

# **Principles and Frameworks for DSM in Ontario**

**A Policy Paper by Enbridge Gas Distribution**

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# 1 Introduction

Enbridge Gas Distribution ("Enbridge") is pleased to be a stakeholder in the Ontario Energy Board's (OEB) planned consultation process on demand-side management (DSM) and demand response (DR). The paper we have prepared presents key principles that we believe should govern the framework for DSM for both natural gas and electricity in Ontario. While we are of the view that the principles should be the same, we highlight where there should be differences in the frameworks that result.

Enbridge is of the view that DSM should be LDC-driven; that is, the LDC should be accountable for DSM within its service territory, but not be required to implement program design, delivery and evaluation. A utility should have the option to contract out various aspects of program design, delivery and evaluation. The OEB should continue to have a central role in DSM policy development and regulatory oversight for the natural gas utilities and this role should be extended to apply to the electric LDCs as well. In order to encourage the delivery of aggressive DSM programs by all LDCs - both gas and electric - the OEB should give the LDCs the financial instruments to keep them whole and reward them for aggressive, cost-effective DSM.

Our experience with DSM is a positive one, and we welcome the Board and the Minister's interest in exploring how DSM programs might be offered by other utilities. Our experience clearly demonstrates that the DSM framework that we use is good for our customers; it is good for our company; and it is good for society.

Since introducing DSM programs in 1995, we have saved our customers more than 650 million dollars on their energy bills, helped make Ontario more competitive, and reduced atmospheric emissions associated with energy use. Reducing these emissions contributes to improving air quality, reduces greenhouse gas emissions from what they would otherwise be, and thereby makes it easier for Ontario and Canada to meet their obligations under the Kyoto Protocol.

Enbridge is continually looking to make improvements to its DSM framework based on the needs of its customers and its markets as well as the ongoing experience it gains in DSM program design and delivery. We presented our most recent recommendations in our 2003 rates case and will continue to bring forward suggestions for improvement in future rates cases before the OEB.

The recommendations we are putting forward in this policy paper reflect our initial views on principles and a framework for DSM in Ontario. Enbridge will continue to participate in the ongoing DSM Advisory Committee consultations with the OEB and other stakeholders, and our position and recommendations may evolve, based on what we learn from this participation.

## 2 Same DSM principles, but different DSM frameworks

The principles underlying DSM for the electricity and gas industries should be the same, but the framework, rules and mechanisms for each industry should reflect the many significant differences between the two industries.

The principles underlying the DSM frameworks should be the same because the DSM policy goals for the gas and the electricity sectors are the same. These goals are to:

- Reduce customer energy bills in a cost-effective manner;
- Minimize capital spending on new energy system infrastructure;
- Facilitate an optimal mix of energy supply and demand; and
- Minimize environmental and social impacts due to energy infrastructure and use.

The DSM frameworks should reflect the inherent differences between the natural gas and electricity industries and take into account the differences in the type of business, the regulatory treatment of the two industries. Moreover, the framework should recognize the experience of the gas utilities in designing and delivering DSM programs. Enbridge notes that other jurisdictions have established different DSM frameworks across industries and for different utilities within the same industry in recognition of the unique characteristics<sup>1</sup>.

The framework design should recognize the following differences:

- The two largest natural gas utilities in Ontario have 10 years experience in the design and delivery of DSM programs<sup>2</sup>, whereas there is very limited experience among electric LDCs.
- The vast majority of natural gas customers are served by two large utilities of roughly equal size, whereas electricity customers are served by over 90 electric LDCs ranging in size from over 1 million customers to less than 5,000 customers. Given this wide distribution, there is a significant disparity in resources and expertise among electric LDCs.
- Natural gas utilities are generally subject to a comprehensive rate hearing on an annual basis, whereas electric LDCs have not been subject to such regulatory scrutiny in the past

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<sup>1</sup> For example, British Columbia, Oregon, Vermont, Connecticut and Washington have differences in their DSM frameworks for gas and electricity, and regulators in both Connecticut and Washington have allowed differences in the DSM framework for some of the gas utilities they regulate.

<sup>2</sup> The OEB did not mandate NRG to do DSM because of the utility's small size.

and most are unlikely to be subject to such scrutiny in the future because of the number of utilities involved.

