2004 Energy Conservation Forum and Workshop

INDECO

CANADIAN Energy Efficiency Alliance

EDA
The Voice Of Ontario's Electricity Distributors

2004 Energy Conservation Forum and Workshop

DSM is here. Are you ready?

July 22, 2004
8:00 AM – 4:30 PM
Metro Hall, Toronto

Thank you to the sponsors of the day:

Hydro One **Toronto Hydro** **Enbridge Gas Distribution**

Ministry of Energy **Kinectrics** **City of Toronto's Better Buildings Partnership** **Ozz Corporation**

This document was prepared by IndEco Strategic Consulting Inc. in cooperation with the Canadian Energy Efficiency Alliance.

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1 Executive Summary

The Canadian Energy Efficiency Alliance, along with IndEco Strategic Consulting Inc. and the Electricity Distributors Association, hosted the *2004 Energy Conservation Forum and Workshop* in Toronto on July 22, 2004. The sponsors of the workshop were: Hydro One; Toronto Hydro Corporation; Enbridge Gas Distribution; Kinectrics; Government of Ontario; Better Buildings Partnership; and Ozz Corporation.

Approximately 140 participants attended the workshop intended to provide local distribution companies (LDCs) with an opportunity to:

- Learn about ready-to-implement electric and natural gas DSM energy efficiency programs and how to leverage existing initiatives;
- Listen as experts shared case studies and DSM program best practices from across the energy industry;
- Discuss how new DSM program designs can be developed and implemented quickly and easily for the 2004-2005 heating and cooling seasons;
- Network with government, local distribution companies and other stakeholders.

Ontario's electricity market and the rules and regulations that govern it have undergone rapid and significant changes over the past year. Several features of the new electricity market which have already been implemented or have been announced by the Minister, will make it favourable for electric local distribution companies (LDCs) to pursue DSM now and in the future.

The Ontario Energy Board and Ministry of Energy both spoke of some of these changes to the market. In her presentation, Marion Fraser on behalf of the Ministry of Energy outlined some key messages:

- LDCs have a choice. They can develop and implement DSM programs and have the possibility of receiving the third tranche or then can do nothing and not receive any of these monies.
- LDCs should move forward with DSM.

Laurie Reid, Appeals Officer with the Ontario Energy Board, discussed the requirements of a deferral account for DSM and outlined the content of the OEB's interim guidelines for DSM. Conducting pilot projects was illustrated as one way to be prudent in the

spending of monies towards DSM. Conservation education was discussed as a grey area in the eyes of the OEB specifically related to prudency of spending on DSM.

Throughout the course of the workshop a number of common themes emerged through various speaker presentations, and breakout groups. They are listed below in point form, but are explained in more depth in the full report.

- The regulatory rules of engagement for LDCs participation in DSM need to be established.
- Priority setting is integral to DSM planning.
- Ontario should draw upon existing DSM experience and knowledge.
- Measuring results is fundamental to achieving DSM goals.
- Partnerships offer many opportunities and advantages.

The LDCs, and other organizations at the conference discussed during presentations and conversations that the delivery of DSM through LDCs is the right thing to do. LDCs are closest to their local customers and therefore may be particularly aware of their customers' needs. LDCs are well positioned to make DSM work.

It was also clear that LDCs are interested to gain further clarity around DSM, and become involved in conservation activities. In many discussions, and through the feedback forms, LDCs are looking for more certainty and direction from the OEB. Just by the fact that the OEB spoke at the workshop, and the level of LDC interest in attending the workshop, it is clear that both the OEB and LDCs are committed to moving the DSM agenda forward in the coming months and years.

In summary, the workshop was a successful one with feedback from attendees indicating an approval rating of 84%. An overwhelming majority of those surveyed said they would like to see a conference around DSM at least once per year (with the highest percentage indicating one conference per year would be ideal).

2 Introduction

2.1. Background to the workshop

The Canadian Energy Efficiency Alliance, along with IndEco Strategic Consulting Inc. and the Electricity Distributors Association, hosted the *2004 Energy Conservation Forum and Workshop* in Toronto on July 22, 2004. The sponsors of the workshop were: Hydro One; Toronto Hydro Corporation; Enbridge Gas Distribution; Kinectrics; Government of Ontario; Better Buildings Partnership; and Ozz Corporation. The hosts of the workshop would like to thank the sponsors, speakers and participants for making this workshop a success.

The objective of the workshop was to provide local distribution companies (LDCs) with an opportunity to:

- Learn about ready-to-implement electric and natural gas DSM energy efficiency programs and how to leverage existing initiatives;
- Listen as experts shared case studies and DSM program best practices from across the energy industry;
- Discuss how new DSM program designs can be developed and implemented quickly and easily for the 2004-2005 heating and cooling seasons;
- Network with government, local distribution companies and other stakeholders.

The workshop was designed to provide an opportunity for LDCs' to meet with potential delivery agents of electric DSM and to explore opportunities for partnership. As well, the workshop was designed to identify issues of concern for LDCs in moving forward with DSM now in light of the existing regulatory and policy framework and to identify how to address these issues.

Approximately 140 participants attended the workshop, including staff from electricity and gas distribution utilities, energy associations, technology manufacturers and vendors, provincial and municipal government, not for profit organizations, and consulting and law firms.

2.2. Policy context

Ontario's electricity market and the rules and regulations that govern it have undergone rapid and significant changes over the past year. The recently proposed changes to the Ontario Electricity Act and the OEB Act, through Bill 100, as well as a number of upcoming consultation processes at the OEB, will present additional changes to

Ontario's electricity system and market. Several features of the new electricity market which have already been implemented or have been announced by the Minister, will make it favourable for electric local distribution companies (LDCs) to pursue DSM now and in the future, including:

- The Minister's announcement that the Province will direct the Ontario Energy Board (OEB) to remove the current financial penalties that LDCs face regarding helping customers to conserve.
- The Minister's announcement that the Province will remove the financial disincentives for LDCs to ensure that their own distribution systems are as efficient as possible.
- The Minister's indication that LDCs may earn the third tranche of their commercial rate of return provided they spend the equivalent of one year's incremental returns on conservation. These funds will be available March 2005.
- The Minister's letter of May 31, 2004 to the OEB, directing the Board to allow the creation of deferral accounts to enable LDCs to access immediately the monies related to the third tranche, approximately $225 million in total. The OEB released a guidance document for applying for a deferral account, on July 16, 2004.

Representatives of the Minister of Energy's Office and the Ontario Energy Board gave presentations on these recent and impending policy changes and the potential implications for LDCs.

2.3. Workshop agenda

The workshop agenda included presentations from DSM experts, case studies from local and international utilities, a panel session and a breakout session. Opening remarks were provided by Peter Love of the Canadian Energy Efficiency Alliance and by Ken Quesnelle of the Electricity Distributors Association. Following these remarks, Marion Fraser of the Minister of Energy's Office and Laurie Reid of the Ontario Energy Board gave presentations which set the context for the day by explaining the recent and impending policy and regulatory changes which are being implemented as part of the development of a provincial DSM framework.

Sheila Halladay facilitated a panel session with the following participants Rob Mace, President of Thunder Bay Hydro; Jack Gibbons, from Pollution Probe; and James Sidlofsky, a partner at Borden, Ladner & Gervais. The purpose of the session was to identify the key issues and possible next steps facing LDCs with respect to participation in DSM.

After the context was set, there were three sessions that included presentations on existing DSM programs:

- **Other jurisdictions –** included presentations by Masoud Almassi, from Kinectrics and by Chris Neme, from Vermont Energy Investment Corporation.
- **Existing programs – Utilities** – included presentations by Michael Brophy of Enbridge, Steve Dorey of Hydro One, Blair Peberdy of Toronto Hydro and Alex Bystrin of Oakville Hydro.
- **Existing program – NGO and ESCO sectors –** included presentations by Corey Diamond of the Clean Air Foundations and Chris Beaton of Ecosystem.

