

**STAKEHOLDER REVIEWS ON ECONOMIC  
DEMAND RESPONSE**

**Prepared for:**

**Market Development  
Independent Electricity Market Operator**

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# **1. INTRODUCTION**

## **1.1 Purpose**

The purpose of this report is to summarize significant comments provided by various stakeholders during Market Advisory Council (MAC) meetings held during the year of 2002 and feedback received upon stakeholder review of “Blueprint for Demand Response in Ontario”. Any commentary relating to IMO’s proposal to develop a Demand Response pilot program designed to initiate price responsiveness among market participants are highlighted.

## **1.2 Scope**

Comments regarding Demand Response in general are grouped separately under *Market Advisory Council Meeting Consultation* and *Blueprint Consultation*. Feedback from the MAC meetings are outlined in general; whereas the feedback from the Blueprint are grouped according to the market participant types: Large Customers, Generators, Local Distribution Companies, Consultants, and Consumer Related Interest Groups.

# **2. MARKET ADVISORY COUNCIL CONSULTATION**

## **2.1 Summary**

Comments listed in this section were obtained from market participants before and after the market opening date during the year of 2002. All market sectors in general were in support of efforts to improve dispatchable load and demand side response especially the Distributors and Wholesale Consumers who treated demand response as a number one priority. The figure on the following page illustrates the questionnaire results by market sector obtained from the Market Advisory Council meeting held on August 13, 2002. A few participants also commented on the IMO’s Emergency Demand Response Program (EDRP) – one indicated that it was a myopic response and another that it needs to be expanded to include non-market participants.

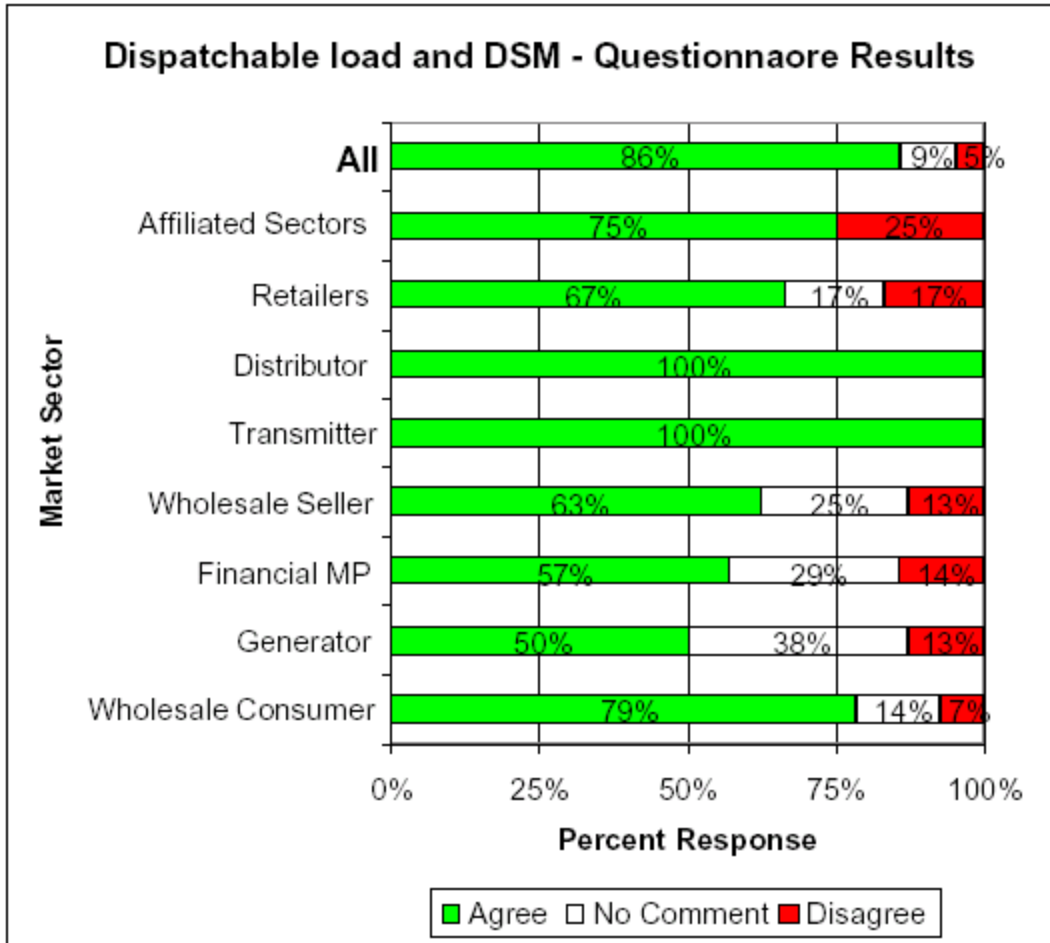


Figure 2-1: Dispatchable Load and Demand Side Response - Questionnaire Results by Market Sector obtained during the August 12, 2002 MAC meeting.