- Natural gas utilities' distribution rates are decided by the OEB based on rate hearings, whereas the distribution rates for electric LDCs have been frozen, in effect, until May 1, 2006.<sup>3</sup>
- Enbridge are privately owned companies, whereas almost all electric LDCs are municipally-owned. The municipal shareholders of these LDCs may have a greater desire for local control of DSM programs.
- Load management and certain types of demand response are unique elements of electric DSM that require special consideration. This same level of short-term price volatility that creates the opportunity for load management and demand response in the electricity market does not exist in the gas market. Load management is handled by the natural gas utilities through natural gas storage and interruptible gas rates for certain customers.

## 2.1 DSM Principles

We have identified the following principles that should govern DSM for natural gas and electricity:

- The local distribution utility should be accountable for DSM within its service territory, but not be required to implement program design, delivery, and evaluation.
- DSM program cost-effectiveness and DSM performance should be based on the Total Resource Cost ("TRC") test.
- The OEB should have a central role in DSM policy development and regulatory oversight.
- The IMO should have oversight over emergency and short duration DR.
- Industry collaboration should be encouraged.
- LDCs should be given financial instruments to keep them whole and to reward them for aggressive, cost-effective DSM.

Each principle is discussed in more detail below.

### 2.1.1 *The LDC should be accountable for DSM within its service territory, but not be*

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<sup>3</sup> The provincial government has just announced its intention to raise the level at which retail rates for the electricity commodity is frozen to a new, higher frozen rate. It is unclear at the time of writing this paper if this announcement extends to the cap on transmission and distribution rates.

### ***required to do program delivery<sup>4</sup>***

The local distribution utility – whether a gas or electric utility – should be accountable for DSM within its service territory. However, the LDC should not be required, necessarily, to design, deliver and evaluate the DSM programs. The LDC should have the option to decide whether to deliver a particular DSM program, or to contract out various aspects of program design, delivery, or monitoring and evaluation to other market players.

#### ***2.1.1.1 LDC-based DSM is good for the utility's customers and the utility's business***

Reliance on the local distribution utility for DSM is good for both the utility's customers and for the utility's business.

Reliance on a non-regulated service provider such as a retailer does not provide the same level of continuity and stability that a regulated LDC can provide. Unlike the LDC, a non-regulated service provider has the option to enter and exit the market freely. The LDC provides a predictable, long term solution to DSM delivery.

LDC-based DSM provides many benefits to customers. The utility has existing relationships with its customers and has a good understanding of local geography and market conditions. As a result, LDC-based DSM provides flexibility to respond to diversity in its customers' characteristics and behaviour and local market conditions, thereby ensuring greater creativity. DSM delivered by a central agency would not be able to provide the same level of local sensitivity and responsiveness to customers.

DSM efforts by Ontario's gas utilities have created significant customer bill reductions. Since 1995, Enbridge has created approximately \$650 million<sup>5</sup> of net customer bill savings through its DSM programs. There are likely similar or greater DSM benefits available among Ontario electric customers, given the greater number of electric customers and total customer electricity bills.

From a utility perspective, LDC-based DSM has many benefits. LDC-based DSM leverages and strengthens customer relationships. It provides value to customers as a "one-stop shop", creates synergies with the utility's core business, and allows a "foot in the door" for offering other energy-related products and services. DSM can also help defray incremental and local network investments, allowing better use of capital. This will ultimately lead to bill savings for utility customers. As well, LDC-based DSM offers the potential for a financial benefit to the utility through incentive mechanisms for DSM.

#### ***2.1.1.2 The LDC should have the option to contract out aspects of DSM delivery***

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<sup>4</sup>The principle, "the LDC should be accountable for DSM delivery within its service territory, but not be required to do program delivery", is referred to hereafter as, "LDC-based DSM".

<sup>5</sup>The \$650 million of net customer bill savings is the accumulated TRC benefits achieved by Enbridge programs.

Although the local distribution utility should be accountable for the delivery of DSM, this does not mean that the utility should be required to carry out all of its DSM functions in-house. The utility should have the opportunity to outsource responsibility for DSM functions.