These sessions were followed by two presentations on aspects of DSM planning. Richard Ronchka of Summit Blue provided thoughts on DSM evaluation and reporting, while Judy Simon of IndEco discussed DSM planning and delivery. Unfortunately, there was not enough time to hear from Ian Morton, Principal at the Summerhill Group, about creating programs that create policy interventions. However, notes from his presentation were provided to all attendees and are included in the follow-up workshop CD.

The penultimate session consisted of eight facilitated breakout groups. The specific topics and summary notes from each of these groups are provided in chapter 4 of this report.

After the breakout session, closing remarks were provided by Marion Fraser from the Minister of Energy's Office, Laurie Reid from the OEB and Peter Love from the Canadian Energy Efficiency Alliance.

2.4. Purpose of this report

Attendees were encouraged to ask questions and engage in discussions throughout the entire day. This mix of presentation-based and discussion-based sessions provided attendees with opportunities to both absorb and contribute information.

Throughout the course of the workshop, there were several ideas and comments which were raised repeatedly in the presentations, in the questions asked of speakers and in the discussion among workshop attendees. The purpose of this report is to summarize the outcomes of the workshop, using these key 'themes' that emerged on the day of the event. An evaluation of the workshop, based on participant feedback, and possible next steps are also provided.

3 Key messages from Ministry of Energy and OEB

The representatives from the Minister of Energy's Office and the Ontario Energy Board provided workshop attendees with guidance and several key messages for LDCs to consider.

Marion Fraser, Senior Policy Advisor to the Minister of Energy, discussed the financial implications to LDCs of proceeding with DSM programs. She indicated that meeting the provincial government's energy conservation target of a 5% reduction by 2007 could mean that LDCs may experience revenue losses from conservation regardless of whether they pursue their own DSM programs.

LDCs have a choice. They can develop and implement DSM programs and have the possibility of receiving the third tranche or they can do nothing and not receive any of these monies. The only way for an LDC to recover fully its third tranche is to spend its portion of the $225 million the Minister has initially allocated for electric LDC DSM. When LDCs begin to do the calculations, the financial benefits of participating in conservation will become clearer.

LDCs should move forward with DSM, which should include working with and piggybacking on existing energy efficiency and conservation programs including those from Natural Resources Canada, the Federation of Canadian Municipalities and local school boards.

Ms. Fraser discussed the Ministry of Energy's broad definition of conservation that has been adopted. This definition not only includes energy efficiency, but also behavioural and operational changes, load management, fuel switching and distributed energy. Each of these activities should also include initiatives targeted towards low income and other hard to reach customers.

Ms. Fraser suggested that the electric LDCs and other stakeholders should not only look towards the gas sector to provide a framework for electric DSM, noting that there are some differences between the gas and electricity sectors. The electric LDCs should consider their particular sector, and develop a framework accordingly.

Laurie Reid, Appeals Officer with the Ontario Energy Board, discussed the requirements for a deferral account for DSM and outlined the content of the OEB's interim guidelines for DSM. Ms. Reid indicated that these guidelines were released now to be a help to LDCs as they prepare their deferral account applications and begin to do DSM. There will be a consultation on these interim guidelines in the fall of 2004. It is expected that the OEB will take a light-handed regulatory approach to determining the prudency of DSM expenditures to encourage experimentation and in recognition of the

early days of this program for electric LDCs. A light-handed regulatory approach as of yet has not been fully outlined but is expected to be less stringent than the regular regulatory approach taken to determining prudency around DSM.

Ms. Reid assured participants that the Minister of Energy and the OEB are in agreement regarding what expenditures should be considered as DSM. She also indicated that the OEB is in favour of conservation enablers such as meters being considered prudent DSM expenditures. As far as meters are concerned, LDCs should conduct pilot projects in the shorts term and hold off on large scale roll-out, until the consultation on metering is completed in February 2005.

Conservation education is more of a grey area in the eyes of the OEB and aspects of education may not be considered prudent expenditures for DSM. Where LDCs partner with the federal government on existing DSM programs, determining the prudency of these DSM expenditures by the OEB will be simplified.

In order to begin DSM programs now, an LDC is required to apply to the OEB for a deferral account to track expenditures up until February 28, 2005. The deferral account will be cleared no less than annually by the OEB. An LDC is required to submit an outline of its proposed DSM expenditures as part of the deferral account application. The amount recorded in the deferral account will be offset against the third instalment of the LDCs' market adjusted revenue requirement, subject to a prudency determination by the OEB. The OEB will provide detailed requirements for the March 1, 2005 rate application filings this fall.

Ms. Reid also indicated that there is a need to evaluate DSM programs. At present there is no prescribed method for LDCs to evaluate their DSM programs. This may change in the future once the guidelines for DSM are established. The OEB acknowledges that evaluation and measurement of DSM programs is broader than just counting the number of kilowatt-hours saved by a DSM program.

The OEB is committed to removing disincentives to LDC participation in DSM and to ensuring that there is a way for electric utilities to recoup their expenditures. This may not involve establishing a Lost Revenue Adjustment Mechanism (LRAM) for the electric LDCs, similar to the one in place in the gas sector - a different mechanism may need to be developed.

4 Themes arising at the workshop

Throughout the course of the workshop a number of common themes emerged. The ideas, comments and views expressed within each of these themes are summarized below.

4.1. The regulatory rules of engagement for LDC participation in DSM need to be established.

The workshop was kicked off by several presentations that 'set the context' for the event, summarizing many of the recent and proposed changes to Ontario's electricity market and the rules and regulations that govern it. The importance of establishing the 'rules of engagement' for LDCs to undertake regulated DSM programs was highlighted early in the day and quickly became a recurring theme.

Marion Fraser, the Senior Policy Advisor to the Minister of Energy, provided participants with an overview of the regulatory framework for DSM, which the Ontario government is currently establishing. The framework will include a broad definition of conservation[1], a proposed conservation bureau, time differentiated prices and standards for smart meter technologies. While DSM programs are not mandatory, LDCs will only be able to receive the third tranche of their commercial rate of return if they spend the equivalent of one year's incremental returns on conservation.

Building upon Ms. Fraser's presentation, Laurie Reid of the Ontario Energy Board (OEB), provided attendees with an overview of the process for applying for a deferral account for DSM activities and of the preliminary guidelines for electricity distributor conservation and demand management activities, which were released on July 16, 2004.

LDCs and other attendees posed many questions and raised concerns about specific aspects and attributes of the proposed regulatory framework for LDC DSM, including:

- **Financial disincentive** – As an LDC's revenue is based on the volume of electricity it distributes, there is a financial disincentive for LDCs to engage in DSM programs which reduce that volume. The Board representative assured attendees that the Board is committed to removing disincentives to LDCs participation in DSM and to ensuring that there is a mechanism for recouping their expenditures. She indicated that this will not necessarily involve

[1] Conservation activities will include: energy efficiency, behavioural and operational changes, load management, fuel switching and distributed energy.

establishing a Lost Revenue Adjustment Mechanism (LRAM) similar to the one in place in the gas sector. In contrast, Jack Gibbons from Clean Air Alliance suggested that the fact an LRAM mechanism is not already in place for electric LDCs is a mistake.

