

Sent by Courier and Electronic Mail

July 21, 2010

Ontario Energy Board
P.O. Box. 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

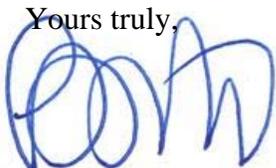
Dear Ms. Walli:

**Re: Comments on Behalf of the Ontario Sustainable Energy Association (OSEA)
Board File No. EB-2010-0215 Creation of the Conservation and Demand
Management Code for Electricity Distributors**

Please find enclosed OSEA's comments relating to the Creation of the Conservation and Demand Management Code for Electricity.

OSEA is committed to representing its members' interests in promoting conservation in regulatory policy and direction and is appreciative of the opportunity to provide its comments herein.

Yours truly,



Cherie L. Brant

Encl.

cc: Mr. Kristopher Stevens, Executive Director, OSEA

Comments on the Proposed Conservation and Demand Management Code for Electricity Distributors

The Ontario Sustainable Energy Association (OSEA) is pleased to have this opportunity to comment on the proposed code for conservation and demand management for local electric distribution utilities (LDCs).

- OSEA is a province-wide, member-based, non-profit organization, representing private citizens, cooperatives, farmers, First Nations, businesses, institutions and municipalities.
- OSEA's vision is that every Ontarian becomes a conserver and generator of sustainable energy either through a household or through a local community owned business, contributing to the transition to 100% sustainable energy.

OSEA proposes to organize its comments as follows:

1. General Comments
2. Comments on Performance Incentives for LDCs
3. Comments on Lost Revenues
4. Specific Comments with respect to the Proposed Code

1. General Concerns

Terminology

As a founding member of the Green Energy Act Alliance (GEAA) that set the stage for the government's development and passage of the *Green Energy and Green Economy Act*, OSEA defined conservation as: "Any measure that reduces a customer's overall demand for energy and/or a customer's demand for purchased energy. Specifically¹:

- energy efficiency;
- behavioural and operational changes, including application of benchmarking, interval meters or "smart" control systems;
- load management -- interruptible and dispatchable loads, dual fuel applications, thermal storage, and demand response;
- fuel switching which reduces the total system energy for a given end-use particularly with respect to the following:

¹ This definition is fully consistent with the May 31, 2004 letter from the Honourable Dwight Duncan to all CEOs of LDCs with a copy to the Chair of the OEB.

- Geo-exchange systems which are also referred to as earth energy systems, or geothermal heat pump systems. This heat 'exchange' between the ground and the building is accomplished by using pump and compressor technology
- Clean energy systems which make use of wasted energy such as: combined heat and power; local generation that uses presently wasted energy from industrial plants; micro grids within local distribution companies, including private wires and pipes in local geographic areas; and recycled exhaust heat from gas pipeline compressor stations.”

OSEA believes that it is time to put an end to the confusing nomenclatures with respect to utility conservation programs. For the Ontario’s natural gas utilities, it is referred to demand side management DSM – a worldwide accepted term and first coined in the United States with respect to electric utilities. For Ontario electric LDCs, it is referred to CDM. OSEA suggests using DSM to define utility delivered conservation programs for both gas and electricity utilities in Ontario. This will more clearly establish utility programs as a subset to the larger universe of “conservation” which is evident in the *Green Energy Act*. However for the purpose of these comments, OSEA will continue to use the terminology of the proposed code.

Approach

OSEA is also disappointed that the proposed code does not reflect any of the improvements in the Board’s own proposed draft guidelines for natural gas utilities or advancements resulting from the Concentric Report and its review in proceeding EB-2008-0346. In our view, this represents a serious lost opportunity to recognize the value of integrating gas and electric conservation, to harmonize the rules for the province as a whole and to reflect the most up to date thinking in approach to electricity conservation. In that report, Concentric identified three approaches to DSM (show in the table below) and it appears from the proposed code that a “Traditional” approach to DSM has governed the approach to electric CDM with some minor exceptions.

Ontario should benefit from the lessons learned not only from the 15 years of natural gas experience, but also the approach taken by Ontario Hydro from 1989 to 1993, which, using Concentric’s grid could be characterized as at least “Progressive”, but also with some features associated with “Aggressive”.

Table 1: Possible Regulatory Approaches to DSM

Element	Traditional	Progressive	Aggressive
Primary Objective	Energy Savings	Energy Savings Manage Demand Growth	Energy Savings Manage Demand Growth Carbon Reduction
Cost Effectiveness Test	Ratepayer Impact Utility Cost	TRC	Societal Modified TRC
Avoided Costs	Commodity	Commodity Capacity	Commodity Capacity Externalities Carbon reduction

Element	Traditional	Progressive	Aggressive
Input Assumptions	Utility costs	Utility costs, participant costs	Utility costs participant costs Externalities
Adjustment Factors	Free ridership Persistence Attribution	Plus free drivership Spillover Proportional attribution	Secondary concern (tradeoff theory)
DSM Program Design	Prescriptive	Flexible	Proportional reduction
DSM Budget	Fixed \$ Amount	% of Revenues	Objective/target Driven
DSM Metrics Targets (Measuring Success)	Energy Saved/DSM \$	Short term and long term energy savings	Long term energy savings Market Transformation DSM Penetration Carbon Reduction
Financial Incentive (Utilities)	Limited	Tied to Energy Savings	Tied to Societal Goals/Climate
Compensating for Lost Revenue	Minimal	LRAM	Revenue Decoupling
Conservation Impact Evaluation	Utility report, prudence review	Independent review and verification	Evaluate whether DSM results achieve program objectives
Filing and Reporting	Progress Report Evaluation Report	Audited Program Results	Broad Evaluation Measures
Stakeholder Input	Limited/Informal	Formal/Advisory	Proactive Consultation Direct Involvement
Integration of Gas/Electric	Limited/None	Encouraged	Mandated

And the proposed code does not even suggest that alternative approaches could apply to electric LDCs.