Ontario's natural gas utilities currently retain accountability for DSM delivery. However, the gas utilities delegate various DSM responsibilities to external service providers such as certain elements of program design, delivery and evaluation when it is cost-effective to do so. The gas utilities remain fully accountable to the OEB and the public for the DSM results achieved by these contractors. This model has worked well for the gas utilities and can work for Ontario's electric LDCs, particularly those without the resources to take on DSM internally. LDCs should have the flexibility to contract out some or all of their DSM design, delivery and evaluation activity to external service providers. These external service providers could include, for example, the Electricity Distributors Association, Enerconnect, Enbridge Gas Distribution, Union Gas, other electric LDCs, energy retailers, special-purpose entities and energy service channel members.

Given the significant investment required for DSM program design, delivery and evaluation and the potential for economies of scale in these activities, it would be cost-prohibitive to require all electric LDCs to "do the work" themselves. Instead, letting them (and the market) determine how best to do the work provides an opportunity to capture economies of scale. While a single agency responsible for electricity DSM program design, delivery and evaluation could achieve similar economies of scale, it is unlikely to demonstrate the same level of creativity and innovation that can be achieved through competition among external service providers and multiple LDCs.

### ***2.1.2 DSM program cost-effectiveness and DSM performance should be based on the TRC test***

The primary test for DSM program cost-effectiveness should be the TRC test. This test measures the direct societal benefits of a given DSM program net of all utility and customers costs. The TRC test has been used with success by Ontario gas utilities to screen potential DSM programs and to measure their DSM performance for many years and is the primary program screening tool used in most other jurisdictions. Other tests such as the Societal Cost Test, Rate Impact Measure Test, and Participant Test, are also used for natural gas DSM program screening as supplementary tests, and these can be used as well as part of the toolkit for screening electric DSM programs.

### ***2.1.3 The OEB has a central role in DSM policy development and regulatory oversight***

High-level DSM policy direction is expected to come from the provincial government, through the OEB. As with natural gas, the OEB should be the DSM regulator for the electric LDCs.

Consistent with the DSM framework for natural gas, the OEB would require electric LDCs to prepare DSM plans comprised of a portfolio of DSM programs. The electric LDCs would be accountable for the development of programs, screening, and monitoring and evaluation. The electric LDCs would also be accountable to the OEB for their DSM performance, regardless of what

other entities are contracted by the LDC to deliver various aspects of their DSM mandate. The OEB would develop guidelines for electric DSM to provide a consistent approach across the utilities. The guidelines would cover program development, screening, monitoring and evaluation.

The OEB guidelines should include, among other things, the following:

- **Input parameters for DSM programs and for the TRC test.** For the TRC, this would include such parameters as avoidable generation and transmission costs and rules associated with the treatment of indirect benefits (e.g. water savings associated with a low-flow showerhead). If possible, the OEB should consider setting a uniform avoidable cost for electricity distribution province-wide unless there are extenuating reasons for LDC-specific avoidable costs. Special consideration needs to be given to diurnal and seasonal changes in avoided generation costs.

To the degree possible, the OEB should also approve uniform program assumptions for prescriptive programs (e.g. savings/unit, lifetime and incremental costs over the base case) that would be “locked in” up front and used for both program screening and evaluation purposes. New information on these parameters would be used prospectively only, not retrospectively. For custom programs, the OEB would standardize the set of inputs for the program design and evaluation tools that are used for these programs.

- **Standardized evaluation and audit protocols.** It is critical that the rules and guidelines for evaluation and audit be completely clear from the outset to streamline the audit process and program evaluation. The standardized evaluation and audit protocols would need to balance the level of effort with the magnitude of risk to the parties involved. Combined with uniform program assumptions (described above), these standardized protocols would simplify electric LDCs’ evaluation process, mitigate the burden of regulatory compliance associated with DSM delivery, facilitate collaboration among LDCs offering similar DSM programs and create economies of scale among providers of evaluation and audit services. Under this framework, the audit process would be greatly simplified from the process currently used in the gas industry’s DSM efforts.
- **Rules for DSM plan approval and review.** Consistent with the need to balance the level of effort for evaluation with the magnitude of the risk, there is also a need to balance the level of regulatory scrutiny of a DSM plan with the total costs of the plan. As with the OEB requirements for the natural gas utilities, larger electric LDCs should submit their DSM plans annually for OEB review. To facilitate the introduction of DSM in the electricity sector, their first DSM plan submission deadlines could be staggered over a one year period (e.g. five in Q1, five in Q2, etc.) to allow sufficient time for OEB review. Smaller LDCs could submit plans for review every two or three years. Smaller LDCs should have the option to choose from a set of pre-approved programs that have already been designed and tested by other, larger utilities and have pre-approved assumptions for program monitoring and evaluation.