- **Wariness regarding deferral accounts –** Many LDCs are wary of using deferral accounts, as not all of the transitional deferral accounts from market opening have been cleared.
- **Prudence of DSM expenditures –** DSM deferral accounts will be cleared under the condition that the OEB deems the expenditures to be prudent. Several LDCs expressed concern over the OEB's lack of guidance on what is considered a 'prudent' activity, thereby introducing the risk of non-recovery of DSM expenditures. The representative from the OEB assured attendees that the Board will be adopting a "broad view of prudency" during this initial phase of LDC DSM. A broad view of prudency has not as of yet been fully outlined, but is expected to be less stringent than the regular regulatory approach taken to determining prudency around DSM.
- **Province-wide versus local programs –** The need for both province wide and local LDC lead DSM programs was recognized. LDCs know their customers and their needs and are therefore better suited to deliver some programs. Conversely, other programs may be more effectively delivered by a central agency on a province wide scale. The manner and extent to which both program types are pursued will likely be clearer once the proposed Ontario Power Authority and Conservation Bureau are established.
- **Deferral accounts versus DSM plans** – Several questions were raised regarding the relationship between applying for deferral accounts and developing and implementing DSM plans. The OEB representative confirmed that LDCs are *not* required to have a fully developed DSM plan in order to apply for a deferral account. The LDC must include "an outline of the distributor's planned conservation and demand management activity and investment[2]" in its deferral account application, not a full-blown DSM plan. LDCs *will* be required to submit a conservation and demand management plan, consistent with OEB requirements[3], when they apply for the March 1, 2005 rate adjustment in order to achieve their full market adjusted revenue requirement (MARR).
- **Investing in smart meters –** There were also several questions and comments raised regarding the investment in smart meters by LDCs, including whether smart meters would be considered a prudent DSM expenditure and when would be the best time for

[2] Page 2 of July 16, 2004 letter from OEB to all Ontario Licenced Electricity Distributors regarding process to apply for establishing deferral account and tracking initiatives, and preliminary guidelines for distributor conservation and demand management activities.

[3] The OEB published preliminary guidelines on July 16, 2004. Consultation on these preliminary guidelines will be held in Fall 2004.

LDCs to invest in smart meters. While the OEB representative confirmed that smart meters are considered a prudent DSM expenditure, she cautioned that LDCs should only conduct pilot projects on smart metering in the short term and should hold off on large scale role out of metering projects until the consultation on smart metering standards is completed in February, 2005.

4.2. Priority setting is integral to DSM planning & delivery.

Several sessions highlighted the importance of priority setting within the DSM planning and delivery process, including those by Judy Simon, Chris Neme, and the Panel Session. There are many possible DSM initiatives, but limited time and resources. LDCs must establish priorities for developing and implementing DSM programs, based on their own unique goals, constraints, opportunities and resources. It was recognized that the regulatory framework and policies being set by the government will also influence the priorities established by each LDC.

The break-out session on priority setting in DSM, facilitated by Peter Love, identified a number of strategies and raised several issues, including:

- "**In-house first**" **strategy** – LDCs could begin with DSM initiatives that would increase the efficiency of their own operations, such as building retrofits, reducing transmission system line losses, improving transformer sub-stations and increasing the efficiency of rental hot water tanks.
- **Government leadership is key** – Several participants felt that the government should lead the priority setting process by establishing more aggressive building codes and appliance standards for energy efficiency.
- **"Biggest potential savings" strategy -** Participants reviewed and discussed results of a 1997 report by ACEEE in US which ranked 50 potential energy savings by the amount of electricity saved and the cost/kWh saved. It was noted that the Alliance will be undertaking a similar study in the near future in Ontario, which could be of use to LDCs during the priority setting process for DSM initiatives.

4.3. Ontario should draw upon existing DSM experience & knowledge

One of the most common idioms expressed during the workshop was the desire to 'not re-invent the wheel'. While Ontario is in the early stages of regulated electric demand side management, it was

recognized that there is a wealth of existing experience and knowledge that can be drawn upon, both from within and outside of our provincial borders, when developing and implementing DSM programs. The presentations by Chris Neme and Masoud Almassi provided attendees with insights from international examples of DSM programs. This was complemented by local examples of DSM initiatives by Enbridge Gas Distribution, Hydro One, Toronto Hydro and Oakville Hydro.

Many of the break-out session groups also touched upon the advantages of drawing upon existing DSM experience and knowledge. Chris Gates shared Enbridge's experience with residential programs, in the residential programs break-out group, while Chris Neme provided many insights into the approaches taken in Vermont in the commercial/industrial programs break-out group. There was recognition that drawing upon existing DSM experience and knowledge may be useful for priority setting, program design, identifying potential partners, developing communication and marketing, and evaluation and measurement.

4.4. Measuring results is fundamental to achieving DSM goals

Another key theme that emerged at the workshop was that measuring and evaluating the results of DSM initiatives will be fundamental to achieving overall DSM goals. The importance of monitoring and evaluation was highlighted in several presentations, including those by the Vermont Energy Investment Corporation and the Ontario Energy Board. There was also a presentation entirely on evaluation and reporting, by Richard Ronchka of Summit Blue Canada Inc, as well as a break-out session on measurement and evaluation, facilitated by Ian Morton. Key issues, comments and concerns regarding measurement and evaluation that were raised by participants throughout these sessions are summarized below.

- **Evaluation methodologies –** There are many possible methodologies for measuring and evaluating the results of DSM programs. LDCs will be required to evaluate their DSM programs in order to get approval by the OEB, however, at present there is no prescriptive Board-approved method for monitoring and evaluating electric LDC DSM programs. The preliminary guidelines for DSM, published July 16, 2004 by the OEB, identify information that distributors will be required to track and maintain for monitoring and evaluation purposes and also include a number of sample screening mechanisms, such as the Total Resource Cost Test that may be employed to estimate the benefits of a particular DSM program. These guidelines are only preliminary, however, and will be subject to consultation this Fall. When asked how to evaluate programs done in partnership with third parties and whether they would be considered 'prudent' by the OEB, the OEB representative indicated that the OEB would likely be comfortable with the

evaluation methodologies and assumptions used by these existing DSM programs.

- **Planning for evaluation –** A key point raised both in Richard Ronchka's presentation and in the break-out session, is that evaluation should not be considered an afterthought to DSM programs, but should be integrated into the planning process. The plans for measuring and evaluating programs should be established *before* programs are implemented and measurements should be made from the outset of the program delivery. This approach will help to ensure that only programs with measurable results are implemented and that sufficient and appropriate data is collected throughout the life of the program.
- **Resources needed** – Based on experience in other jurisdictions, evaluation costs should make up approximately 5% of the DSM budget. Evaluation costs generally include monitoring savings as well as conducting special studies, such as determining the level of free rider-ship for a particular program. It is important that LDCs build these evaluation costs into their overall DSM plan and budget.
- **Potential obstacles and accelerators** – There are many potential obstacles to monitoring and evaluation. For example, there may be a perception within the company that evaluation is 'tedious' or 'not a good use of resources' or the company might lack in-house expertise on evaluation. Failure to set a baseline for monitoring at the beginning of programs could also hinder the ability to effectively evaluating the results of programs. Many of these obstacles could be addressed through an OEB requirement for LDCs to include monitoring and evaluation plans in their DSM plan submissions. Drawing upon existing studies and reports regarding DSM evaluation could also help to overcome these obstacles. Participants in the break-out session on monitoring and evaluation noted that there is a plethora of information available, primarily from U.S. utilities.

4.5. Partnerships offer many opportunities and advantages

The opportunities for and advantages of partnering in DSM was a key theme of the workshop and was highlighted in nearly every session. In the sessions on existing DSM programs, several presenters indicated that they are keen to partner with LDCs on electric DSM programs. Partnership opportunities were also discussed in several break-out sessions: *residential programs*; *commercial/industrial programs; partnership building*; and *build, buy or partner*. Key issues, comments and concerns regarding partnering that were raised by participants throughout these sessions are summarized below.