## 2.2 MAC Feedback

The following is a recitation of the many comments received concerning Demand Response issues:

1. One key recommendation made by several respondents was for the increased use of interval meters as well as encouraging and facilitating LDC's ability to become more active in the market.
  - Interval meters might help in demand response programs at the retail level, it is a necessary part of implementing retail load responsiveness.
  - Interval meters could be funded by subsidization from wholesale market (net benefit to whole market)
  - There is no incentive currently for interval meters if there is no price fluctuation
  - Interval metering is an important investment for load management.

2. Great concern was raised with respect to the lack of price predictability, more price predictability makes decisions easier for loads
  - One-hour dispatch could impact loads becoming dispatchable, 5-minute response is not practical for most loads and it creates uncertainty.
  - Day Ahead Market could be used to price discount and will have impact on loads becoming dispatchable; this reduces price volatility and improves more price predictability.
  - Price predictability at wholesale level is critical for wholesale demand response.
  - Retail consumers do not see the true market price and have little incentive to reduce consumption during periods of tight supply.
3. Incentive program for all consumers would be helpful
  - Pay a load to shut down on their consumption, encourage and compensate LDCs
  - Have market rules established in a way that is easy and/or lucrative for surplus and DDS customers to participate
  - Assistance should be offered for implementation to become a dispatchable load
  - Provide financial incentives to medium sized industrial consumers.
4. The IMO should conduct a market simulation to identify the potential benefits of any particular response action
  - Currently there is not enough impact analysis being done before changes are implemented.
  - The IMO's EDRP program should be expanded to include non-market participants.
  - IMO could publish a manual on how to become a dispatchable load; this facilitates greater understanding by loads who could implement quickly on benefit of demand response.
  - Need greater consumer education – allow them to understand actual electricity price and consumption levels.
  - There are retail opportunities for demand side response as well as wholesale mechanisms but IMO may not be the best party to do this.
5. Several participants recognized that the involvement of the OEB in improving demand side response is a necessity.
  - Central coordination is needed and the responsibility for Load Management needs to be placed on the IMO, the OEB, or the government.
  - Need the OEB to allow retail contracts that involve both price and quantity with minor enhancements to retail settlement process.
  - OEB and the government involvement should be at retail level but not wholesale – IMO role should be at the wholesale level.

With respect to a wide array of issues discussed during the MAC meetings, market participants, as a whole, decided on a number of issues that they would like to see the Government and the IMO take the initiative with the goal of improving/promoting demand side response:

The Government should:

- Increase the number of consumers impacted by a market price (interval metering for residential, open retail market for metering to competition, different prices for peak, off peak and seasonal)
- Price has to vary in order to create market incentive, government reaction has reduced or perhaps even eliminated any incentive
- Subsidies/incentives for encouraging consumers fuel switching and energy conservation
- Government should only act as an enabler and stay out of day to day operations
- Mandate water heater/air conditioning control devices (forced load shifting)
- Regulated demand side management programs similar to the gas industry
- The government will need to promote an open market; or promote “market driven behavior”
- If the government offers incentives for generators, then incentives for loads is also a must

The IMO should:

- Provide accurate market signals (price, market information transparency)
- Make it simple/operator friendly process for loads to respond to participate in load response programs
- Conduct education programs to encourage embedded loads to become dispatchable in conjunction with distributors
- Recognize non-market participants as dispatchable loads (references made to ISOs in other jurisdictions that create the incentives to dispatch)
- Should participate with the OEB in developing DSM programs at a retail level
- Promote automated systems to send price signals directly to all users (for example through industrial processes, appliances, etc.)
- Identify priority potential dispatchable loads and work with them to build a business case for dispatchability
- The IMO should conduct a market simulation to identify the potential benefits of any particular response action
- In residential market, evaluate fuel switching technologies and off peak heating technologies such as non-electrical appliances

## 3. BLUEPRINT CONSULTATION

### 3.1 Summary

The consensus from most of the stakeholders who responded upon review of the Blueprint is that Demand Response generally is a critical factor in the market. Funding for the DR programs, according to a number of stakeholders, should come from government since it is the major gainer of the energy/demand management programs. Loads are generally in favor of Economic Demand Response Program; generators are not.