- **Guidance on stakeholder involvement.** Similar to what is encouraged for the natural gas companies, the OEB would encourage involvement of stakeholders in DSM planning through a simple and easy to manage process. The involvement should be commensurate with the size and complexity of the DSM portfolio of the particular LDC.
- **Filing of an annual DSM report.** All LDCs should be required to publish a DSM annual report based on a report template developed by the OEB. This template should standardize the information provided and the structure of this information to allow comparison across LDCs. The template could be based on the evaluation report now prepared by the gas LDCs. Having an annual DSM report would help to encourage greater innovation and creativity among electric LDCs as they strive to surpass the performance of their peers. Many jurisdictions require the filing of an annual DSM report.<sup>6</sup>
- **Principles for an incentive mechanism for electric DSM.** The principles would be designed to encourage electric LDCs to capture significant customer benefits through their DSM efforts. To ensure DSM funds are spent cost-effectively, LDCs would be required to realize a positive net benefit through their DSM efforts (i.e. their DSM portfolio would need to have a benefit/cost ratio greater than 1) in order to be eligible for a financial incentive.

#### ***2.1.4 The IMO should have oversight over emergency and short duration DR***

Given its oversight of the wholesale market, the IMO is expected to provide guidance and mechanisms for demand response to the retail market (i.e. electric LDCs) that reflect wholesale market needs and price signals. Active participation by an electric LDC in an IMO-DR program as an aggregator (similar to other private sector aggregators) should not be covered by OEB regulated DSM funding on the basis that other participants in such DR programs are expected to participate without external funding. As well, electric LDCs should not be eligible for an incentive for this DR activity through the DSM incentive mechanism. DR should be encouraged primarily through specialized rate structures such as time of use or interruptible rates.

#### ***2.1.5 Industry collaboration should be encouraged***

Because of the significant fixed costs associated with DSM program design, delivery and evaluation, it makes sense for LDCs to collaborate with respect to these matters (gas and electric LDCs together or separately, depending on the matter) and benefit from the economies of scale of such collaboration. The DSM framework should, accordingly, encourage such collaboration. One activity where such collaboration is critical is in respect of those DSM programs with a significant market transformation component (such as those involving manufacturer rebates, or changes in equipment specifications at the factory, or province-wide advertising).

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<sup>6</sup> For example, the British Columbia Utility Commission requires the filing of an annual DSM report, even though the PBR approval period for the revenue cap ranges from 3 to 4 years. The practice of filing annual DSM reports is common in many US jurisdictions.

### **2.1.6 LDCs should be given financial instruments to keep themselves whole and to reward them for aggressive, cost-effective DSM**

Enbridge's success in DSM is, in part, due to the financial instruments available to the company. These include a DSM variance account to provide flexibility in DSM spending; a lost revenue adjustment mechanism to recover revenue losses due to reductions in gas use as a result of DSM; and an incentive mechanism to reward the company for strong DSM performance. These are discussed in more detail below.

All LDCs should have access to financial mechanisms to provide flexibility in DSM spending in order to meet market needs more effectively and to ensure that the utility is encouraged to carry out aggressive, cost-effective DSM and is rewarded for a job well done.

To the extent possible, the financial instruments should be straightforward to use and minimize regulatory and monitoring costs. The specific financial instruments need not be identical for both the gas and electric industries and need not be identical for utilities within those industries. The OEB should grant the flexibility in the design and application of the instruments to meet the specific needs of the utility, its markets and its customers.

The three primary financial instruments underpinning Enbridge's DSM framework are:

- **DSM Variance Account (DSMVA).** This allows Enbridge to adjust its spending annually based on market conditions and market response to its DSM programs by +/- 20% from budget, with variances within this range recovered from or provided to ratepayers in subsequent years. To simplify accounting for electric LDCs, it may be appropriate to allow electric LDCs to accumulate or "bank" any annual variances in the expectation that underspending in some years will offset overspending in other years and mitigate the overall impact of recovery.
- **Lost Revenue Adjustment Mechanism (LRAM).** This effectively holds Enbridge harmless from the reduction in revenues stemming from DSM, and helps to address what would otherwise be a significant disincentive to offer DSM programs. In Enbridge's case, it deals with recovery of lost revenues through two distinct mechanisms: 1) the volume forecast for a given year reflects the impact of the planned DSM programs (hence the rates required to meet the utility's revenue requirements reflect the impact of DSM), and 2) differences in the expected "lost revenues" between forecast and actual DSM savings are recovered through a variance account. If electric LDCs are likely to be operating under a multi-year PBR framework (and will not be filing a comprehensive rate application each year), it may be simplest to develop an additional Z-factor<sup>7</sup> to be applied on an annual basis to reflect the impact of the LDC's DSM activities on its distribution revenues.