Fuel Switching

The *Green Energy and Green Economy Act* fully recognized the need to broaden the coverage of conservation with the broadening of the conservation reporting function to include: natural gas, propane, oil, and transportation fuels with a focus on three areas:

- Barriers to Conservation
- Initiatives in Ontario to achieve conservation
- Ontario's progress in achieving its targets.

While OSEA recognizes that the OEB has no jurisdiction with respect to propane, oil and transportation fuels, it is OSEAs, the *Green Energy Act* does recognize that conservation includes fuel switching, but the proposed code does provide any guidance on how fuel switching might apply to any of the programs covered by the code.

Scope

It is OSEA's view that the Code does not clearly articulate what roles and responsibilities are covered by the code. In addition to the broader definition of conservation above, OSEA wishes to bring to the attention of the Board, its views along with those of the other members of the Green Energy Act Alliance on conservation to inform discussions with respect to conservation. Specifically, the GEA Alliance called for: "A mandated commitment to a continuous improvement approach to conservation with a minimum 2.5% annual (compounding) reduction in energy resource needs from conservation between 2011 – 2027" with this associated rationale:

By pursuing all of the economic conservation, Ontario will ensure the lowest cost option for energy customers. In determining both what is economic and pricing/value the OEB and OPA must count all system benefits including peak and average loss reductions, transmission and distribution savings based on average long term budgets and externalities. Adders could be specified in the code to simplify these matters. By pursuing all of the economic conservation the current narrow and piecemeal approach to conservation will be addressed. Pursuing all economic conservation will include the following.

- Empowering consumers with relevant energy information through well-developed rating systems, building labeling, energy performance benchmarks, and energy assessment tools to make informed buying decisions. Ensuring all energy consumers receive regular feedback on their energy consumption and relative energy performance compared to their peers.
- Ensuring a portion of the net benefits of conservation are available for energy conservation programs covering research, development, education, market transformation, training, codes and standards, rating systems, implementation, monitoring and evaluation.
- Providing financing for programs that help communities, individuals and businesses to improve energy efficiency and increase conservation in order to reduce their energy bills.
- Regularly tightening energy efficiency in the *Ontario Building Code* and the *Energy Efficiency Act*. Require all energy efficiency standards to be reviewed and brought up to the international best practice on a three-year cycle.
- Educating Ontario students of all grades on environmental protection, energy efficiency and conservation as key elements of good citizenship.
- Ensuring end users pay the real price of energy, which has resulted in a reduction in consumption so that energy costs represent a decreasing share of disposable income.
- Smart metering and billing infrastructure in place for real-time pricing of energy (and water) and users pay principles in effect through individual metering and sub metering.
- Protect vulnerable energy consumers through direct install conservation programs, bill assistance through universal service plans and emergency assistance which will make sub metering an advantage for them.
- Protect energy intensive industries by providing a double rebate for annual energy savings in excess of 10 per cent.

- Support greening (roofs, urban forestry etc.) through financing programs, incentives and building codes.
- Applying feed in tariffs (FITs) to conservation has not been done elsewhere, but there are many similarities. Local distribution companies and other designated organizations could be “conservation developers” and paid for delivering conservation and demand management for a per kWh or kW fee which would represent a portion of the avoided costs of supply.

Furthermore, the draft Integrated Power System Plan (IPSP)² identified that **conservation includes continued use by the Government of vehicles such as energy efficiency standards under the *Energy Efficiency Act* and the *Building Code*, and should include load reductions from initiatives such as : geothermal heating and cooling; solar heating; fuel switching; small scale (10 MW or less) customer-based electricity generation, including small scale natural gas-fired co-generation and tri-generation, and including generation encouraged by the recently finalized net metering regulation.** (Emphasis Added).

The April 23, 2010 Ministerial directive to the OPA also notes two additional areas of focus for the OPA beyond strategic coordination of CDM programs with LDCs; namely: energy efficiency and demand response programs involving First Nations and Métis Communities and support and funding of CDM research and innovation. These are in addition to existing province wide programs offered by the OPA such as the Power Pledge whose results, presumably will be felt during the timeframe of the allocated LDC targets. In addition, organizations such as REALpac have set aggressive targets for their members own conservation outside of any OPA or LDC program. Organizations like the Toronto and Region Conservation Authority and Federation of Canadian Municipalities work directly with municipalities including those who are owners of LDCs.

While OSEA acknowledges that the proposed code only applies to electric LDCs and then only for Board approved programs and OPA Contracted Province wide CDM programs, it remains unclear how LDCs will account for, report on, or verify the results of the myriad of other activities and their energy savings or how these will be differentiated both in terms of meeting their license conditions or developing their own programs for Board approval.

More importantly, however, the proposed code appears to create barriers which will inhibit the LDCs from leveraging any of these initiatives to improve the effectiveness, efficiency and efficacy of their efforts.

OSEA proposes adding a performance based component to both the DSM/CDM frameworks. We believe this model is achievable and goes beyond the “Aggressive” approach set out in the Concentric report. A performance based model would by its nature be more customer-focused and centered on continuous improvement and has a better fit with the day to day operations of utility as envisioned under the *Green Energy Act*.

² EB-2007-0707; Exhibit B; Tab 1; Schedule 1; Page 1 of 34; Updated: August 29, 2008

In summary, it is our view that conservation will be better achieved and more sustainable if more focus is put on performance and innovation and less on short term equipment replacements and evaluations which focus on ensuring installation of the new equipment, rather than how well it performs.

