Comments on the Ontario Energy Board's Views of the Role of Ratepayer Funded DSM Activities[1]

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Background

This consultation on the role of ratepayer funded Demand Side Management ("DSM") activities was initiated in 2008 by the Ontario Energy Board ("the Board"), which means that the DSM framework currently in place throughout Ontario dates from 2006 and is based on the original guidelines of 1993. In other words, it is so out-of-date that Board-approved DSM programs do not respond to current market conditions, be they economic, social or environmental.

The Board's own views on DSM are also both out-of-focus and myopic. It believes, for example, that "today's market for conservation goods and series provides an array of solutions that are economically attractive to consumers" but there has been no significant change in the "array of solutions" since 2006 and natural gas prices are half what they were back then.[2]

A significant change in the "array of solutions" would have been the introduction of mandatory home energy labeling of homes at time of sale or listing, but that part of the *Green Energy and Green Economy Act* has not been enacted. A significant change that would have made DSM investments "economically attractive" would have been the introduction of a national cap and trade system, but that has not happened.

Another change to the business-as-usual approach would have been a government actually respecting its international commitments in this field, but Ontario has recently said that it will no longer join the Western Climate Change Initiative on January 1, 2012 as previously indicated.[3]

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[1] DSM Guidelines for Natural Gas Utilities: Issues for Further Comment, contained in the March 29, 2011 letter from OEB Secretary Kirsten Walli.
[2] http://www.oeb.gov.on.ca/OEB/Consumers/Natural+Gas/Natural+Gas+Rates/Natural+Gas+Rates+-+Historical
[3] B.C., Ontario hinder California green plan. The Globe and Mail, April 12, 2011.

Although an analysis of what has worked in the past is a good place to start, the Staff Report[4] prepared for the Board on this matter provides little information on future trends or projections in the field of natural gas supply and demand in Canada despite the fact that utilities are using such information to make billion-dollar exploration and distribution decisions. Governments are using similar information to base billion-dollar investment decisions on job creation, health and environmental protection.[5] Detailed information on the potential of energy-efficiency, however, does not appear to make its way into the decision-making processes of the Board, which continues to devote most of its time, resources and expertise to the supply side.

Despite delaying the proposed update to the DSM framework in order to consider the impact of the *Green Energy and Green Economy Act*, the Staff Report refers to it only twice in a minor way and there is no reference whatsoever to the current or projected impact of the *Act* in the views of the Board.

DSM Framework

The Board notes that "some parties have proposed significant increases to scope and budgets for ratepayer funded gas DSM" but does not acknowledge that the most significant support for such an increase has come from its own staff and the utilities themselves, which have worked diligently over the past several years under the direction of the Board, if not the Minister, to this end.

Since the turn of the century, Quebec has increased investments in DSM by almost ten-fold and Manitoba has increased investments in DSM by over thirty-fold compared to Ontario's increase of less than four-fold.[6] The same report prepared for the Canadian Gas Association shows that in 2009, DSM investments as a proportion of utility revenue were 15% for Manitoba but less than 3% for Ontario.

One would, therefore, not expect the Board to give much credence to the few stakeholders who believe that a "fundamental reassessment of the long-term role of ratepayer funded DSM activities" is warranted unless they are arguing for a dramatic increase in DSM funding.

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[4] EB-2008-0346 Staff Discussion Paper On Revised Draft Demand Side Management Guidelines for Natural Gas Utilities , January 21, 2011

[5] The decision by the Province of Ontario, for example, to phase out coal-fired power plants has already made an impact on natural gas supply and demand in Ontario and will also improve health and environmental protection consistent with its commitments in this field.

[6] *DSM best practices update: Canadian natural gas distribution utilities' best practices in demand side management: study update*, INDECO, July 2010

Furthermore, no data is provided to support the Board's conclusion that today's "landscape for conservation … has led to customers implementing DSM technologies without requiring a ratepayer funded or tax-funded subsidy". Although some customers have certainly done so, one would expect the Board to provide evidence showing that the vast majority of households in Ontario who have implemented DSM programs did so without being motivated by such a subsidy before it tries to justify a "fundamental reassessment" in this field.

