective options to achieve compliance with the Kyoto Protocol.

Contrary to fair and responsible public utility regulation

Since 1993, in response to consistent Board and Government of Ontario direction, Ontario's gas utilities, and in particular Enbridge Gas Distribution, have made very significant corporate, personal, intellectual and financial commitments to the development and implementation of excellent conservation and efficiency programs. For the Board to now order the gas utilities to wind down their conservation programs would be an indefensible and confidence breaking breach of faith by the OEB.