The proposed code imposes an artificial end date after four years, when Ontario needs ongoing drivers for conservation. The proposed code's focus on annual reports will force LDCs to use CDM expenditures within the year on efforts that will result in savings in the same year.

Funds should be also be allocated to work that will deliver future benefits. Optimal performance can only be achieved through the combined use of more efficient technology with equal attention to long term standards and system design that impact performance in way that can be demonstrated.

As stated above, the proposed code appears to take a "Traditional" approaches to CDM. Such approaches, including that used by the OPA in its own programs, have focused on "technology based" interventions, most often using incentives to encourage the purchase of higher efficiency equipment as a replacement for "standard" efficiency equipment. In our view, this approach does little to effect any long term change in the decision making process of consumers, whether, home owners, businesses or institutions. In addition, business institutions are more focused on their primary business and concern themselves only with timely bill payment.

Increasingly, other sectors such as Building and Industrial sector use models such as REALpac³ or The Energy Coach⁴™ to pursue broader, more comprehensive frameworks for energy management based on benchmarking, actual performance, and measurement of results. Traditionally, regulated utilities or governments were "the only game in town" driving conservation. This is no longer the case in Ontario. We have sector specific organizations, nonprofit organizations and community based groups all contributing to the agenda. A successful DSM framework will be one which capitalizes on and enhances these opportunities rather than competes with them.

A particularly important opportunity for harmonization will arrive when the Ontario government issues the regulations with respect to the requirements for energy management plans in the public sector. Already, the Ontario Realty Corporation is pursuing a performance based approach to conservation consistent with the REALpac process. Set out below is an excerpt from the REALpac report⁵.

"A roadmap is presented for achieving and sustaining high levels of energy performance in individual buildings and portfolios. The roadmap begins with benchmarking, and works through to performance monitoring, feedback and continuous improvement. Canada's real estate industry is positioned to have a meaningful impact on the climate change mitigation agenda, through both its

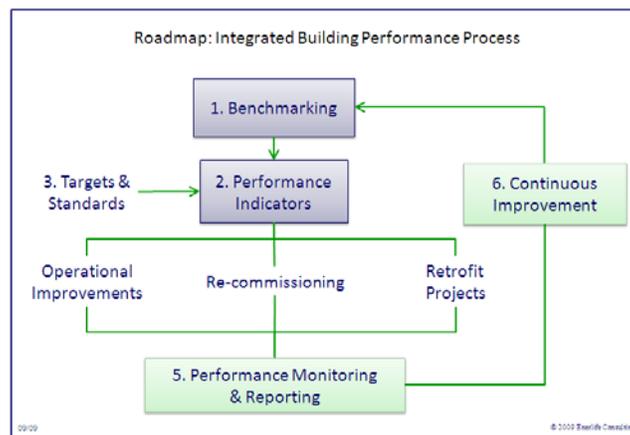
³ REALpac, the Real Property Association of Canada is Canada's senior national real property association whose mission is to bring together the country's real property investment leaders to collectively influence public policy, to educate government and the public, and to ensure stable and beneficial real estate capital and property markets in Canada. www.realpac.ca

⁴ The Energy Coach™ is an energy management best practices program. It will enable users to become more competitive, identify key improvement opportunities for energy planning, utilization and metrics and will potentially reduce their manufacturing input costs, relating to energy consumption and environmental footprint.

⁵ "Ontario Realty Corporation is committed to systematically working towards energy efficiency targets for high performing buildings across its whole portfolio. The REALpac 2015 target is a useful development in moving this agenda forward." Gavin Maher, Senior Sustainability Program Specialist, Ontario Realty Corporation

own potential to demonstrate greenhouse gas emission reductions, and the example it can provide. The methodology, metrics, standards and tools described in this paper did not exist two years ago. The commercial office sector and government real property departments have shown leadership, through their participation in the CaGBC pilot projects, in both substantiating the opportunity for deep cuts in energy use and emissions, and developing the means to achieve and sustain them. REALpac's "20 by '15" target takes this leadership to the next level."

OSEA suggests that such an approach can provide the OEB, ratepayers and consumers with great assurance of the veracity of savings. OSEA strongly supports moving to a performance based approach to conservation. We support the REALpac model, as detailed below. The following diagram shows the fundamentals of this approach from a customer's point of view and the text below explains the steps as excerpted directly from the REALpac report followed by an illustration of the role of an LDC in the process.



Step 1: Benchmarking

Benchmarking is the starting point for addressing energy efficiency. High performance can be used by leasing agents to market a building. Lower performance should factor into target setting and individual performance objectives. Executives should know how their properties compare with each other and with the office buildings market as a whole.

Step 2: Performance Indicators

Beyond total energy use, benchmarking and drilling down into component parts of energy use helps create building-specific targets, and identify which buildings are candidates for operational improvements, re-commissioning and/or retrofits. Interval meter profiles allow identification and quantification of operational improvements. The interpretation of utility data to guide conservation action is becoming an essential management capability.

Step 3: Targets & Standards

Every building can have an individual energy target, based on its actual and potential energy performance. The target guides allocation of effort and resources, planning of improvements, and performance objectives for staff and service providers. Building owners should adopt good practice design/retrofit standards for individual building systems, as identified by the CaGBC program, to be incorporated into specifications and service agreements.

Step 4: Operations, Recommissioning and Retrofitting

There are typically three streams of activity involved in implementing energy efficiency improvements in existing buildings.