As noted above, data from other jurisdictions in Canada, with the notable exception of Alberta, show significant increases in ratepayer funded or tax-funded subsidies. The most significant DSM program in Ontario has been its Home Energy Savings Program, which has provided *tax-funded subsidies* totaling about $537 million or $134 million per year[7] since 2007 compared to the $55 million of rate-payer funded DSM programs approved by the Board for 2011. In fact, the Staff Report suggests that increased DSM programs could replace the Home Energy Savings Program, although the $254 million recommended by staff for DSM investments during 2012-2014 is less than half of the mostly DSM investment made through the Ontario Home Energy Savings Program from 2007 to 2011.

So in the absence of any data to the contrary, the record shows that the overwhelming majority of customers who implemented DSM technologies in Ontario since 2007 have been motivated to do so by a ratepayer or taxpayer funded subsidy.

Although the Board rightly notes that higher mandatory efficiency standards in the Ontario Building Code and for appliances like water heaters and furnaces "has led and is expected to lead, to significant natural gas savings over time", it fails to estimate how much these savings will be or how long they will take, *with or without* DSM programs. The Board appears to apply a double standard: it requires applicants to provide independently verified plans and projections of DSM programs – sometimes even before approving the programs in question – but does not practice what it preaches in its own views.

In fact, the improvements to the Ontario Building Code scheduled to be implemented in 2012 could just as easily be rescinded,[8] and in any event would only maintain Ontario's position as simply slightly better than the current average. When the new National Building Code is implemented, it will push Ontario even further down the list whose first spot will still be occupied by Quebec, whose code and practices will still be far below those now in place in California.

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[7] Personal communication, Office of the Environmental Commissioner of Ontario.

[8] Energy-efficiency standards in the Ontario Building Code were reduced soon after a new government was formed in 1995. It took Ontario many years to get the Code back up to where it was in 1993 before improving it further.

Although it is true that new appliances are much more energy-efficient than old ones, the problem remains one of turn-over, which is directly motivated by DSM programs. The Board contradicts itself on Page 3 of its views by noting that customers are implementing DSM technologies without requiring a subsidy but then acknowledging that current market conditions will make it more difficult to do so. DSM programs have traditionally been relied on to incent people to do things sooner than planned, so they are needed even more when market conditions make them more costly to implement.

To its credit, the Board does recognize that "ratepayer funded DSM programs were originally meant to achieve savings beyond those that would have naturally been achieved by customers as a result of market forces or higher energy efficiency standards" but it does not appear to understand that "current market conditions" require a redoubling of efforts to achieve the higher reductions in greenhouse gas emissions (GHG) that the Government of Ontario has clearly committed to and that the Environmental Commissioner of Ontario has clearly warned will not be achieved with current programs.[9]

By agreeing to focus on DSM programs that will not only provide value to ratepayers but can be shown to do so, the Board may wish to acknowledge that this means investing in deeper measures that can generate actual results albeit with a smaller number of participants. That is the trade-off between accountability and cross-subsidization if the Board continues to ignore the broader social and environmental benefits of DSM programs, notably their contribution to reducing current and future costs of climate change.

In that respect, it should be noted that deeper, hard-wired measures like weatherization and furnace upgrades not only guarantee both immediate and long-term results for low-income households but also benefit all ratepayers by decreasing GHG emissions in cost-effective ways. This argument is similar to that which even the most conservative governments now adhere to: instead of forcing their industries to reduce GHG emissions locally (even if that would also decrease health care costs) they are achieving similar savings at a lower short-term cost by helping industries in poorer countries because they recognize that GHG emissions do not respect national boundaries.

With regard to the question of cross-subsidization, it should be acknowledged that this issue will almost completely disappear when the Board recognizes the costs imposed on society by climate change. When that happens, the tables will be turned through a paradigm shift in attitude or a tipping point of contagious behaviour: those customers whose 'representatives' argue are subsidizing others by paying for DSM programs that they do not believe they benefit from, will suddenly be seen as being subsidized by those who are making the efforts to reduce GHG emissions. Every cubic metre of natural gas that is consumed generates substantial costs to the health care system and the environment

[9] Gord Miller, Environmental Commissioner of Ontario, May 31, 2010.

in Ontario that are not reflected in the economic costs debated before the Board. That is the kind of strategic, forward thinking that should be informing the Board's views on matters like this.