Large Customers have a common list of issues that they would like to see resolved as part of IMO's DR programs. Here is the list in bullet format:

- Demand response should be defined as the end-user's load reduction and there should be no hesitation to pay a load the current MCP rather than pay all generators a higher MCP. Loads should be paid to shut down, if not they will incur a production loss and additional cost.
- Loads are frustrated due to the unpredictability of pre-dispatch prices. The IMO should put the highest priority on this problem because it would help these loads and/or promote others to shed load.
- The Hour Ahead Dispatchable Load (HADL) program should be revisited and more analysis should be performed. It may not provide enough incentives for the wholesale end users to participate.
- IMO should educate potential dispatchable customers on the benefits of Demand Response and help them develop a business case.

The Generators themselves have a commonality in their view of Demand Response:

- Essential to avoid major market distortions caused by allowing payments of an effective marginal price for certain loads that is far higher than the simultaneous price offered to mobilize supply-side resources to meet the demand.
- Demand Response is a critical factor in the market, given its role in achieving the balancing of demand and supply in both the operational and planning time frames.
- Reference to Larry Ruff's article on the Electricity Journal was made to indicate the issues raised regarding the treatment of demand response as a "resource", among them the difference between short and long run impacts of demand reductions.

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1. Stakeholders who suggested that the funding for the Demand Response programs should be provided by the government include: Terra Power Systems Inc, Union Gas, and Consumers' Association of Canada.

- Concerned that long-term demand side initiatives need to be developed in conjunction within a broader resource adequacy.
- Price signals should be correct in the first place as a key step in establishing demand responsiveness.

Local Distribution Company members' views address some main issues regarding Demand Response:

- Encourage the IMO to develop short-term strategies for the summer of 2003 and agree that IMO is the most suitable body to take the overall lead in developing Demand Response programs.
- Customers under the current price cap are reluctant to participate in Demand Response and therefore there is very little value in installing interval meters for them.
- Desperate need of some day-ahead market exists but only in conjunction with removal of the price gap.
- Being the major gainer through these DR programs, the government should be responsible for funding of this program.
- There is great need for pilot projects to better understand the opportunities and costs of the price freeze and lack of installed interval meters. Customer education programs are very critical to the success of DR and the IMO should start immediately on these programs.

### **3.2 John Grant's Proposal (IMO Board Member)**

- According to the proposal, OEFC should pay loads to reduce their demand. Only consumers with interval meters would be eligible to offer such reductions, but an attractive offer could be expected to elicit a very substantial response.
- Due to a number of factors that can generate significant differences in its forecast between pre-dispatch and real time, neither the IMO nor OEFC could predict accurately how much would be saved by this strategy in any given hour.
- Worth exploring how far the IMO should and could legitimately go in providing OEFC and other potential offerers with information that would improve their strategies.
- It would appear to be desirable to confine OEFC's offers to those occasions on which the electricity price was likely to be higher than the level at which it would settle in the presence of effective competition.
- Only consumers with interval meters would be eligible to offer Negawatts, and it would be necessary to develop appropriate protocols to ensure that promised demand reductions were indeed made.
- With suitable regulatory support and market rule changes, LDCs or other aggregators might also be allowed to participate in the Negawatt market.
- It should be possible to develop a pilot version of this proposal relatively quickly. Undoubtedly it would take experimentation and evolution to achieve an optimal set of strategies.
- Propose that the IMO, OEB, and OEFC study and test the feasibility of the number of episodes in the near future where even a crude scheme would have demonstrable benefits to OEFC and the province.

### 3.3 Large Customers (Wholesale Market Participants)

Demand Response should be defined as the end-user's load reduction and there should be no hesitation to pay a load the current MCP, if not they will incur a production loss and additional cost.

#### **BOWATER:**

*Leading producer of newsprint and coated ground-wood papers. In addition, the company makes uncoated groundwood papers, bleached kraft pulp, and lumber products.*

<http://www.bowater.com>

- Loads have characteristics of granularity, response time, and ramp rate that are different from generators and any system of demand response should accommodate such differences. For instance, the bidding rules for demand response resources don't need to be identical to the supply side resources.