- **Potential partners** – Presenters and attendees recognized that there is an opportunity for LDCs to partner with the many groups and organizations that have existing energy efficiency and

conservation programs. Potential partners include government agencies (e.g. Natural Resources Canada), non-profit organizations (e.g. Clean Air Foundation), natural gas utilities (e.g. Enbridge) and energy service companies. There is also an opportunity for LDCs to work together to develop and implement successful DSM programs.

- **Types of partnerships** – There are many different ways that an LDC could partner with an existing organization on DSM programs. For instance, an LDC may choose to design, screen and develop programs in-house and partner with a firm on the program delivery. Alternatively, an LDC could piggy-back on an existing program, essentially acting as a delivery agent for that existing program.
- **Advantages of partnering** – There are many advantages to partnering on DSM, particularly given that Ontario is only in the early stages of regulated electric DSM. Both the Ontario Energy Board representative and the representative from the Minister of Energy's Office encouraged the LDCs to explore partnership opportunities with existing energy efficiency and conservation programs. Partnering would reduce LDCs 'learning curve' on DSM and would provide them with greater assurance regarding the prudence of their DSM expenditures.

5 Breakout session outcomes

There were eight facilitated groups in the breakout session. Each group discussed a different topic, with one exception – two groups discussed the role of LDCs, the Conservation Secretariat, the OEB and the government. Summary notes from each group are provided below.

5.1. Residential programs

The residential programs breakout group was facilitated by Chris Gates of Enbridge Gas Distribution. The main topics and questions addressed by the group are listed below, and the points raised are summarized in the table below.

Questions addressed	Issues/comments raised
Resources needed versus possible kWh savings	
• What are the costs of the program? • What resources will you need/build/buy/partner to go forward? • What capacity is needed to run this program? • What are the possible energy savings as a result of this program?	• Need to start with an understanding of historical data • Try reducing consumption by 5% by 2007 - is this doable? • Not sure what we would need to spend in up-front dollars to get customers to reduce their demand by say, 5%. Is it average or peak demand? • Some would prefer to staff up for this to build internal expertise; others would contract out or partner with gas utilities • Don't just focus on give-aways - need to educate and empower customers
Potential Obstacles	
• What might stop an LDC from doing DSM? • What might stop consumers from participating? • What regulations might make developing this program difficult or frustrating?	• Having the OEB determine what is "prudent" is a potential show-stopper • Want pre-approval of DSM budget before or outside the regulatory arena • The choices we make early on may not produce results expected • Rate design will be key to mitigate consumption risk • Concern about lost revenues and need for LRAM • Deferral account issue - some would apply, some won't! • Message to consumer has to be clear as to why the LDC is offering DSM and what the benefits are for both parties or

	the consumer may not play
Potential Allies/Accelerators	
• For example, are there any companies that you could partner with? • Are there any programmatic examples of this program in other jurisdictions or from the past? • Will you design your own or piggy-back on others?	• Environmental groups key ally • Retailers and manufacturers also can play a role • Both gas utilities have a major DSM learning curve we can benefit from • NGOs, municipalities, ESCOs, school boards and BIAs also good allies • Why not a friendly competition between neighbouring communities to see which is the greenest?
Communication & Marketing	
• How will you educate/inform your customers about your DSM/DR program offerings?	• Utility website • Conservation newsletter • Articles in bill stuffers • Outreach through public workshops, sponsored by councillors, BIAs • Mass reach ads and PSAs
Measurement and Evaluation	
• How do you plan to measure and evaluate the success of residential DSM programs?	• Doesn't happen at the end but is an on-going process to improve program design as we go along • Start with engineering estimates and verify through small pilots • Billing analyses • Need to determine issues like freeridership so we don't overestimate success/impacts from these programs

5.2. Partnership building

The partnership building group was facilitated by James Alden. The main topics and questions addressed by the group are listed below, and the points raised are summarized in the table below.

Questions addressed	**Issues/comments raised**
Reasons to partner	
• Why are you interested in exploring partnerships for DSM program delivery? • Where is Partnering Needed?	• Limited size • Lack core competency • Must assess fit with business • Risks if regulations change • Dependent on demographic and load base. • Concern about partnering on industrial/commercial programs if it is reducing base load – compensation is an issue.

	• Don't necessarily want to support key accounts in cutting energy consumption. • Customers want consistency so partnering with existing efforts is required
How to Choose a Partner	
• What are the key determining factors in selecting a potential partner?	• Companies which have broad scope (environmental expertise, media, reputation, track record) • Safety in numbers (are many LDCs working with the same organizations) • Look at companies, like retailers, groups of contractors which can deliver services. • Alignment of objectives and complementarity with your organization
Potential Partners	
• Who exists currently as a potential partner?	• List available on NRCAN site, but don't know organizational capabilities. • Many start-ups but they are young. • Market is very fragmented. • Gas utilities probably have knowledge of potential partners and experience in DSM delivery.
Potential Difficulties in Partnering	
• What might make partnering difficult before, during and after program implementation?	• Funding, how do I make a deal, don't necessarily have the expertise at the LDCs. • Limited experience in payback/sponsorship, value of media exposure, marketing. • Need to work with groups who have had experience working in particular markets (ie. farms, hospitals etc.)
Partner Gaps	
• Can the DSM delivery needs in Ontario be met by the existing network of companies?	• Group feels that there is the expertise – but need clarification to mobilize resources. • Look at other jurisdictions for expertise. • RFQ for DSM may bring out new technologies/partners that could help drive programs. • Partnering with manufacturers/retailers which can drive technological innovation

5.3. Measurement and evaluation

The measurement and evaluation breakout group was facilitated by Ian Morton, the Principal of the Summerhill Group. The main topics and questions addressed by the group are listed below, and the points raised are summarized in the table below.

Questions addressed	Issues/comments raised
Key discussion points	
• What are your business objectives in pursuing DSM/DR and how do they relate to your core business?	• Improve customer relationships • DR improves asset utilization – with avoided cost benefits.
Planning Measurable Programs	
• What programs can be measured? • How can you plan a program that has a measurable element?	• If you can't measure it – why would you do it • Evaluation plan (detailed) should be part of the program plan.
Setting Targets and Goals	
• How do you set realistic targets and goals for DSM initiatives? • Should you consider benchmarks/programs from other jurisdictions? • What might be the pros and cons of using results from other jurisdictions?	• What gets done gets measured. • How much can be added to our rates. • Spend a certain portion of revenue – seek budget approval.
Resources Needed	
• What are the costs of measuring the program? • Can program partners help with evaluation/measurement of program results?	• Evaluation should be approx. 5% of dedicated DSM includes measuring/monitoring, special studies e.g., free riders. Specific program i.e., up to 25% for large industrial. • High upfront cost that may decline overtime on an individual program basis. • Information does not result in measurable results • Can aggregate data but data should be audited by independent contractors before being accepted.
Potential Obstacles	
• What might hinder your ability to measure the results from a program? • What regulations might make evaluating/measuring results from this program difficult or frustrating?	• Need to recognize that they need to do it (lack of awareness of practice). • Need to set the baseline at the beginning not the end • How can this be addressed? – OEB requires a M/E plan from LDC. • Measuring co-benefits i.e., comfort,

	health, safety.
Potential Accelerators	
• What elements might make it easy to measure/evaluate a program? • Are there studies/formulas that exist to aid in evaluation/measurement of the program? • Are there any programmatic examples of this program in other jurisdictions or from the past that you can use as benchmarks?	• Lot's of information – historical data from Ontario Hydro and utilities in the United States. State of California – Evaluation Framework (on website under publications).
Sharing the outcomes	
• Will you inform your customers about your program results? • How will you do this? • Will you share results with other groups/general public? If so, how?	• Interest in wider community in results. Reporting to the OEB – document becomes a document for public access.