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<sup>7</sup> The OEB's *Electricity Distribution Rate Handbook* (OEB, 2000) defines 'Z factor' as an adjustment of an utility's rates that accommodates extraordinary events over which the utility has no control.

- **Incentive Mechanism (Shared Savings Mechanism - SSM).** While Enbridge's current incentive mechanism has been refined over time since it was first introduced, Enbridge believes that, given the diversity of electric LDCs, there is a need for a simpler incentive mechanism for electric LDCs.<sup>8</sup> Electric LDCs outsourcing elements of their DSM delivery may wish to share their incentives with their DSM contractors.

To encourage LDCs to carry out cost-effective, aggressive DSM, the OEB could benchmark DSM performance in Ontario for Ontario's electric LDCs. This would encourage competition among the utilities to strive for better performance and provide the government and public with information on the overall success of electric DSM in Ontario.

## 2.2 Implementation of Electric DSM

Enbridge has the following suggestions to offer to facilitate the implementation of DSM for electric LDCs in Ontario:

- Electric DSM budget should be based on a fixed energy charge.
- Introduction of DSM in the electricity sector should be staged based on the size of the LDC.

Each suggestion is discussed below.

### 2.2.1 *Electric DSM budget should be based on a fixed energy charge*

The previous provincial government introduced changes to the *Ontario Energy Board Act*, requiring that the electricity rates that applied to the LDCs as of November 11, 2002 were to remain in effect unless replaced or amended. Any amendments to these rate orders can be made by the LDC upon application for a new rate order to the Minister of Energy, or the Minister can amend a rate order without application. There are no similar requirements for natural gas rate orders. In this regulatory environment, it makes the inclusion of DSM funding in electricity rates more complicated and more onerous for the Minister, the OEB and the utilities than for natural gas. If the same approach was taken for the electric LDCs as for the gas utilities, then once the Minister issued an approval for all electric LDCs to amend their rate orders to include DSM in their rates, this would require the OEB to have individual rate cases for each utility to include the appropriate level of DSM in their rates based on their proposed DSM plans and budgets.

A simpler approach would be to set the DSM budget for each LDC based on a uniform fixed

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<sup>8</sup> One approach that has been used elsewhere is basing the incentive on a fixed percentage of the net TRC benefits realized through a utility's DSM efforts. Thus, if the incentive were 3% of net TRC benefits realized, and the utility created \$10 million of net benefits through its DSM efforts, the incentive would be \$300,000. If this same LDC were able to realize an additional \$2 million of TRC benefits through more effective program delivery or some other program enhancement, the potential for an additional \$60,000 incentive should be sufficient incentive to encourage such efforts.

energy charge (e.g. 0.2 cents/kWh)<sup>9</sup>. This charge would be calculated by each LDC and would set the DSM budget without the need for scrutiny of the rationale for the proposed budget by the OEB. The actual volumetric charge to apply could be based on current practices in other jurisdictions and/or informed by DSM studies undertaken by electric LDCs as part of their program design activities. This approach would save considerable time and effort by the utility, its stakeholders and the OEB. With the input parameters for DSM programs and the TRC in place and the protocols for the audit and evaluation simple and clear, this should streamline the approvals process for the OEB and the LDC. However, new rates would have to be calculated, submitted and approved for each LDC.

A further simplification would be for the fixed energy DSM charge to be separate from existing rates<sup>10</sup>. In this way, existing LDC rates could remain unchanged. This will eliminate the need for annual rate hearings for each electric LDC to take account of the DSM budget and provide budget stability for planning purposes. While expedient from a regulatory approvals point of view, this approach requires a significant difference in the DSM regulatory frameworks of gas and electricity. However, this approach is being used in other jurisdictions such as Vermont, where Vermont Gas has DSM incorporated into rates and electric DSM is funded through a system benefit charge.