1. First are operations – reducing “on-time” for building systems, shutting equipment off during unoccupied periods and adjusting building control “setpoints”. This is the least cost, highest payback stream, but requires training and accountability for operators and engagement of tenants.
2. Second is re-commissioning – testing, diagnosing, repairing, upgrading and adjusting building systems to perform to their best potential. This is generally a relatively low cost stream with a good payback, and requires direct involvement of operators as a learning process, and to ensure high performance is maintained over time.
3. The third stream is system redesign and retrofit projects – lighting, ventilation and hydronic system upgrades, and replacement of plant and equipment. This is the highest cost stream and requires a robust business case.

Every building has its own unique set of opportunities. The performance indicators derived from benchmarking point to which streams apply to which buildings. In general, the lower cost streams should be implemented first in order to gain immediate savings with high returns, engage and train operators, and build internal confidence and capacity for tackling large capital projects.

Step 5: Performance Monitoring

Transparency of performance maintains organizational engagement and commitment, and drives continuous improvement. Operators and property managers should have access to monthly changes and trends in energy use for their building so they can make the connections between cause and effect – how their actions and operating practices impact performance – and take appropriate measures for improvement. Executives should see quarterly progress reports compared with baselines and targets. High performing buildings and large improvements should be recognized and celebrated, and corporate reporting should include targets, actual savings, and profiles of measures implemented and improvements made.

Step 6: Continuous Improvement

Energy performance management is a continuous management system which needs to respond to new standards and technology, and improved operating procedures. As the energy efficiency of the office building sector as a whole continues to rise, and better standards and practices continue to emerge, so individual building targets are raised and the cycle of continuous improvement takes us to 20 by '15 and beyond.

In addition to recruitment, the role of LDCs in the above steps could be as shown below. An attractive feature of such an approach is that it provides a fair and equitable way to have gas and electric distribution utilities share in the delivery of conservation.

Step 1 Benchmarking	Provide the metered data to customer to inform benchmarking
Step 2 Performance Indicators	Assist in the building and technical analysis to develop performance indicators.
Step 3 Targets & Standards	Assist in the building and technical analysis to develop targets and standards.
Step 4 Operations, Recommissioning and Retrofitting	Provide workshops, technical advice and guidance re operational improvements and recommissioning Provide financial incentives based on performance criteria re: retrofitting
Step 5: Performance Monitoring	Provide the metered data to inform performance monitoring and reporting.
Step 6: Continuous Improvement	Provide ongoing support to ensure that savings persist.

2. Comments on Performance Incentives for LDCs

Section 7 of the proposed CDM Code sets out the provisions relating to performance incentives, including what CDM Programs are eligible. Comments specific to the proposed code are included later in section 4.

As per the Board's notice, the Board's current performance incentive proposal does not include a cost efficiency element. However, the Board sees merit in providing an incentive to those distributors that achieve their CDM Target in the most cost-efficient manner. The Board is interested in receiving specific proposals for possible cost efficiency incentive structures that reward those distributors who achieve their CDM Targets by using the least amount of program funds.

OSEA is pleased that the OEB sees merit in providing an incentive to those distributors that achieve their CDM Target in the most cost-efficient manner. However, the proposed code gives the LDCs little discretion in alternate delivery of province wide programs and very narrow scope to design and deliver Board approved programs - a clear barrier to cost efficiency.

OSEA suggests that the proposed performance based approach to conservation is based on mechanisms that demand cost efficiency both for LDCs and for customers. Such an approach, in the end will provide cost efficiency for both gas and electric ratepayers. If LDCs are provided an average price per kWh (kW) saved, the performance incentive could be finding ways to doing is in a less costly way than what appears to the approach embedded in OPA programs to date.

3. Comments on Lost Revenues

OSEA has participated in the Board's consultation process (EB-2010-0060) to examine the revenue adjustment and cost recovery mechanisms that are currently available to electricity and natural gas distributors to address revenue erosion resulting from unforecasted changes in the volume of energy sold. Although lost revenues have not been addressed in the proposed CDM Code, OSEA repeats its key analyses and recommendation below for completeness.

With respect to **electricity distributors**, LRAM alone will not provide sufficient protection against lost revenues from conservation. Electricity distributor CDM is but one factor that needs to be considered. While the government has indicated that it will be introducing targets for electricity distributors, the draft IPSP also estimated that 65% of the long term electricity conservation target (a minimum of 6300 MW by 2025 in addition to the natural conservation already occurring in the market place) would come from higher codes and standards⁶. Furthermore many other parties, including governments of all levels, trade associations and non-government organizations are active in encouraging energy conservation, energy efficiency and climate change mitigation, all of which will affect the revenue of electric distributors.

OSEA Recommendation: Any decoupling in the electricity sector must address all of these impacts to be effective in ensuring that electricity distributors are encouraged to pursue conservation. Again, OSEA has no views on additional decoupling elements provided they do not decrease their incentive to pursue DSM.

With respect to **electricity distributors**, the Ontario Power Authority demand response programs and the IESO's emergency demand response programs will also affect their revenues but far less than conservation itself.

OSEA Recommendation: Decoupling for electricity distributors should reflect the (albeit) relatively less impact of demand response programs on its revenues.

With respect to both natural gas and electricity distributors, OSEA is concerned that decoupling alone is not sufficient to address needs of vulnerable customers such as low income consumers, First Nation's communities and residents in the north. Also included would be consumers without access to natural gas who must rely on other fuels. Additional mechanisms, which OSEA understands will be covered in EB-2007-0346, will be required to address these customers with additional needs for conservation.

OSEA Recommendation: The Board should not consider decoupling sufficient to ensure vulnerable customer groups are included in gas and electricity programs.

⁶ The OPA is relying on codes and standards to deliver energy efficiency that will achieve almost 65% of the 2025 Conservation peak demand reduction target. EB-2007-0707, Exhibit D, Tab 4, Schedule 1, Page 30 of 58

4. Specific Comments with respect to the Proposed Code

OSEA has organized its comments to conform to the table of contents for the proposed code.