#### **DOFASCO:**

*Dofasco is Canada's most successful steel producer, serving customers throughout North America with high quality flat rolled and tubular steels and laser welded blanks from facilities in Canada, the United States and Mexico.*

<http://www.dofasco.ca>

- Loads are frustrated due to the unpredictability of pre-dispatch prices, fixing the pre-dispatch price problem would increase "self-dispatch" demand response and help these loads and/or promote other to shed load.

Benefits to the IMO and Ontario are maximized if loads provide their shed prices/volumes to the IMO in advance and committing to this, thereby making their actions "transparent" to the IMO.

- To increase transparent demand response, loads must be compensated appropriately for their increased costs/risks, and the benefit they provide to Ontario consumers.
- By putting loads on an equal basis with generators, more loads would provide transparent demand response, and Ontario would benefit.
- The merits of the Hour Ahead Dispatchable Load (HADL) program should be revisited. The benefit to loads, benefit to Ontario, and bidding/payment methods should be reviewed.

**FALCONBRIDGE:**

*Leading low-cost producer of nickel, copper, cobalt and platinum group metals. Also one of the world's largest recyclers and processors of metal-bearing materials.*

<http://www.falconbridge.com>

- The Ontario Demand load profile is mainly caused by LDC customers; hence the required Demand Management should be targeted at this sector.
- Aggregators are very important to secure Demand Response from smaller customers. Unfortunately there has not been much activity in this area and therefore must be promoted. LDC and LSE cost recovery is a huge issue.
- Strongly agree with cost recovery for LDC's. LDC's should benefit from Demand Response.
- More investigation should be done with industrial customers. They have the best knowledge to understand and participate in Demand Response.
- IMO should educate potential dispatchable customers on the benefits of Demand Response and help them develop a business case.

**GERDAU AMERISTEEL:**

*Leader in the minimill industry in production, service, and quality, and the nation's largest concrete reinforcing steel fabricator.*

<http://www.gerdauameristeel.com>

- Demand response should be defined as the end-user's load reduction and there should be no hesitation to pay a load the current MCP rather than pay all generators a higher MCP.
- The volatility of 5-minute MCP makes demand response very difficult, loads might not be able to predict the price on a 5-minute basis. The IMO should put the highest priority on this problem because predictable pricing is fundamental to DR.
- The IMO should ensure that the pricing issues are rectified to enable the price to vary predictably with demand, and reduce volatility with the hour so that loads can make better operating decisions.
- The Hour Ahead Dispatchable Load program may not provide enough incentives for all wholesale end users to participate.
- The amount and type of market information provided by the IMO is also a barrier to demand response. End-users do not have sufficient information about the cause and duration of price spikes to make good operating decisions.

**INCO:**

*One of the world's premier mining and metals companies and the world's second largest producer of nickel.*

<http://www.incoltd.com>

- Loads should be paid to shut down, if not they will incur a production loss and additional cost. This is far more than the avoided cost as seems to be assumed by the IMO.

### 3.4 Generators

Essential to avoid major market distortions caused by allowing payments of an effective marginal price for certain loads that is far higher than the simultaneous price offered to mobilize supply-side resources to meet the demand. To that end, it is critical that any mechanisms involving market-administered payments to load to be dispatchable be based solely on achieving reliability objectives.

#### **INDEPENDENT POWER PRODUCERS' SOCIETY OF ONTARIO:**

*Non-profit organization for the promotion of independent power, has more than 400 members including developers, suppliers and consultants to independent power enterprises, both public and private.*

<http://www.newenergy.org>

- Reference to Larry Ruff's article on Electricity Journal with respect to issues raised regarding the treatment of demand response as a "resource", among them the difference between the short and long run impacts of demand reductions. The article ridicules the market in which the "participants are paid for not consuming what they do not own, even if they can prove that they would've bought it but didn't."
- The draft should provide a framework for future, rigorous assessments of costs and benefits of treating demand response as a resource. Economic demand response should be based on the economics of energy consumption, recognizing the role of aggregators in realizing and sharing benefits.
- Blueprint should provide an assessment of why existing and new on-site, load-displacement and distributed generation facilities would not be significant contributors to demand response.
- It might be helpful to provide some assessment of the historic levels of demand response by loads currently interval metered that are non-dispatchable market participants or non-market participants, and to provide some analysis of ways to increase the demand response by customers already having interval meters.
- Interval meters represent a small fraction of the costs to enable demand response, there is little point to the installation of large numbers of interval meters without reference to the communications and control hardware and software systems that can be expensive and in many cases, are still under development.