To ensure all customers have an opportunity to participate in DSM programs, the OEB may wish to establish broad budget allocation guidelines for each customer class (e.g. residential programs must represent at least x% of total DSM funding and business customer programs should represent at least y%). Similarly, it may be beneficial to require all LDCs to include certain core programs in their portfolio of programs (hence encouraging co-operation). As in the gas industry, cross-subsidization between customer classes should be avoided.

To cover the costs of electric LDCs developing their first DSM plans and setting up their DSM planning and evaluation functions, a volumetric charge should be instituted a year in advance of submission of the first DSM plan. The OEB would determine the appropriate level for this one-time volumetric charge, which would likely be different than the level established to fund ongoing delivery of DSM programs.

### **2.2.2 Introduction of electric DSM should be staged based on the size of the LDC**

Just as there are different DSM rules for different industries, several jurisdictions have established DSM frameworks that vary by utility within a given industry<sup>11</sup>. The diversity of electric LDCs suggests a similar pragmatic approach should be considered in Ontario.

<sup>9</sup> The natural gas utilities would continue to recover the costs of their DSM plans in their rates. In other jurisdictions that require that both natural gas and electric utilities carry out DSM, it is not unusual for gas DSM to be recovered in rates, and for electric DSM to be paid for through a systems benefit charge.

<sup>10</sup> This charge could be listed separately on customer bills, or combined with the LDC distribution rates to create a combined “distribution and energy efficiency charge”.

<sup>11</sup> For example, Connecticut, Oregon, Washington and Massachusetts have different frameworks for utilities within either the gas or electric industry.

To this end, it would be prudent to stage the introduction of DSM by electric LDC size. For example, the “top 20” electric LDCs could be held accountable for DSM design delivery and evaluation during an initial introductory period, with the remainder of smaller LDCs to follow in two or three years. The “top 20” electric LDCs would cover approximately 70% of the distribution market by volume. However, smaller LDCs that wished to carry out DSM sooner would be permitted, but not required, to do so.

The staged approach to DSM implementation for electric LDCs described above has the following significant benefits:

- It encourages collaboration and co-operation among LDCs and facilitates the development of the DSM design, delivery and evaluation infrastructure to support smaller utilities, allowing them to cost-effectively contract out all of their DSM activities if they choose to do so. Limiting the initial stage to the top ten electric LDCs (representing an estimated 60% of the distribution market by volume) would be expected to yield less collaboration among LDCs and fewer of the potential economies of scale in design, delivery and evaluation would be captured.
- It provides an opportunity for smaller electric LDCs to learn from the experiences of the “top 20” LDCs and ramp up their delivery efforts more rapidly based on this experience and using the DSM support infrastructure that is expected to develop.
- It allows the OEB to refine and streamline the electric DSM regulatory framework before all electric LDCs get involved.

Figure 1 on the following page suggests a timeline for the phase in of electric DSM over the next 5 years, starting in mid-2004.

In the early years of DSM the OEB could facilitate collaboration among the electric LDCs to help the “top 20” utilities prepare their first DSM plans. For example, the OEB could encourage the “top 20” utilities to set up a collaborative to work together to:

- develop a set of DSM programs with commonly agreed upon input assumptions from which each utility could select programs appropriate for its own DSM portfolio
- develop a common approach for using the TRC test, and for program monitoring and evaluation.