1. GENERAL AND ADMINISTRATIVE PROVISIONS

- 1.1 The Purpose of this Code
- 1.2 Definitions
- 1.3 Application and Interpretation
- 1.4 To Whom this Code Applies.
- 1.5 Coming into Force.
- 1.6 Requirements for Board Approvals
- 1.7 Timeframe for the Code

2. CDM STRATEGY AND ANNUAL REPORTS

- 2.1 CDM Strategy Requirements
- 2.2 Annual Reports
- 2.3 Co-ordination with the OPA

3. BOARD-APPROVED CDM PROGRAMS

- 3.1 Requirements
- 3.2 Re-Allocation of Funding Among Existing Board-Approved CDM Programs
- 3.3 CDM Programs for Low-Income Customers

4. COST EFFECTIVENESS

- 4.1 Cost Effectiveness Tests
- 4.2 Pilot CDM Programs
- 4.3 Educational CDM Programs

5. ACCOUNTING TREATMENT

6. PROGRAM EM&V

- 6.1 Independent Review

7. PERFORMANCE INCENTIVE

- 7.1 Eligible Programs
- 7.2 Calculation of the Performance Incentive

APPENDICES

- A – Fully-Allocated Costing Methodology for Non-Rate-Regulated Activities
- B – CDM Strategy Template
- C – Annual Report Template
- D – Performance Incentive Calculation.

Comments on General and Administrative Provisions

The Purpose of this Code: The purpose of this Code is to set out the obligations and requirements that licensed distributors must comply with in relation to the CDM Targets set out in their licenses. This Code also sets out the conditions and rules that licensed distributors are required to follow if they choose to use Board-Approved CDM Programs to meet the CDM Targets.

OSEA Comment: None.

Definitions in this Code

OSEA Comment: None.

Application and Interpretation

OSEA Comment: None.

This Code applies to CDM Programs that start on January 1, 2011 and end on December 31, 2014 or occur anytime in between those two dates. All electricity savings (kWh) and peak demand savings (kW) resulting from CDM Programs must also occur within that timeframe.

OSEA Comment: OSEA is concerned that the proposed code is time limited; such a stop/start approach to conservation has already demonstrated the damage to the evolution of conservation. Conservation is included as a resource in the draft IPSP until 2027, a code, subject to revisions, should become a permanent element of the role and responsibility of all LDCs. Like any other resource, conservation is an asset that must be maintained, updated and in some cases replaced as new technology, systems and processes are developed. In any event, in a letter dated May 31, 2004 the Honourable Dwight Duncan advised all CEOs of LDCs with a copy to the Chair of the OEB that the Board should be developing a “sustainable framework.” A four year code is not a sustainable framework.

OSEA also notes that the phrasing of the second sentence can be misleading. One of the key elements of program design for conservation is to find ways to ensure that energy savings persist beyond the life of a program, or even the life of the measure. A more precise way of phrasing this point would be to replace the term “occur” with “be effective”. That having been said, the time limited approach and focus on annual savings fails to take into account decision making processes. Whereas the OPA has shown that its short term coupon programs can increase sales of compact fluorescent lamps and other easy to use technologies, there is no evidence that such programs ensure long term savings.

Furthermore, the experience of the BOMA CDM program funded by OPA showed dramatically that large customers with complex decision making processes take time to adjust to an offer of incentives in order to integrate with their own facility management plans. There is nothing magic about the fiscal year of a LDC with respect to having an impact on business or institutional decision making.

Comments on CDM Strategy and Annual Reports

A distributor's CDM Strategy must provide a high level description of how a distributor intends to achieve its CDM Targets. The CDM Strategy must include: (a) a high level description of a distributor's year by year plan, including annual milestones, for achieving its CDM Targets; (b) a description of each of the CDM Programs, divided into OPA-Contracted Province-Wide CDM Programs and potential Board-Approved CDM Programs, that the distributor plans to undertake to achieve its CDM Targets including, where the information is available, a description of: (i) the program name; (ii) the year(s) the program is intended to be in operation; (iii) the purpose of the program; (iv) the target customer type(s); and (v) where the information is available, projected budgets and projected results; (c) confirmation that CDM Programs will be offered for all customer types (residential, commercial, institutional, industrial) in a distributor's service area, as far as is appropriate and reasonable having regard to the composition of the distributor's customer base; and (d) a section that details how, where applicable, the distributor will pursue administrative efficiencies and co-ordinate its CDM activities with other distributors, natural gas distributors, social service agencies, any level of government, government agencies, and the OPA. Distributors shall file their CDM Strategy in the manner set out in Appendix B. A distributor shall file its CDM Strategy with the Board by November 1, 2010.

OSEA Comment: In the absence of having access to OPA program documentation either for its own programs over the past few years which were of a promotional nature rather than a managerial nature or for the planned province wide programs for 2011 to 2014, which only exist in the public domain in the form of power point presentations, OSEA is unclear not clear if the LDCs will have access to such information about the OPA contracted programs to fulfill this requirement. Nor is it clear that given the restrictions for Board Approved programs, how such information will be in place, particularly in Year one.

OSEA recommends that the OPA be required to issue program descriptions for the province wide programs which conform to this description for use by LDCs.

After receiving an acknowledgement letter from the Board confirming that the CDM Strategy is complete, a distributor shall make its CDM Strategy available for public review at the distributor's offices. If the distributor has a website, the distributor shall also post its CDM Strategy on its website.

OSEA Comment: OSEA recommends that the OPA should make its CDM strategy available for public review and posted on its website. OSEA is also concerned that the proposed code provides no opportunity for input from any type of programs from customers or other interested parties consistent with the long standing consultative process included in the natural gas DSM process.