**SITHE:**

*Sithe is a leader in independent power generation in North America and among the top five independent power producers in the world.*

<http://www.sithe.com>

- Sithe believes demand response is a critical factor in the market, given its role in achieving the balancing of demand and supply in both the operational and planning time frames.
- Concerned that long-term demand-side initiatives need to be developed in conjunction with this broader resource adequacy context to ensure that the most economically efficient solutions are derived.
- Supplementary payments to secure commitments from loads to reduce demand should only be contemplated by the IMO to achieve reliability objectives in a broader resource adequacy context that addresses all means to ensuring adequate long-term supply on a level playing field.
- Should identify the need to get the market price signals right in the first place as a key step in establishing demand responsiveness.
- Supports the desirability for demand response to real-time pricing. To that end, interval metering should be considered for all retail consumers and immediate focus should be on those larger consumers currently without interval metering.
- On the assumption that small consumers continue to be shielded from spot prices, then it is valid to contemplate “buy-down” programs where a Load Serving Entity pays such consumers for substantiated energy and demand reductions on a market price basis.
- The contemplation of the IMO making payments to secure load reduction commitments on the basis of economic benefits can cause major distortion of the market in that it allows payment of an effective marginal price for certain loads that is far higher than the simultaneous price offered to mobilize supply-side resource to meet the demand.

### 3.5 Local Distribution Companies

Demand Response should be pursued immediately and the IMO should develop short-term strategies for this summer as well as the next summer and there seem to be little value in installing interval meters for customers under the current price fix.

#### **COLLUS POWER CORP:**

*Collingwood Utility Services provide energy to Collingwood, Clearview, and the town of Blue Montains.*

<http://www.cpuc.on.ca/index.cfm>

- Highly suggest that the LDC's be directly involved with any ongoing discussions regarding the involvement of either customers, or delivery of programs to those customers.

#### **HYDRO OTTAWA:**

*Hydro Ottawa Holding Inc. owns and operates three subsidiary companies that distribute electricity, generate power and provide energy services, and transmit data.*

<http://www.hydro-ottawa.com>

- Encourages the IMO to develop short-term strategies for the summer of 2003 and next.
- There seem to be little value in installing interval meters for any customers that are on a fixed 4.3cent/kWh commodity price. For customers that are still exposed to the market prices there is more value in having interval meters.
- LDCs cannot carry the cost of implementing interval meters as a regulatory asset that has no certainty of recovery.
- The risks of an LDC becoming an aggregator for demand response seem inconsistent with the current market design. Significant risks will be incurred if an LDC was to coordinate dispatchable loads within its territory.
- Designated customers no longer have any incentive for shifting load therefore they would have to receive direct compensation for any demand response.

#### **PETERBOROUGH DISTRIBUTION INC:**

*Public utility that distributes energy to the Peterborough community.*

<http://www.puc.org>

- Desperately need some day-ahead market, but only in conjunction with removal of the price gap.
- Threshold for interval metering should be at least 200kW because rarely do people watch the fluctuating spot price.

- A system would need to be developed whereby the customer had access to TOU rates, knew what the price would be ahead of time. TOU meters are cheaper to buy and much cheaper to operate.
- A system should be developed whereby the customer had access to TOU rates, knew what the price would be ahead of time and could change their life style to take advantage of the rates.

**POWER CONNECTION INC:**

*Mission is to provide industrial, institutional and commercial customers with the most comprehensive offering of retail energy services.*

<http://www.thepowerconnection.ca>

- It is utter nonsense to whine about “when the government has firm electricity policy” as an excuse not to pursue Demand Response or postpone action.
- There is a long distance between having interval meter and a customer taking action to reduce demand and consumption and this distance can be reduced using inexpensive web-based load profiling displays.
- The IMO and the government would be well advised to get real practitioners, companies that actually seek to economically survive and make a profit from installing and being accountable for Demand Response performance.
- The first order of business is to remove apolitical disincentives that work against fostering more Demand Response, e.g. the regulations around distributed generation etc.
- Demand Response has a role to play; it’s not a commodity like electricity. The challenge is to make it a habit.