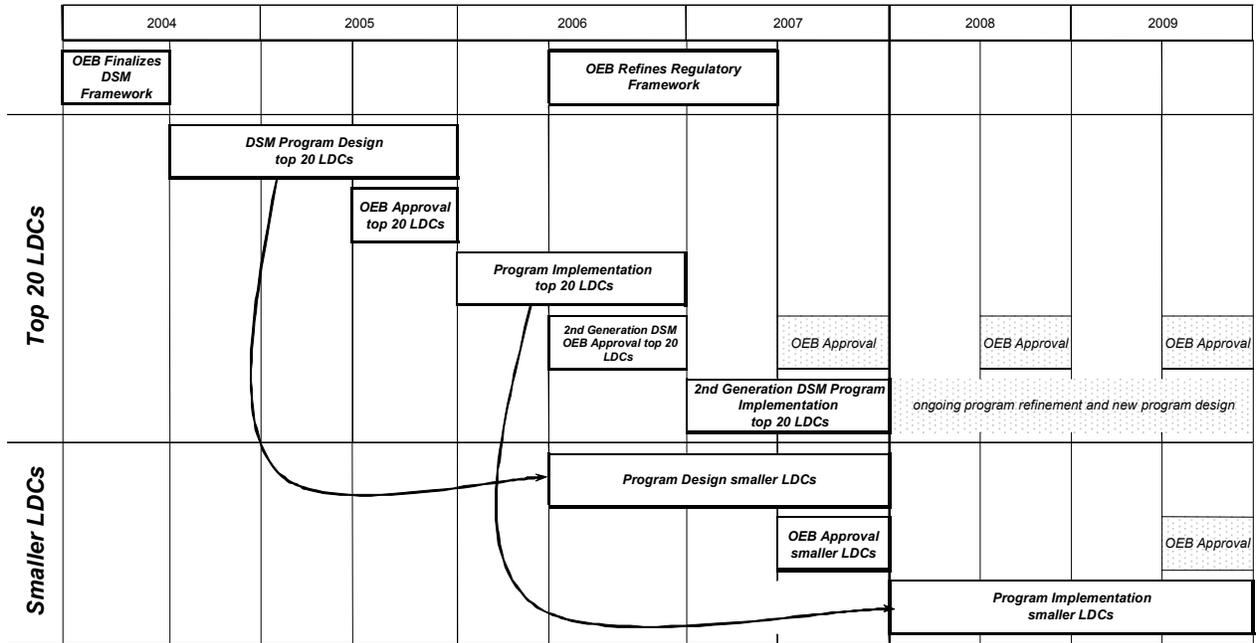
Based on the work of this collaborative, the OEB could facilitate the transfer of knowledge from this group to the other electric LDCs through various vehicles (e.g. workshops, seminars, publications, partnerships with industry associations etc.).

There does not appear to be a need to set up a central agency to carry out activities that the LDCs

could work together on their own to achieve. The OEB can review the success of the collaborative approach after some experience with it to determine whether a more formal, central agency is required.

### **2.3 Treatment of Distributed Energy**

Distributed Energy (DE) should be considered a form of energy conservation. Whatever framework is ultimately implemented in Ontario for DSM and DR, it should explicitly allow for DE as an energy-saving option with societal benefits and the potential for reductions in transmission loss. Examples of DE are high efficiency cogeneration (combined heat & power) and trigeneration (combined heat & cooling & power) both of which conserve total energy at source.



### 3 Conclusion

The Enbridge experience with DSM is a positive one. Our experience demonstrates that the DSM framework that we use is good for our customers; it is good for our company and it is good for society. Since introducing DSM programs in 1995, we have saved our customers more than 650 million dollars on their energy bills, helped make Ontario more competitive, and reduced atmospheric emissions associated with energy use. Reducing these emissions contributes to improving air quality, reducing greenhouse gas emissions from what they would otherwise be, and thereby makes it easier for Ontario and Canada to meet their obligations under the Kyoto Protocol.

We have identified the following principles that should govern DSM for natural gas and electricity:

- The local distribution utility should be accountable for DSM within its service territory, but not be required to do program delivery.
- DSM program cost-effectiveness and DSM performance should be based on the TRC test.
- The OEB has a central role in DSM policy development and regulatory oversight.
- The IMO should have oversight over emergency and short duration DR.
- Industry collaboration should be encouraged.
- LDCs should be given financial instruments to keep the utilities whole and to reward them for aggressive, cost-effective DSM.

Enbridge has the following suggestions to offer to facilitate the implementation of DSM for electric LDCs in Ontario:

- The electric DSM budget should be based on a fixed energy charge. This can either be incorporated into the LDC's rates or treated as a separate system benefit charge.
- Introduction of electric DSM should be staged based on the size of the LDC. The "top 20" largest LDCs covering about 70% of total electricity customers in Ontario should be required to do DSM first, followed by the remaining 30%.

The recommendations we are putting forward in this policy paper reflect our initial views on principles and a framework for DSM in Ontario. Enbridge will continue to participate in the ongoing DSM Advisory Committee consultations with the OEB and other stakeholders, and our position and recommendations may evolve, based on what we learn from this participation.