Role of Ratepayer Funded DSM Activities

The Board reveals its bias at several levels when it reiterates that "long-standing regulatory principles state that cross subsidies should be avoided where possible". First of all, the regulatory principles in question are not just "long-standing" but obsolete.[10] Furthermore, they have been imported from the United States, whose approach to energy regulation is responsible for the one of the highest levels of energy-inefficiency in the world, the deaths of thousands of people in Ontario from smog generated by coal-fired generating plants, environmental destruction through massive oil spills, teenage acne, and ongoing wars around the world to protect the American way of life.

One would hope that the Board would not want to mimic the poor regulation of the energy sector in the United States or its even worse regulation of the financial sector, which ironically led to the most cost-effective yet costly DSM program in Ontario to date: the 2009 recession.

The Board acknowledges that "some level of cross subsidization can be appropriate to address certain system wide and societal benefits", and one can only hope as noted above that it will eventually acknowledge the environmental benefits that accrue from expanded DSM programs in other jurisdictions in Canada, notably Québec and Manitoba.

Some intervenors apparently believe that ratepayers who can afford to consume a lot of energy should not be expected to pay for DSM programs to help those who cannot. Although there appears to be no comparable research in Ontario, a British report concluded that low-income consumers often pay more per unit than higher-income consumers for the energy they consume and may actually contribute more per unit to rate-based DSM programs than they receive.[11]

Given its mission to regulate the industry in an "effective, fair and transparent" manner, the Board may wish to provide evidence to corroborate its view that "the justification for gas DSM cross subsidies is eroding" rather than simply make unsubstantiated statements.

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[10] *The Principles of Public Utility Rates* was written before 1961 by James Bonbright who was born in 1891 and developed his theories during the Great Depression.

[11] Baker and White (2008). Towards sustainable energy tariffs. A report for the National Consumer Council by the Centre for Sustainable Energy, Bristol.

In its analysis of cross-subsidization, the Board misinterprets the Staff Report by failing to acknowledge that the average cost cited of $121 for minor measures provided "per customer" for one utility was for *low-income households*. As that amount was presumably less than 14% of the total DSM budget, one may conclude that 86% was provided to higher-income customers. By noting that the average cost for more significant measures provided to low-income participants was $2,750 the Board gives the misleading impression that cross-subsidization is much larger than it really is, at least between socio-economic, if not rate classes. The language used by the Board also reveals another bias: low-income people who pay for their gas are not "customers" but "participants".

A more informed view would be based on the results of these two very different programs, but one is so shallow that actual results are almost always lost to background noise and the other is not subject to before and after measurements despite the relative ease of doing so. This means there is virtually no accurate data on actual results in this field because the Board has failed to require it. One might well ask why, after almost 20 years of experience in this field, does the Board continue to treat DSM programs with such circumspection, if not disdain?

The most troubling view of the Board is that which concurs with "one participant" who believes that "the federal and provincial governments' decision to withdraw from the deep measure residential programs" is cause for caution with regard to expanding deep DSM programs. The record needs to be corrected:

1. Neither the federal nor the provincial government withdrew from the programs in question, both of which were scheduled to end in March 2011 as part of budgets approved by both parliaments.
2. The federal government recently announced its intention to resume the program.

In fact, all federal parties strongly support deeper residential energy-efficiency programs because they recognize that, in the absence of higher taxes or regulated prices that incorporate all of the economic, social and environmental costs associated with uncapped energy consumption, subsidies are needed to address climate change and to generate employment in every community across the country.

Some might think that these are just vote-buying measures being promoted by parties of all stripes but even if that were true hardly any voters are complaining about cross-subsidization because most recognize a long established principle in Canadian society: when it comes to delivering essential services – like education – people without children gladly agree to pay for schools because of the societal benefits that accrue to all from higher levels of education.