5.4. Commercial/industrial programs

This breakout group was facilitated by Chris Neme of the Vermont Energy Investment Corporation. Participants in the break-out session expressed interest in first getting detail on how commercial and industrial efficiency programs operate in other jurisdictions and then talking about the potential for applying such approaches to Ontario. The discussion ultimately focused on four key themes. What follows is a summary of the discussion of those themes.

Prescriptive Rebates vs. Integrated/Systems Approaches to Building Efficiency

Chris Neme began by explaining how such programs work in Vermont. He started by explaining that, at the macro-level, there are two parallel approaches to the market:

1 individual efficiency projects; and

2 general (i.e. not project-specific) outreach to, and training/education of key trade allies (e.g. architects, engineers, lighting designers, HVAC contractors, electricians, equipment distributors, etc.).

With regard to individual efficiency projects, there are also several different approaches. Those approaches could be characterized as being along a continuum between prescriptive rebates for individual efficiency technologies at one end and an integrated, systems approaches to improving building efficiency at the other end. Examples of integrated, systems approaches include focus on lighting design instead of just more efficient light fixtures and using reductions

in internal loads resulting from lighting efficiency to down-size air conditioning systems.

The principal advantage of prescriptive rebates is that they are relatively easy to develop and can be fairly quickly deployed into the market (though it will take a little time for them to receive widespread use due to the need to get word out to and through trade allies). They can also be used to introduce efficiency programs to consumers and trade allies who are not yet sophisticated enough about efficiency opportunities to consider more comprehensive systems approaches.

Ultimately, the goal of interventions in the market should be to (over time) cost-effectively move as many consumers, trade allies and projects from the prescriptive approach to the integrated, systems approach. The integrated, systems approach typically provides much greater savings (i.e. consistent with the 30% in existing buildings that Chris Beaton referenced in his presentation earlier in the day and up to 50% in new construction). It also typically has greater non-energy benefits (e.g. improved productivity, improved comfort, reductions in process waste, etc.) that can ultimately be more attractive to consumers. However, pursuit of integrated, systems approaches is more complex and requires trade allies who have sufficient training and understanding on both technical issues and how to sell advantages to their clients. The general outreach to and education and training of design professionals and other trade allies is key to enabling greater use of integrated, systems approaches over time. Interactions with design professionals and trade allies and customers using prescriptive rebates on specific projects also provides important opportunities to introduce integrated/system concepts and educate and train them.

Setting Prescriptive Rebates

One participant asked how one would set prescriptive rebates. What followed was a brief discussion of the need to get an understanding of the local market. Key questions include: What technologies are "standard practice"? what market share do the efficient technologies have? Are efficient technologies readily available or must they be special ordered? What is the incremental cost from the standard technology to the efficient one? Are there important barriers other than cost to increasing sales of the efficient technology? Market research on these questions – even if quick and limited (a few conversations with key trade allies who are in many buildings may be enough to get a good feel to the answers to some of these questions) – would be helpful. It is also likely that approaches in and experience from neighboring jurisdictions could be applicable (since the markets for some products are not unique in Ontario – some are international).

Local vs. Province-wide (i.e. LDC vs. OPA) Implementation

The discussion of the approach to the market segued into one about where responsibility for different elements of commercial and industrial programs should lie. Ultimately, the group spent more time on this subject than any other. In many ways, the discussion transcended commercial/industrial programs.

The root of the issue is that some program elements and possibly even entire programs would potentially be more effective if delivered at a regional rather than a local level. For example, if a large architectural firm or HVAC contractor is involved in designing buildings and/or installing equipment in several different cities and LDC service areas across the province, it would not make sense to have several different LDC representatives promoting several different definitions of "efficient design" with several different incentive levels, several different processes for program participation, etc. That said, it was clear that at least some LDCs will want to have individual contact with their larger commercial and industrial customers. This is particularly true given the potential for customers to switch electric service providers.

With respect to new construction, one option briefly discussed was to have OPA responsible for all general outreach to and education/training of design professionals and trade allies and the LDCs responsible for interaction with market players in individual projects within their jurisdictions. This would obviously require that the LDCs have staff (or subcontractors) with training and technical expertise consistent with standards promoted to the market. They would also have to fairly closely coordinate the messages and advice they were providing to market actors.

Chris noted that these problems have been reasonably successfully tackled in other jurisdictions such as Massachusetts, New Jersey and California. In those states, utilities have gotten together and established working groups to identify when:

- a program needs to effectively be implemented by a single contractor across all service territories;
- key elements of a program needed to be identical, but other elements did not need to be, so that individual utilities could maintain local control of at least some program elements; and/or
- there is no significant market advantage to having consistency across programs.

However, it was noted that there were only 5 to 7 utilities in most of those working groups whereas Ontario has 90 LDCs so it was likely to be a more complicated process. While the group did not have enough time to try to outline how such a process would work, it was clear that the development and launch of such a process should be a priority.

DSM an Important Opportunity to Interact with Customers

The group also spent a little time at the end of our discussion on concerns that DSM in the current environment of regulatory uncertainty did not offer much to the LDCs. A brief discussion on the potential benefits to LDCs followed. In particular, the conversation focused on the opportunity DSM offered LDCs to have interactions with their customers – particularly commercial and industrial customers – in ways that potentially offer significant value to them. Chris also noted that his organization has increasingly focused on the role commercial/industrial DSM could play in promoting economic development, including how they are currently working closely with local and state-level economic development agencies. In Vermont, those agencies increasingly include DSM in the portfolio of "tools" that they use to encourage existing business to remain and new businesses to relocate to their areas.

5.5. Build, buy or partner?

This breakout group was facilitated by Bruce Lourie of the Ivey Foundation. Each participant introduced themselves and indicated whether they were from a utility or not. There were no attendees from a utility which made the process of the discussion change somewhat. The approach taken by the group was to list the pros and cons of the various options for rolling out DSM. For example, what may be the pros of building DSM capability (planning and/or implementation) internally?

The following summarizes the points that were recorded during the general discussions:

- All three approaches to implementing DSM have a role. In fact, success requires all three.
- Answers may be size and situation dependent.
- Recognize need to engage more LDCs.
- Should take advantage of the gas experience.
- Any planning should start on clear definitions. Clear definitions are needed from the OEB.
- Those in the industry should have access to a "DSM for dummies" guide on how to get started on DSM.
- The risk of not acting is greater than risk of acting.
- In any DSM plan leadership is key.