A distributor shall file an Annual Report with the Board by September 30 of each year. The Annual Report shall cover the period from January 1 to December 31 of the previous year. The first Annual Report shall be filed by September 30, 2012 and shall cover the period from January 1, 2011 to December 31, 2011. Distributors shall file their Annual Reports in the manner set out in Appendix C. A distributor shall make its Annual Report available for public review at the distributor's offices. If the distributor has a website, the distributor shall also post its Annual Report on its website by September 30 of each year for the previous calendar year. The Annual Report shall provide an overall review of the activities undertaken by the distributor in the calendar year in order to achieve its CDM Targets. The Annual

Report shall consist of the following sections for both Board-Approved CDM Programs and OPA-Contracted Province-Wide CDM Programs: (a) an introduction that provides a general overview of the CDM Programs that the distributor offered in its service area; (b) a description of the CDM Programs that the distributor offered in its service area, the targeted customer type or group for each of the CDM Programs, the objectives of each of the CDM Programs, and any activities associated with the CDM Programs; (c) a section that details the participation levels (i.e., the number of participants by customer type) for each of the CDM Programs that the distributor offered in its service area; (d) a section that describes and details the funds the distributor spent on each of the CDM Programs offered in its service area; (e) a section that describes and details the verified electricity savings (kWh) and peak demand savings (kW) based on the OPA EM&V Protocols; (f) a section that states the balance in the distributor's CDM variance account that shows the distributor's total spending on all of its Board-Approved CDM Programs for the year applicable to the Annual Report; (g) a section that summarizes the distributor's progress towards meeting its CDM Targets, an explanation of any significant variances between the annual milestones contained in the distributor's CDM Strategy and the verified results achieved by the distributor for the reporting year, and an explanation of the potential impact that the aforementioned significant variances may have with respect to the distributor meeting its CDM Targets; (h) a section that details any changes or planned modifications to the distributor's CDM Strategy; and (i) a section that provides any additional information the distributor feels is appropriate, including but not limited to, recommending any improvements to its Board-Approved CDM Programs that could enhance program design, performance, and uptake by customers.

OSEA Comment: OSEA recommends that the OPA be required to issue annual reports for the province wide programs which conform to this description for use by LDCs to avoid having the LDCs from duplicating province wide data and descriptions.

Prior to applying for Board approval of any CDM Programs, a distributor must review the existing OPA-Contracted Province-Wide CDM Programs. Distributors shall not apply for Board approval of CDM Programs that duplicate existing OPA-Contracted Province-Wide CDM Programs. CDM Programs that will be considered duplicative of OPA-Contracted Province-Wide CDM Programs include, but are not limited to, CDM Programs that have: (a) different customer incentive levels on products or services already offered through the OPA-Contracted Province-Wide CDM Programs; (b) different qualification requirements to receive customer incentives or services already offered through the OPA-Contracted Province-Wide CDM Programs; (c) different technology specifications for technologies already incentivized or utilized through the OPA-Contracted Province-Wide CDM Programs; (d) different marketing approaches for promoting customer incentives or services already offered through the OPA-Contracted Province-Wide CDM Programs; and (e) different budgets for delivering customer incentives or services already offered through the OPA-Contracted Province-Wide CDM Programs.

OSEA Comment: This section of the code, along with the timeframe apparently available for LDCs to fully understand the application of province wide programs, and then develop their own programs, puts LDCs at a significant disadvantage in either customizing programs to meet the specific needs of customers in their service territory or respect the significant differences in the geographic variations in the electricity sector. It appears that this section of code is specifically

designed to limit the ability of LDCs to develop innovative solutions to help their customers in ways that perhaps cannot be foreseen from an office in Toronto.

Comments on Section on Board-Approved CDM Programs

A distributor shall not apply for Board-Approved CDM Programs until the OPA has established its first set of OPA-Contracted Province-Wide CDM Programs. Subject to the restrictions in sections 2.3.3 and 3.1.5, a distributor may apply to the Board for approval of CDM programs that are designed to assist the distributor in meeting the CDM Targets set out in its licence. Board-Approved CDM Programs must end by December 31, 2014.

OSEA Comment: Given how restrictive the rules for LDC-developed Board-approved programs, is the Board confident that have that LDCs will be able to achieve their targets only with the OPA contracted programs and what recourse is available for the LDCs if the province wide programs are not effective.

A distributor's application for a proposed Board-Approved CDM Program must include the following: (a) a program evaluation plan, based on the OPA's EM&V Protocols, for each program; (b) a benefit-cost analysis of each program which shall be completed by using the OPA's Cost Effectiveness Tests; (c) a detailed explanation of the program's objective(s) and method of delivery; (d) the types of customers targeted by the program; (e) a forecasted number of participants that the distributor expects will participate in the program; (e) the total projected peak demand savings (kW) and electricity savings (kWh) per year, or if the program is for less than one year, the total projected peak demand savings (kW) and electricity savings (kWh) for the duration of the program; (f) a complete projected annual budget for each of the distributor's CDM Programs, including the following information: (i) projected expenditures incurred on an annual basis, for each year of the CDM Programs, separated into customer incentive costs and program costs; (ii) a division of program costs into direct and indirect expenditures incurred as a result of program implementation; (iii) information on the allocation of total expenditures incurred by targeted customer types for each direct projected expenditure; and (iv) total projected expenditures for each program evaluation conducted; and (g) a statement that confirms that the distributor has used the OPA's Measures and Assumptions Lists or if the distributor has varied from the OPA's Measures and Assumptions Lists the following information must be provided: (i) a distributor must appropriately justify the reason for varying from the OPA's Measures and Assumptions Lists in the application and provide a statement that the distributor has followed the OPA's EM&V Protocols for custom measures not included in the OPA's Measures and Assumptions Lists.