The Board may wish not to be seen basing its view in this matter on the short-term interests of a narrow and small constituency that apparently prefers to overlook the fact that higher levels of energy-efficiency in homes, for example, help reduce the number of children coming to school on empty stomachs or with asthma.

The Board is wisely leaving the door open to considering "an increased focus on deep measures in the residential sector" but inexplicably ignores its own staff, Ministerial directions, and the highly-regarded work of major utilities over the last five years by concluding that "in any event" the current DSM budget should be capped in order to alleviate obsolete theories "regarding cross-subsidization levels".

DSM Budget Level & Plan Term

As noted above, there is little foundation for the Board's assertion that the "environment and market for demand resources has evolved substantially". Compared to other major sectors in Ontario, for example the telecommunications industry, the utility sector has been remarkably stable and almost immune from transformation thanks – or not – to the Board's remarkably steady, if not invisible hand.

By questioning the appropriateness of utilities providing DSM programs, and by determining that they should be capped, the Board appears to be undermining its own mandate and to contradict its own staff, who support significant increases and note that:

> *In staff's view, no new significant evidence has been provided on the appropriateness or lack thereof of the natural gas utilities undertaking DSM activities as part of their regulated business. In light of the participants' generally supportive comments to build upon the current DSM framework, staff is of the view that consideration of a fundamentally different framework is not warranted at this time.*[12]

The Board also appears to have based its views without due regard to more progressive regulatory regimes in neighbouring jurisdictions with similar demographics, e.g. the State of New York, where consumers are now paying much more *per month* for conservation programs than the Staff Report estimates increased DSM funding in Ontario would cost customers *per year*.[13]

The views of the Board also flatly contradict those of the Environmental Commissioner of Ontario, who recommended in a recent report[14] that:

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[12] Staff Discussion Paper On Revised Draft Demand Side Management Guidelines for Natural Gas Utilities, January 21, 2011

[13] "the year over year average annual funding increase per residential customer would range from about $2 to $3 for Enbridge's residential customers and from about $1 to $2 for Union's residential customers".

[14] *Re-thinking Energy Conservation in Ontario – Results, Annual Energy Conservation Progress Report – 2009 (Volume Two)*, November 30, 2010, p. 2.

> *conservation spending by gas utilities be expanded, given the very high net benefits per dollar spent and the low level of current spending on conservation by gas utilities in Ontario compared to other jurisdictions.*

There is no question that other regulatory agencies and approaches have done a much better job improving the energy-efficiency of housing, transportation, and appliances but even the utilities agree that expanded DSM programs are in both their interests and the public interest.

It is hard to understand how the Board could claim that "current DSM budget levels, which now represent about 2% and 4.1% of Enbridge's and Union's respective distribution revenues, have come to represent a sizeable portion of their business." One might well ask: Since when has 3% of anything been considered to be a "sizeable portion"?

The Board is right, however, to question the continued role of utilities in providing low-flow showerheads and other DSM devices that have been available for years in hardware stores but it appears to be throwing the baby out with the bathwater when it concludes that just because DSM services are – as they always have been – available "through a variety of channels in the marketplace" that customers will take advantage of them without any help whatsoever from their utility.

The Board is also right to call into question DSM programs that have been fraught with free riderships, such as Ontario's Home Energy Savings Program, which inexplicably offered subsidies to install higher-efficiency gas furnaces when high-efficiency furnaces were the only options available.

In its proposal to cap DSM investments at the current level, the Board appears not to have considered the impact that the higher bills resulting from lower DSM investments could have on retaining natural gas customers. It would be helpful if the Board clarified its position on cross-subsidization between the gas and electricity sectors it regulates and explain how it justifies the differences in funding between DSM and CDM programs in Ontario. Would it be fair to the natural gas utilities if the Board denied them the same ratepayer or taxpayer-funded opportunities provided to electricity utilities to service or retain their customers?