**TORONTO HYDRO:**

*Mission is to be the premier Canadian provider of cost-effective energy services in the new competitive energy market.*

<http://www.torontohydro.com>

- Shares the view that it is probably most appropriate for the IMO to take the overall lead in developing demand response programs and facilitating the necessary collaboration between a variety of industry stakeholders.
- Supports the recommendation that a coordinated approach among the government, the IMO, the OEB, LDCs, ESCOs and energy retailers, and ultimately customers is vital in order to effectively develop demand response capability in Ontario.

- To meet immediate needs, interim measures designed for short-term implementation will need to be developed which may not dovetail with longer-term measures.
- LDCs are at a risk of significant revenue losses if demand response programs, as well as broader demand side management initiatives, are undertaken without corresponding mechanisms to compensate utilities for the resulting lost revenues.
- Demand response on the parts of general and residential users has been muted, in large part due to the absence of compelling price signals.
- With respect to short-term demand response options, given the existing state of the market, Toronto Hydro recommends that additional analysis be conducted to identify technical and economic potential for demand response programs to serve over the next few peak seasons (perhaps 12 to 24 months).
- Believes that it will likely be necessary to focus short-term efforts on programs that target large, controllable loads that can respond to strong economic incentives in order to reduce peak demands, which may be greatest concern in the immediate future.
- For the smallest loads, probably including the majority of residential loads, Toronto Hydro is not persuaded that the widespread adoption of interval metering would be cost effective, particularly during the period of fixed prices.
- Conceptually supportive of direct load control programs in circumstances where they are voluntary, cost-justified, and beneficial to all parties involved.
- Impediments to effective demand response include; inaccurate price signals, inadequate metering, contrary economic incentives, regulatory uncertainty, uncertainty regarding emerging technologies, and no assurance of cost recovery.

**UNION GAS:**

*Union Gas Limited is a major Canadian natural gas utility that provides energy delivery and related services to 1.1 million residential, commercial and industrial customers in over 400 communities in northern, southwestern and eastern Ontario.*

<http://www.uniongas.com>

- Fully agree that wholesale market participants likely represent the best opportunity for short-term demand response.
- In terms of retail programs the price freeze and lack of installed interval metering are significant barriers to demand response through at least April 2006. There is a great need for pilot projects to better understand the opportunities and costs.

- As a consequence of the barrier to developing demand response over the next three years, it might be far more productive to target efficiency, programs and end user education materials that shift load from electricity to other energy sources.
- As the beneficiary of lower wholesale costs of power, the government could provide a financial contribution to participating customers and LDCs.
- Capturing readily available demand response opportunities and making the critical policy decisions are significant short-term goals for summer 2003. It is doubtful that pilot projects (retail) will begin this summer due to a number of policy issues.
- Agree that an education program is critically important and is clearly within the mandate of the IMO to start immediately. The remainder of medium-term goals will fall out of the policy decisions to be determined this summer.
- Supportive of all the action items for the IMO including implementation of the Hour Ahead Dispatchable Load program.

### **3.6 Consultants**

Pilot projects need to be encouraged and the government should provide funding and incentives for the Demand Response since they benefit the most from these programs.

#### **TERRA POWER SYSTEMS INC:**

- Market segments that could contribute to the total demand response are not clearly identified in the report. It is possible that the demand response potential is much higher in some specific sectors.
- Web based enabling technologies are not identified as ways to implement direct load control or read interval meters. There are other leading-edged technologies that could be implemented in pilot programs at a relatively low-cost or no cost to the IMO.
- Do not collect 15-minute data for customers under 4MW. Use one-hour data to simplify data storage, data processing and data presentation. Simplification in data presentation is key in helping educate customers on demand response.
- The report suggests that only LDC's can act as aggregators of demand of various enabling technologies. Pilot projects need to be encouraged to test the market pull of various enabling technologies.
- A day-ahead market would make the role of aggregators and demand response participants much easier. One suggestion is to have a trial day-ahead market in place for the summer.
- Recommend direct control of select loads (paid not to run). It is a simple strategy to explain and implement. Additional studies and market simulations are needed to clarify the benefits.
- Some LDC's are investigating automatic meter reading (AMR) systems for hard to read locations. If an AMR pilot goes forward, demand response could be integrated into these demonstrations.
- Under the current price freeze, Ontario government is the major gainer of the demand management programs. The government bets on almost 48% of the energy market, therefore they should provide funding and incentives for the DR programs.