Specific discussion around the three approaches to implanting DSM:
1) Build – internally staffed DSM (depends on scale)
Pros:

- Staff development
- Customer service
- Control
- Revenue/business development opportunity

Cons:

- Long lead time
- Significant HR investment
- Strain/distract internal resources
- Lose benefits of partnering

2) Buy – purchased services (broadly defined)
Pros:

- Quick turn-around time
- Variety
- Best practices
- No need to build internal capacity/infrastructure
- Flexible (ability to cancel if not working)
- Off-load risk

Cons:

- Different cost structure (perception of higher cost)
- May dilute customer relation
- Less control over program design

3) Partner – Partner with existing organizations running DSM programs
Pros:

- Great "no regret" opportunities (ie. Energy Star)
- Good selection
- Reduces risk
- Leverage resources ($, contacts/expertise)
- Enhanced customer relations
- Increase credibility
- Can move more quickly than the "build" option
- Learn from partners

Cons:

- Balancing partner priorities
- Finding right partner may be difficult (have to guard against "fly by night" organizations)
- Can be bureaucratic
- Need to establish clear definition of "partner"
- May need to share the spotlight

5.6. Priority setting in DSM

This breakout group was facilitated by Peter Love of the Canadian Energy Efficiency Alliance. Each participant briefly introduced themselves and provided initial comments on their views on priority setting for DSM. The following summarizes the points there were recorded during the ensuing discussions:

- Should start with own in-house opportunities, including reduced line losses (5%?), facilities, sub-stations, hot water tank rentals with the following potential outcomes:
    - results in benefit to shareholder
    - end up with a better asset
- LDC's are receiving conflicting information

- Reduced revenues from effective conservation programs could impact "take or pay" contracts with Hydro One for transformer sub-stations.
- Promoting energy efficient hot water tank rentals only useful if LDC still active in that market.
- Government's must play a leading role with building codes and appliance standards - should be the TOP priority
- Likely sources of biggest savings in residential sector: air conditioning (turn off compressor, leave fan running); lighting; traffic lights (LED); street lights (but represent off peak base load); on-site storage; time-of-use metres perhaps with just 3 blocks, radio controlled.
- Likely sources of biggest savings in commercial sector: air conditioning/chillers; lighting; overcoming split incentives between owners & tenants.
- Likely sources of biggest savings in industrial sector: variable speed motors; power factor correction motors.
- Need for qualified list of contractors/consultants - potential role for EDA? Perhaps results from Hydro One RFQ?
- LDCs used to cooperate/share very well, then became competitors. Still some lingering concerns about sharing info.
- Important for Minister to no longer say "intend" in his speeches, but say "will be".
- Potential for tax laws to overcome disincentives for energy efficiency.
- Key role for consumer education:
    - LDC's role unclear
    - Time-of-use meters will play key role
    - Important to have consistent messages

Participants reviewed and discussed results of report in 1997 by ACEEE in US which ranked 50 potential energy savings by amount electricity saved and cost/kwh saved. They generally agreed with ordering and it was noted that the Alliance may do a similar study for Ontario, but including when electricity is saved.

5.7. Role of LDCs, Conservation Bureau, OEB and government

There were two facilitated sessions under this topic, one by Mike Singleton of Sustainable Buildings Canada and one by Judy Simon of IndEco Strategic Consulting Inc.

Mike Singleton's group

This group generally adhered to the proposed issue list, however given the diverse nature of the group and the complexity of the topic, a wide variety of topics were discussed. These are summarized below under major topic headings.

Role of the Central Agency

- There is some concern that a central agency may become large and unwieldy in its bureaucracy. It is important that the Agency be able to react quickly and provide a streamlined approach to their activities. The 2007 timeline is seen as fairly aggressive and not something that lends itself to creating large organizations.
- The Agency must ensure that there is equity in program offerings across franchise boundaries. Utilities are very sensitive to customer perception and are concerned that their customers have equal access to the appropriate programs.
- Programs must have a "societal" benefit and should be cost effective. Cost effectiveness can be measured using avoided costs as the benefits or there may be other ways to do it.
- The Agency should have the responsibility to collect and fund programs directly. This need not be a central planning effort, but rather one of ensuring that certain activities occur.
- The Agency should provide guidelines and 'rules' around which programs are designed, delivered, evaluated etc.
- The Agency may need to deliver mass market type programs for all customers. Utilities would also like the ability to 'opt-in' or 'opt-out' of programs, especially those that are oriented toward niche markets.
- The process needs to accommodate region specific needs and attributes, including those associated with population, customer base, rural vs. urban split, etc.
- Small utilities in particular will need assistance to deliver programs of facilitate the delivery of programs.
- An immediate need identified by the group relates to qualifying or certifying individuals and organizations that may have consulting,

product, program, or delivery offerings. A pre-qualified list was seen as having immense value as the smaller utilities have little or no knowledge in this area.

- The Agency should also be looking to partner and locate co-funding from other organizations such as NRCan.

How and who pays for DSM programs

- Utility members of the team were sensitive to the issue of making electricity bills any more complicated than they already are. In particular, the addition of more line items showing charges for DSM was not well received.
- The utility members were unanimous in their support for the notion of access to DSM programs and indicated that they would be willing to resource at least some of these activities (and are doing so already). They are quick to point out that they are owned by the customers and have a strong desire to do what is right from a societal perspective, not just from a bottom-line perspective.
- An issue of significant importance relates to the revenue model that utilities operate under which sees them receiving greater revenue with great sales. This paradigm is counter-intuitive in an environment where less sales are to be promoted. This will have to be addressed in any roll-out of DSM programs.
- The Agency could operate its funding component like a “Green Fund” where some or all of the value of the savings are returned to the Agency to support future efforts.
- The group favoured the use of regulatory incentives and instruments to ensure that the utilities are held whole and to incrementally promote energy efficiency. In particular, the group recommends the use of LRAM, variance accounts and some form of shared savings mechanism. Revenue neutrality should be the goal if no incentive is in place.

Responsibilities

- The group felt that the Agency could be the repository of central incentive based programs that the utilities could deliver. The LDCs would act as agents and channel delivery partners.
- While there would be some shared responsibilities, it is understood that the LDC takes on a major role in this approach.
- Measurement protocols and criteria would be developed by the Agency and adhered to by the LDC. It would be the responsibility of the LDC to ensure that these are used and reported against. A funding model for this effort was not identified.
- All activities need to be measured and real dollars applied for comparison purposes.

Final Commentary

The group was unanimous in the support for the establishment of **a clear set of guidelines** that are supported by an educational effort aimed at the general public.

Judy Simon's group

Before making recommendations on what this group thought that the role of the new Conservation Bureau ought to be, it felt that it was important to understand the proposed roles and responsibilities for all of the key players. The group spent time ensuring that all participants were at a common level of understanding regarding Bill 100. Once this common level was achieved, the group developed the following recommendations regarding what the role of the new Conservation Bureau should be:

- Report on total electricity savings achieved on an annual and cumulative basis
- Identify benchmarks for determining the level of savings achieved and establish the framework for measuring savings
- Create market transformations
- Ensure that building codes and standards are continually updated to reflect higher energy efficiency standards
- Facilitate LDC's working together and help avoid re-inventing the wheel on program design, delivery, monitoring and evaluation
- Foster the sharing of best practices among LDCs, while fostering local innovation
- Develop a standard contract that LDC's can use when tendering for various DSM services
- Remove roadblocks to distributed generation

The group did not want to see the Conservation Bureau spending resources on general consumer education. This is already being done by others.

The group expressed concern regarding the uncertainty surrounding DSM. In particular, LDCs among the group were concerned about the LDC being kept financially whole if the LDC implements DSM, and having the proper incentives in place to encourage savings.

LDC's have had problems with the OEB in recovering dollars in deferral accounts before and were afraid that their DSM costs would not be recovered. This has made LDCs suspicious of the government and the regulator. The government is urged to take steps to build trust with the LDCs.

6 Participant feedback and next steps

"The industry is finally beginning to engage on this important issue." Anonymous testimonial

The Energy Conservation Forum and Workshop took place on Thursday, July 22, 2004, in Toronto's Metro Hall. The following results are summarised from questionnaires filled out by attendees. A total of 32 questionnaires were completed on that day.

Quantitative Results

Responses to requests for another workshop:

There was a very positive response to the question on whether the workshop should be held annually or bi-annually. 78% of respondents were in favour of one or more conferences being held every year. A full 47% preferred one conference a year, while 31% would have liked to see two or more a year. The remaining 22% of people had no opinion on the issue.

Average results of satisfaction ratings:

The scores were highly favourable for the conference. Grading the satisfaction level of attendees by topic, the focus/objective of the day scored 86%, the speakers also 86%, the morning panel scored 87%, the afternoon breakouts had the lowest at 78%, and the overall rating for the day was rated at an 84% approval.