OSEA Comment: OSEA recommends that the OPA be required to issue information for the province wide programs which conform to this description for use by LDCs.

Distributors shall not apply for CDM Programs that: (a) relate to a distributor's investment in new infrastructure or replacement of existing infrastructure; (b) relate to any measures a distributor uses to maximize the efficiency of its new or existing infrastructure; or (c) are associated with the OPA's Feed-in Tariff Program or the OPA's Micro Feed-in Tariff Program. Any initiatives that are captured in (a), (b) or (c) above will not be considered CDM initiatives and are therefore not eligible for approval under this Code.

OSEA Comment: While OSEA understands that the Minister's directive excluded items under section c, no such exclusion was included for (a) or (b). In fact, in a letter of May 31, 2004, Minister Duncan provided the following guidance: "In addition, I would expect the framework to remove barriers to demand-side management, provide incentives to manage distribution systems more efficiently and ensure consumers benefit from reduced energy use. Conservation assets should be included in the rate base." It is unclear how LDCs can invest in distribution system improvements that also save energy in a manner consistent with the natural gas distributors under this proposed code. Do LDCs have an alternative method of recovering costs on such investments?

Re-Allocation of Funding Among Existing Board-Approved CDM Programs

A distributor must apply to the Board for cumulative fund transfers among the distributor's Board-Approved CDM Programs that exceed 30% of an approved budget for an individual CDM Program. An application to transfer more than 30% of a distributor's funds from an approved budget for an individual CDM Program shall include: (a) current and proposed budgets for programs affected by the re-allocation; (b) a description of the programs from which, and to which, funds are being re-allocated; (c) confirmation that CDM Programs will still be offered for all customer types (residential, commercial, institutional, industrial) in a distributor's service area, as far as is appropriate and reasonable having regard to the composition of the distributor's customer base; and (d) cost effectiveness calculations for all programs where re-allocation of funding has occurred and confirmation that the program receiving the additional funding is still cost effective.

OSEA Comment: It is OSEA's position that given that the LDCs bear the responsibility of any shortfall in achieving their targets, these restrictions are unnecessary.

CDM Programs for Low-Income Customers

A distributor may meet a portion of its CDM Targets through the delivery of CDM Programs targeted to low-income customers.

OSEA Comment: None

Comments on Section on Cost Effectiveness

A distributor may only apply to the Board for the approval of CDM programs that are cost effective. Cost effectiveness shall be measured by using the OPA's Cost Effectiveness Tests.

OSEA Comment: OSEA suggests that additional clarity be provided with respect to which cost effectiveness tests are to be used. OPA documentation refers to the full suite of industry standard tests, but seems only to use the Total Resource Costs Test (TRC) and the Program Administrators Test (PAC). The Code must make it clear what tests apply to what costs and what benefits in order for the tests to be used. The Code must also indicate which test is the hurdle test. In addition, the Participant Cost Test should be used inform program designs. This is particularly important as the Board has a fiduciary responsibility to customers.

Despite section 4.1.1, a distributor may apply to the Board for approval of CDM programs where cost effectiveness cannot be demonstrated if the program is: (a) a pilot program; or (b) designed for

educational purposes. A distributor shall use the OPA's Measures and Assumptions Lists to conduct the cost effectiveness tests. If the distributor is using custom measures that are not included in the OPA's Measures and Assumptions Lists, the distributor must appropriately justify the reason for varying from the OPA's Measures and (sic) Assumptions List. Although there is no requirement that pilot or educational CDM programs be cost effective, distributors shall provide, in addition to the requirements set out in section 3.1.4, adequate evidence (as described in sections 4.2 and 4.3) that the CDM programs will likely result in peak demand savings (kW) and electricity savings (kWh). The Board will take into consideration the cost and the number of pilot and educational CDM Programs that a distributor already has undertaken or plans to undertake when approving these CDM programs.

OSEA Comment: The code is silent on how funding for this endeavour will be provided to the LDCs. The code should be explicit.

Pilot CDM Programs

A pilot CDM program will only be eligible for approval by the Board if: (a) it involves the testing, or evaluation of methodologies and/or technologies that are not already in use in Ontario and that may serve as a model for other distributors or the OPA to use in future CDM development; (b) it does not duplicate existing CDM pilot programs being undertaken by the OPA or other distributors; and (c) the distributor has already applied to the OPA for CDM program funding and was not approved by the OPA. A distributor shall provide a detailed description of the costs and benefits of the proposed pilot program and demonstrate how the pilot program will increase the collective understanding of the methodology and/or technology and its benefits as a CDM activity. A distributor shall file with the Board a report on the expected outcome(s) and benefits of the pilot program (i.e., projected data or information to be produced by the program and how the data or information will be used in the operations of, or planning frameworks for, future CDM initiatives). A distributor must specify the customer type(s) and the number of participants that will be targeted by the pilot program.

OSEA Comment: Element (a) of this code should clarify what agencies or organizations have to be testing or evaluating methodologies. In this case is it, by the OPA, or also by natural gas distributors or the government or other agencies or organizations that test and evaluate conservation methodologies. Element (b) begs the requirement for all LDCs and the OPA to develop a central registry of all pilot programs. Element (c) makes the OPA the de facto approval authority on these matters. Is the Board intending to relinquish its authority on this matter?

Educational CDM Programs

A distributor must demonstrate how the educational CDM program will promote the understanding of energy issues and lead to behavioural changes that result in the overall reduction of electricity demand and consumption. A distributor must: (a) identify the customer type(s) that will be targeted; (b) specify the number of participants that will be targeted; (c) explain why the educational CDM program is needed (i.e., why there is a need to educate the specified customer type(s) on the specified energy issues); (d) articulate the educational approaches that will be utilized by the distributor (i.e., brochures, seminars, etc.); (e) provide estimates of costs of the educational CDM program; and (f) describe the anticipated benefits of the educational CDM program.