**Energy Profiles Limited:**

*Energy Profiles Limited provides independent, impartial energy consulting services. Our primary clients are owners and managers of Commercial and Multi-Residential buildings, and select Industrial companies.*

<http://www.energyprofiles.com>

- We need to set our own direction, follow the plan, and be prepared to adapt and change as knowledge is gained through implementation. Must focus on the building blocks to achieve DR from the residential sector
- The report doesn't sufficiently define an action plan and timetable for implementation. We cannot and should not wait to assess the results of extensive trials before setting our direction.
- Wholesale end users are the obvious priority for the immediate term. The Hour Ahead Dispatchable Load program could be implemented quickly.
- There is a general consensus that having interval meters for all customers is the ultimate objective and currently far too much credence is given to the perceived cost barrier.
- According to the Milton Hydro field trials, residential consumers are the main contributor to increased demand during times of extreme weather, therefore we must focus on the building blocks to achieve DR from the residential sector.
- Caution that existing load control schemes may not still be operational and will require investment comparable to new hardware.

### 3.7 Consumer Related Interest Groups

**Canadian Energy Efficiency Alliance:**

*Leading multi-stakeholder, not-for profit, voice representing a variety of non-profit and for-profit organizations involved in the energy sector*

<http://www.energyefficiency.org>

Demand response needs to be put within the larger context of demand side management, efforts must be taken to educate customers regarding the demand side of the market and largely support the interval metering at the retail level.

- Ontario’s original market design only paid a little attention to the demand side while most of the focus was on bringing new generators into the market.
- Caution should be taken in replicating programs from other jurisdictions. Resources will be better spent in creating an infrastructure within which the demand side of the market can respond to price rather than “paying” customers to shut down (in anything over than the direst circumstances).
- While other markets have mistakenly focussed on large industrial customers, Ontario should take advantage of the opportunities afforded by the market structure of the commercial sector.
- The period up to 2006 should be used to put “training wheels” on the demand side of the market to get customers educated and adept at managing their energy bills.
- All new customers, not just new houses, should be required to have interval metering and all distributors should be required to develop a transition plan to convert their existing customers.

**Consumers’ Association of Canada:**

Non-profit organization which represents the interests of residential consumers

<http://www.consumer.ca>

Given Ontario’s current supply situation, demand response issues should be considered a high priority. Infrastructure costs and pilot programs to encourage demand response in Ontario should be funded by government.

- The benefits of the use of interval meters for all consumers require careful practical study and pilot programs should be undertaken to determine how and if all or just some residential consumers can use them effectively.
- Given Ontario’s current supply situation, demand response issues should be considered a high priority.

- A fruitful discussion of demand response cannot be achieved until we know how the wholesale market will behave without dominance by OPG and the existence of MPMA. It is essential to resolve pricing issues so transparency is achieved. Demand response initiatives may not be worth pursuing without adequate transparency.
- Supports the establishment of coordination between the IMO, the OEB and the government with respect to DR in Ontario. It is more of a priority for these entities to be clear on how the market is to be structured during and after the retail price freeze.
- Supports the proposal for the government to assess the costs/benefits of the government or a government agency funding some of the infrastructure costs and pilot programs to encourage demand response in Ontario.
- With respect to the proposal that the OEB mandate interval meters for medium sized customers and interval meters for new homes, CAC does not support the initiative prior to a study of the potential costs and benefits.
- CAC agrees that effective communication is essential and the only way any demand response programs either at the wholesale and retail level, can be effective is with comprehensive education campaigns and other ways to ensure price transparency.

**Ontario Energy Association:**

*Unique trade association representing major participants in the converging natural gas and electricity industries in Ontario.*

<http://www.energyontario.ca>

Strongly support the IMO's plans for market evolution and the need to address impediments to demand response in the Ontario market structure

- The development of effective demand response is a pre-requisite to deliver efficient price signals in the Ontario electricity market.
- Achieving price transparency in the market, including consistency between spot prices and forward prices will do much to empower consumers.
- OEA supports the need to address impediments to demand response in the Ontario market structure as well as defining a role for Aggregators and clarifying the roles of Local Distribution Companies and program financing.
- Strongly support the IMO's plans for market evolution, with the view that transparent and efficient price signals to consumers and suppliers will allow the market to identify the most promising investments to meet electricity demand in the long term.

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