Average results of utility questions:

The questionnaire's final three point-based questions relate to conference utility and DSM implementation. 92% of respondents were interested in having DSM turn key and/or best practices available on-line. Furthermore, they marked an 84% likelihood of planning DSM into next year's business plans. 79% of respondents felt that the likelihood of including DSM increased as a result of the workshop. The high effectiveness of the conference in influencing the consideration of DSM implementation suggests a successful information delivery session.

Qualitative Results

Respondents were asked to write the most important issues for utilities to consider regarding demand side management (DSM). The top three most mentioned issues are as follows:

- A need for clearly identified Ontario Energy Board (OEB) guidelines.
- Development of partnerships with community and private sector organizations for program delivery.
- Development of regional DSM plans and programs.

According to the questionnaire results, conference attendees seemed very pleased with the strength of Local Distribution Company (LDC) representation, allowing them to learn about that sector's issues, methods, and concerns. A typical comment was that the conference helped in "understanding the positions/concerns of […] LDCs (Doug Bradbury; Canadian Niagara Power)." Another individual commented that "[the workshop provided] an opportunity to hear what issues other LDCs perceived to be most salient."

Conversely, a noticeable number of respondents would have liked broader representation from municipalities, industry, and power generation companies to supplement and improve upon the presence of LDC representation. Several people would have preferred the speakers had more time for their presentations. As mentioned by David McKay of Bluewater Power, “More time [is needed]. Several of the presenters seemed rushed or did not complete their talk in its entirety.” This took place because of the tight timelines and full morning schedule. A possible solution is to increase these time allotments by taking from the afternoon’s breakouts in order to complete information delivery in a manner better suited to the speaker.

In general, it seems attendees appreciated what they considered “tangible, usable information to build [a] DSM strategy/plan (Owen Mahaffy; Hydro Ottawa).” This is very promising feedback considering the intent of the conference. It should take us a step forward toward the implementation of a successful and effective DSM strategy in the future.

The importance of demand versus supply in the energy industry coupled with Ontario’s urgent need for a solution to energy shortage was recognized by the 78% of respondents who suggested one of more conferences be held a year. Interestingly, a shared insight by those who favoured more than one conference a year was that this time of transition and awareness be taken advantage of for the next one or two years before easing into a more relaxed one conference a year rate of presentation.

Of those who participated in the survey, the number of those who favoured combined workshops with EnerComm was roughly equal to those who suggested an independent conference. However, the majority of participants chose not to answer this question, and the totals are low enough to make any result inconclusive

Finally, attendees seemed to appreciate and take advantage of industry experts in order to forge bonds and make new contacts. This networking could lead to improved cooperation, forge a decisive momentum in favour of serious DSM solutions, and raise pertinent common questions that both public and private sectors could tackle together. As one conference-goer opined: “A very worthwhile day.”

Appendix A. Workshop agenda

The workshop was facilitated by Fiona Oliver, Director of Operations at the Canadian Energy Efficiency Alliance.

Time	Session
8:00 – 8:30	Registration and Breakfast
8.30 – 8.50	Opening remarks 1) Canadian Energy Efficiency Alliance *Peter Love, Executive Director* 2) Electricity Distributors Association *EDA Chair, Ken Quesnelle*
8:50 – 9:10	Setting the context Ontario Ministry of Energy *Marion Fraser, Senior Advisor to the Minister of Energy*
9:10 – 9:30	OEB *Laurie Reid, Strategic Planning and Policy Development for the OEB*
9.30 – 10.00	Panel – Setting the DSM context – Issues and next steps *Sheila Halladay, LL.M. – Facilitator* *James Sidlofsky, LL.B. – Borden, Ladner & Gervais* *Rob Mace, President of Thunder Bay Hydro, Chair of the EDA's DSM committee* *Jack Gibbons, Chair of OCAA and Director of Pollution Probe's Energy Programme* Question and Answer period
10:00 – 10:15	Creating programs that support policy interventions *Ian Morton, Principal, Summerhill Group*
10:15 – 10:45	Other jurisdiction speakers 1) Kinectrics (A Canadian vs. UK experience) *Masoud Almassi, Department Manger, Emerging Energy Technology* 2) Vermont Energy Investment Corporation (US examples) *Chris Neme*
10.45 – 11.00	Break and Networking
11.00 – 12.00	Existing Programs - Utilities 1) Enbridge *Michael Brophy, Manager, DSM Strategy* 2) Hydro One *Steve Dorey, Vice President External Relations* 3) Toronto Hydro *Blair Peberdy, Vice President, Communication & Public Affairs* 4) Oakville Hydro *Alex Bystrin, President and CEO*
12.00 – 12.30	Questions and Answer period

12.30 – 1.30	**Lunch**
1.30 – 2.30	Existing programs – Non-government Organizations (NGO) and Energy Services Company (ESCO) sectors NGO - Clean Air Foundation *Corey Diamond, Program Manager* ESCO - Ecosystem *Chris Beaton, President, Ecosystem*
2:30 – 2:45	Evaluation and Reporting Summit Blue *Richard Ronchka, President, Summit Blue Canada*
2:45 – 3:00	Planning and Delivering IndEco *Judy Simon, Vice President, IndEco*
3.00 – 4.00	Facilitated breakout sessions New programs identification and networking
4.15 – 4.30	Closing remarks Canadian Energy Efficiency Alliance *Peter Love, Executive Director*

Appendix B. Final workshop registration list

Attendees for the July 22nd, 2004 Energy Conservation Workshop

First Name	Last Name	Position	Company
Ian	Morton	Principal	Summerhill Group
Peter	Love	Executive Director	Canadian Energy Efficiency Alliance
Michael	Brophy	Manager DSM	Enbridge Gas Distribution
Heinrich	Feistner	Senior Energy Consultant	City of Toronto - Better Building Partnerships
Judy	Simon	Vice President	IndEco
Fiona	Oliver	Director of Operations	Canadian Energy Efficiency Alliance
Sheila	Halladay	Barrister and Solicitor	
Corey	Diamond	Program Manager	Clean Air Foundation
Marion	Fraser	Senior Advisor to the Minister of Energy	Ministry of Energy
Alex	Bystrin	President & CEO	Oakville Hydro Energy Services Inc.
Chris	Beaton	Vice President	Ecosystem
Masoud	Almassi	Department Manger, Emerging Technology	Kinectrics
Chris	Neme	Director of Planning and Evaluation	Vermont Investment Energy Company
Rob	Mace	President	Thunder Bay Hydro
James	Sidlofsky	Lawyer	Borden, Ladner, Gervais
Blair	Peberdy	Vice President, Communication and Public Affairs	Toronto Hydro
Richard	Ronchka	President	Summit Blue Canada
Barbara	Neill	Executive Assistant	Summerhill Group
Ritchie	Udell	Distribution Supt.	Orillia Power Corporation
Ed	Houghton	President & CEO	Collingwood Utility Services Corp
Darius	Vaiciunas	Load Mgt & Regulatory Coordinator	Collingwood Utility Services Corp
Sheila	Kee	Product Manager	Itron
Scott	Owen	Director of Sales & Marketing	Itron
Chris	Gardiner	Client Service Manager	Itron
Peter	Hajek	Manager, Metering & Settlement	Brantford Power
Douglas	Bradbury	Director of Regulatory Affairs	Canadian Niagara Power Inc.
Dennis	Franco	Customer Relations Manager	Canadian Niagara Power Inc.
Pat	Zimmer	Market Compliance Coordinator	Erie Thames Powerlines Corp
John	Puhr	Vice President & GM	Erie Thames Powerlines Corp
Wray	Gibson		EMS/DACS
Pat	Noble	Chief Conservation Officer	Newmarket Hydro Ltd.
Jac	Vanderbaan	VP of Engineering & Operations	Festival Hydro Inc.
James	Small	Senior Associate	Canadian Urban Institute
Allan	Frederick	VP Customer Service & Billing	P4C Services Inc
Doug	Fletcher	Manager of Support Services	Norfolk Power Distribution Inc.
Cheryl	Elliot	Manager of Customer Services	Norfolk Power Distribution Inc.
Fred	Druyf	President & CEO	Norfolk Power Distribution Inc.
Stephen	Kishewitsch		APPrO
Andrew	Turney	Engineering Supervisor	Niagara-On-The-Lake Hydro
Shannon	Brown	IT/Settlements Officer	Innisfil Hydro
Steve	Edwards	Customer Service Technician	Innisfil Hydro
George	Shaparew	President	Innisfil Hydro