OSEA Comments: Why are education programs limited to reductions in demand and consumption, while demand response programs only target demand and can often increase consumption but yield significant savings for the system as a whole?

Comments on Section on Accounting Treatment

A distributor shall follow all the Board's accounting policies and procedures specified for CDM activities. A distributor shall use a fully allocated costing methodology for all CDM Programs. The fully allocated costing methodology that distributors must use for the CDM Programs it delivers is set out in Appendix A. A distributor's earned revenues and incurred expenses from all Board-Approved CDM Programs are to be kept separate from a distributor's earned revenues and incurred expenses from all OPA-Contracted Province-Wide CDM Programs. A distributor's earned revenues and incurred expenses from all Board-Approved CDM Programs and all OPA-Contracted Province-Wide CDM Programs are to be kept separate from the distributor's distribution operations and shall not be included in the distributor's distribution revenue requirement. A distributor shall track spending for its Board-Approved CDM Programs in a Board-approved CDM variance account, which will be used to record the difference between the funding awarded for Board-Approved CDM Programs and the actual spending incurred for these programs. The disposition of the balance in this account shall be made at the time specified by the Board and in the manner specified by the Board.

OSEA Comment: While OSEA accepts that for the purposes of allocating costs to the Global Adjustment Mechanism, full allocation of costs are a valid approach, but we respectfully suggest that with the exception of the large LDCs, a rule of thumb could be used for the rest of the LDCs to make it easier for them to concentrate on conservation rather than accounting.

A distributor shall not be the owner or beneficiary of any Environmental Attributes that are related to or result from Board-Approved CDM Programs.

OSEA Comment: OSEA is deeply concerned that the matter of environmental attributes remains unclear. While the government should own and retire any attributes resulting from the phase out of coal (less the impact of natural gas plants), environmental attributes should remain with the customers. OSEA understands that the OPA is claiming these attributes.

Comments on Section on Program EM&V

Independent Review

A distributor's results for its Board-Approved CDM Programs must be evaluated through an independent third party review. The review of a distributor's results for its Board-Approved CDM Programs must be done by an independent third party selected from the OPA's third party vendor of records list. The third party reviewer must use the OPA EM&V Protocols when conducting EM&V on Board-Approved CDM Programs.

OSEA Comment: Given that OSEA understands that almost all vendors on the OPA list are based in the Greater Toronto Area or the United States, will the Board allow the additional costs associated with travel outside of Toronto to be reflected in the costs allowed for evaluation. Given

that two of the four documents on evaluation protocols continue to be stamped draft on the OPA web site, when will LDCs have certainty with respect to the process? Does the proposed code restrict the LDCs from sharing evaluators and evaluations? Does the proposed code require any one LDC to use only one evaluator?

The independent third party reviewer's report on the distributor's Board-Approved CDM Programs must be filed by the distributor with the Board at the same time the distributor's Annual Report is filed with the Board (i.e., by September 30 of each year). The independent third party reviewer's report shall cover the period from January 1 to December 31 of the previous year.

OSEA Comments: How will this schedule accommodate the impact of seasonal changes in the given end uses of electricity?

The distributor shall co-operate with any Board initiated audits and shall provide documentation as requested.

OSEA Comment: None.

Comments on Section on Performance Incentive

Eligible Programs

A distributor may apply for a performance incentive for its CDM Programs.

OSEA Comment: Does this include both OPA contracted programs and Board approved programs?

A distributor may only claim a performance incentive in relation to its contribution to the CDM Programs. In order for a distributor to claim 100% attribution of benefits, the distributor shall demonstrate that its role was central to the CDM Programs. Centrality is established by the distributor if its budgetary contribution was greater than 50% of program funding or, where the distributor's budgetary contribution was less than 50% of program funding, the distributor initiated the partnership, initiated the program or initiated the implementation of the program. If the distributor's budgetary contribution was less than 50 percent, the distributor shall provide supporting documentation outlining its role in the CDM Programs. If a distributor's role does not meet the test for centrality set out in section 7.1.2, the distributor shall then submit a proposal for an attribution of benefits to the Board for approval and the Board will determine whether the proposal is acceptable.

OSEA Comment: One of the most important elements of successful conservation programs is the ability for a utility to engage others in implementation. This requirement is far too narrow and fails to recognize the fact that so many other organizations are engaged in various aspects of conservation. This rule could lead to unnecessary payments in order satisfy the requirement, that than the cost efficiency asked for by the Board in an earlier section.

If more than one distributor applies for an attribution of benefits for the same CDM Program, the total applied for between the distributors cannot exceed 100%.

OSEA Comment: None.

Calculation of the Performance Incentive

Performance incentive payments shall be made on the basis of a distributor's achieved verified results in meeting its CDM Targets. A distributor must provide verified results for both electricity savings (kWh) and peak demand savings (kW) at the time of its application to the Board for a performance incentive. The verification must have been completed by an independent third party selected from the OPA's third party vendor of records list.

OSEA Comment: The proposed code does not make it clear how and when OPA contracted programs will be evaluated, how the results will be allocated to LDCs or is this too the responsibility of the each LDC?

A distributor may accrue a performance incentive once it meets 80% of each of its CDM Targets. Performance incentives shall not exceed 150% of each CDM Target. A distributor's performance incentive shall be calculated across the distributor's entire portfolio of Board-Approved CDM Programs and OPA-Contracted Province-Wide CDM Programs. A distributor's performance incentive shall be calculated in the manner set out in Appendix D.

OSEA Comment: None.