Although there is broad support from utilities, intervenors and Board staff for an increase in DSM budgets because they are seen to be an "effective, fair and transparent" way of regulating gas utilities, the most important attribute of DSM programs continues to be ignored by the Board: since 2000, DSM programs have reduced GHG emissions by over 3 million tonnes (CO_2e) in Canada, [15] over half of which can be credited to Ontario.

[15] *DSM best practices update: Canadian natural gas distribution utilities' best practices in demand side management: study update*, INDECO, July 2010

Although data from Ontario's Climate Change Secretariat is not readily available, DSM programs are almost certainly one of the most significant sources of GHG savings in Ontario. Any decision to reduce these programs would undermine both provincial government policy and the commitments that Canada is legally bound to respect under the Kyoto Protocol. As noted in a recent report by the Environmental Commissioner of Ontario:

> *the Ontario government will need to expand its climate change policy agenda if it hopes to have any chance of reaching its short- and medium-term greenhouse gas (GHG) reduction targets*.[16]

The Board also appears to have ignored the advice it received last year from its own consultants on this matter:[17]

> *For Ontario, a more aggressive stance toward climate change may justify a different DSM framework … while a more traditional approach would suggest continuation of the existing policy, with minor modifications or adjustments.*

It is worth noting that it never occurred to the consultant in question that the Board would even think about reducing ratepayer-funded DSM programs.

Issues for Further Comment

The determination by the Board that "the budgets for ratepayer funded natural gas DSM activities should not be expanded" runs counter to Ministerial directives as well as the regulatory regimes of almost all other jurisdictions in Canada and many abroad.

The Concentric Report[18] noted that although "operating information is limited and somewhat difficult to obtain" even the most successful companies in the United States were only able to achieve reductions in gas consumption of less than 1% on average. Although the Board does not appear to have relied on comparable data for Ontario to make its determination, it really has only two options to achieve better results: higher levels of ratepayer funded DSM programs or higher prices reflecting all economic, social and environmental costs to liberate the market forces the Board appears to prefer.

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[16] Gord Miller, Environmental Commissioner of Ontario, May 31, 2010.
[17] *Review of Demand Side Management (DSM) for Natural Gas Distributors*, Concentric Energy Advisors, Inc., March 19, 2010
[18] *Review of Demand Side Management (DSM) for Natural Gas Distributors*, Concentric Energy Advisors, Inc., March 19, 2010

Putting a cap on conservation when there is no cap on consumption would kill any hope of a Culture of Conservation in Ontario and doom the province to higher levels of unemployment, sickness and deaths from dirty industries, businesses, homes, and schools that are charged subsidized energy prices that are not in the public interest, are not in the interests of future generations, and are not “effective, fair or transparent”.

1.
- The low-income DSM budget should be increased from the current 14% of the total budget to the levels recommended in the Staff Report and accepted by applicants.
- The low-income DSM budget should continue to be recovered from the residential rate class.
- The focus should be on deep measures generating much more significant results that can be accurately monitored.
- The many “opportunities for synergies between DSM policies and frameworks for natural gas distributors and electric utilities” [19] should be pursued through Board-mandated collaboration between DSM and CDM programs.

2.
- Industrial and commercial DSM programs have not been shown to create competitive advantages.
- These sectors need stable, long-term policies upon which to base investment decisions, not short-term DSM programs.
- The Board has a responsibility to ensure that its decisions are based on accurate data of energy consumption and the effects of rate changes and DSM programs.
- All DSM programs should be based on before and after energy audits in order to provide the data needed for long-term investments and regulatory oversight.
- Unless the Board mandates natural gas and electricity utilities to provide residential energy-efficiency loans paid back through bills, it should not approve DSM programs that provide financing just to the industrial and commercial sectors.

3.
- Utilities should continue to provide DSM education and training programs focused on contractors, trades and professional associations but should fund them from their own funds.

4.
- Utilities should continue to invest their own funds in R&D and pilot programs.
- Utilities should also continue to work with key industry leaders to improve building codes and efficiency standards for equipment.

[19] *Review of Demand Side Management (DSM) for Natural Gas Distributors*, Concentric Energy Advisors, Inc., March 19, 2010