Mary	Craddock	Manager, Retail Division	Oakville Hydro Energy Services Inc.
Deborah	Sleeth	Chief Executive Officer	Brant County Power Inc.
Ray	Payne	President & CEO	Chatham-Kent Energy Inc.
Robert	Scarffe	Executive Vice President	Veridian Energy Inc.
Kate	Sweetman	Customer Care Supervisor	Halton Hills Hydro
Glen	Dufton	VP Corporate Affairs	Barrie Hydro Energy Services
Joe	Bonandie	Project Engineer	Barrie Hydro Energy Services
Maeve	Malone	Associate	Magaree Consultants
Rose	Gatto	Marketing Officer	EDA
Dan	Delurey	Executive Director	Demand Response & Advanced Metering Coaltion
Nancy	Taylor	Vice President	Utilities Kingston
Jim	Keech	President & CEO	Utilities Kingston
Brian	Wilkie	President	Niagara Falls Hydro
Michael	Freel	Director of Administration	Niagara Falls Hydro
Jack	Gibbons	Executive Director	Clean Air Alliance
Alex	MacDonald	Consultant	
David	MacKay	Deregulation Co-ordinator	Bluewater Power Distribution Corp.
Judith	Rosebrugh	CAO	Wellington North Power Inc.
Paul	Dilda	VP Marketing	Ontario Power Generation
Rick	Tomson	Sales Manager	Siemens
Paula	Tarini	Supervisor Competitive Services	Greater Sudbury Hydro Plus Inc.
Gary	Graham	Electric Superintendent	Goderich Hydro
Chris	Litschko	President & CEO	Lakeland Power Distribution Ltd.
Gerry	Smallegange	VP, Engineering & Operations	Burlington Hydro
George	Dick	President	Orangeville Hydro
Roger	Ryan	Partner	EnerSpectrum Group
Bob	Middleton	President	R. Middleton & Associates
William	Bogardis	President	Savings by Design
Shona	Adamson	Consultant	IndEco
Raegan	Bunker	Senior Consultant	IndEco
Colleen	Mogan	Manager of Operations	Summerhill Group
James	Alden	Partner	Summerhill Group
Servanne	Fowlds	Ontario Business Manager	Ecosystem
Dave	Stavinga	Manager, Energy Services	Wasaga Distribution
Anton	Krawchenko	Director of External Relations	Electricity Distributors Association
Will	Stewart	Director, Policy Development & Communication	Electricity Distributors Association
Wayne	Taggart		Electricity Distributors Association
John A.	Alton	President	Peninsula West Utilities Ltd.
Rob	Fennell	General Manager, Operations	Enbridge Gas Distribution
David	McKendry	Director, Marketing & Sales	Hydro Ottawa
Owen	Mahaffy	Energy Conservation Manager	Hydro Ottawa
Paul	Crawford	Communications Advisor	Ontario Energy Board
Don	Thorne	President & CEO	Milton Hydro Distribution Inc.
Michael	Knox	Operations Manager	Westario Power
Guy	Cluff	President & CEO	Westario Power
Bruce	Craig	President	Lakefront Utilities Inc.
Stewart	Cunningham	Treasurer	Lakefront Utilities Inc.
Tom	Semler	Energy Services Supervisor	Hydro One Brampton
Todd	Ross	Vice President Strategic Planning & Business Development	Erie Thames Power
Laurie	Palmer	Vice President Integrated Utility Solutions	Erie Thames Power

Lenard	Hart	Manager, Built Environments	Summerhill Group
Tony	Jennings	Vice-President	Proactive Energy Management Inc.
Joe	Saunders	Director of Operations	Burlington Hydro
Kevin	Boggs	Supervisor Metering & Energy Services	Burlington Hydro
Brian	Reid	Energy Services	Burlington Hydro
Steven	Lund	General Manager	Tillsonburg Hydro Inc.
Mark	Renaud	Chair	Tillsonburg Hydro Inc.
Rick	Jacob	Instrumentation Technologist	Town of Tillsonburg
Bruce	Lourie	Executive Director	Ivey Foundation
Shelley	Parker	Settlement Officer	St. Catherines Hydro Utility Services
Frank	Fabiano	Vice President Customer Service	St. Catherines Hydro Utility Services
Dan	Goldberger	President	New Paradigm Capital Corporation
Scott	Rouse	Managing Partner	Energy @ Work
Steven	Poff	Manager DSM & Program Evaluation	Enbridge Gas Distribution
Judith	Ramsay	Project Manager, DSM and Program Evaluation	Enbridge Gas Distribution
Rodney	Idenouye	Senior Analyst, DSM and Program Evaluation	Enbridge Gas Distribution
Margarita	Suarez	Senior Analyst, DSM and Program Evaluation	Enbridge Gas Distribution
Sharon	Moffat	Analyst, DSM and Program Evaluation	Enbridge Gas Distribution
David	Goodman	Supervisor, Operations	Enbridge Gas Distribution
Patrick	Guran	Metering Manager	Power Stream Inc.
Gay	Cook	Senior Advisor, Industry & Government Relations	Spi Group
Mark	Kerbel	Managing Director, Business & Regulatory Solutions	Spi Group
Susan	Clinesmith	Manager, Business Markets & Communications	Enbridge Gas Distribution
Chris	Gates	Manager, Sustainable Energy	Enbridge Gas Distribution
Kerry	Lakatos-Hayward	Manager, Strategic Planning	Enbridge Gas Distribution
Erica	Lontoc	Program Manager, Mass Markets	Enbridge Gas Distribution
Catherine	Parry	Director of Marketing	Toronto Hydro
Connie	Turner	Director of Marketing	Toronto Hydro
Leslie	Thomas	Energy Manager	Select Power Inc.
Linda	Poirier	Manager, Interval Metering Solutions	OZZ Corporation
Larry	Brydon	VP Sales & Marketing	OZZ Corporation
Kyle	O'Hearn	Marketing Manager	OZZ Corporation
Anne	McConnell	Director, Regulatory and Environment	Proctor & Gamble
Bruce	Ander	Chair	Canadian Energy Efficiency Alliance
Ron	Clark	Partner	Fraser Milner Casgram LLP
Robert	Irvine	Ontario Regulatory Manager	Homeworks Services Inc.
Chris	Winter	Executive Director	Conservation Council of Ontario
Martin	Malinowski	Director Business Development	Rodan Power
Ken	MacDonald	Senior Manager, Communication & Government Relations	Enersource
Kyle	Ferguson	Communications Specialist	ECO Communications
George	Nutter	Communications	Ministry of Energy
Anne	Rappe	Communications	Ministry of Energy
John	Rinella	Conservation, Efficiency and Renewables Office	Ministry of Energy
Giuliana	Rossini	Director Strategy	Hydro One
Dominic	Carri	Director of Marketing	Dynen Energy Management