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February 10, 2004

VIA COURIER

Paul Pudge Ontario Energy Board 26th Floor 2300 Yonge Street Toronto, ON M4P 1E4

Dear Sir:

Re: RP 2003-0144

We are enclosing herewith nine copies of the Submissions to the Ontario Energy Board Re: A Demand Side Management and Demand Response Framework for Ontario. In addition, we are enclosing a disk containing an electronic version of the document.

Yours very truly,

WeirFoulds LLP

Robert B. Warren

RBW/dh

c: Lisa Brickenden Peter Dyne Joan Huzar Michael Lio Julie Girvan

SUBMISSIONS TO THE ONTARIO ENERGY BOARD

RE: A DEMAND SIDE MANAGEMMENT AND DEMAND RESPONSE FRAMEWORK FOR ONTARIO – RP-2003-0144

The Consumers Council of Canada The Consumers' Association of Canada

February 9, 2004

INTRODUCTION:

On June 4, 2003, the Minister of Energy directed the Ontario Energy Board ("Board" or "OEB") to consult with stakeholders to identify and review options for the delivery of demand side management ("DSM") and demand response ("DR") activities within the electricity sector. It included a requirement to review the role that local distribution companies ("LDCs") should have in such activities. The directive also asked the Board to balance implementation costs with the benefits to both consumers and the entire system. On August 12, the Board expanded the review to include DSM in the natural gas sector.

The Board set up an Advisory Group of comprised of energy sector stakeholders to analyze and evaluate options, address issues and prepare a report to the Board. The residential consumer voice on that Advisory Group was a representative for two consumer organizations, the Consumers Council of Canada ("CCC") and the Consumers' Association of Canada ("CAC"). The Advisory Group Report, delivered to the Board on December 12, 2003, did not set out a consensus position, but detailed several options for delivering DSM and DR in the Province. In addition to the Advisory Group Report the Board received a number of written representations from stakeholders.

On January 23, 2004, Board Staff submitted a Report ("the Staff Report") to the Board drawing on information gathered through the Advisory Group process. The Board is now seeking stakeholder comments on Board Staff's Report prior to deciding upon its final recommendations to the Minister. These are the combined submissions of the CCC and the CAC regarding the Staff Report. In the next section we provide an overview of our position and in subsequent sections address the specific recommendations set out in the Staff Report.

OVERVIEW:

The CAC and CCC represent the broad spectrum of Ontario residential energy consumers. As a general proposition residential consumers stand to benefit from cost-effective DSM and DR activities in both the electricity and natural gas sectors. Because

of that, CAC and CCC have long supported the development of DSM initiatives in the natural gas sector and now strongly support the development of these initiatives in the electricity sector.

Energy efficiency initiatives can benefit Ontario residential consumers in a number of ways. They can help reduce consumer bills, reduce overall demand and peak load on the system thereby foregoing the need for new investments in generation, and reduce emissions and other environmental impacts. Given the current demand/supply imbalance in Ontario these have become important objectives to pursue. CAC and CCC recognize the fact that conservation initiatives must become a priority for all of Ontario's residential energy consumers.

It is also critical to recognize that Ontario residential consumers are responsible for funding these initiatives through their energy rates. That is why CAC and CCC advocate that, although energy efficiency initiatives are important, it is equally important that DSM and DR initiatives be pursued in the most cost-effective way possible. Conservation in the name of conservation is not enough. Ontario residential energy consumers need to be able to see concretely that the benefits associated with the pursuit of these programs outweigh the costs. They also need to see demonstrable impacts on their energy bills. Ultimately, if energy consumers in Ontario are funding these initiatives there must be confidence that tangible and sustainable benefits will be delivered to those customers. "Cost-effective" in this context should not be defined by the total resource cost test.

Ensuring that these initiatives are cost-effective is one of the primary reasons why CAC and CCC advocate a centralized approach to developing and delivering DSM and DR in Ontario. If DSM and DR are not facilitated in a centralized way, there is virtual certainty that duplication of effort will occur, coordination will be stifled and resources will not be allocated to maximize benefits. In addition, the auditing of effort and effectiveness will be unworkable.

The need to immediately address the current supply/demand imbalance in Ontario's electricity sector, and the fact that there are so many LDCs in the Province clearly dictate the need for a centralized approach. One Central Agency must be charged with the primary responsibility for overseeing these initiatives, ensuring coordination and being accountable for their effective implementation. There is also a need for one agency to coordinate with those initiatives currently being undertaking by the Federal Government. Residential consumers are more likely to support these initiatives if they know there is one Central Agency responsible for and charged with ensuring that the ratepayer funds will be used to support DSM and DR in the most cost-effective way possible.

In the short term, having each LDC in Ontario pursuing its own DSM initiatives would not, in our view, represent a responsible approach. The regulatory burden associated with oversight alone would make such an approach unworkable.

One of the other significant reasons why CAC and CCC support a centralized approach is that the current Government has a responsibility to Ontario consumers to assess demand

side initiatives against possible generation and transmission alternatives in terms of achieving the lowest societal cost. Without a centralized approach those trade-offs cannot be adequately assessed. A province-wide strategy to address supply and demand issues is critical. A Central Agency can play a key role in assessing those competing alternatives.

Another important reason why CAC and CCC advocate a centralized approach is that it will allow for the development of market-based DSM and DR initiatives. To assume that the LDCs in Ontario should be the leaders in DSM and DR development in Ontario would forgo an opportunity to look to the private sector to pursue the most cost-effective approaches possible. Electric LDCs in the Province of Ontario do not have extensive DSM and DR experience while many private sector players do. Private sector players may be better suited to develop and implement these initiatives and more inclined to accept any risks. It would be naïve to conclude that DSM and DR should only be developed and delivered by utilities. Indeed, the most cost-effective approach may well be through a combination of public sector and private sector initiatives.

Overall CAC and CCC recognize that our electricity sector in Ontario must be transformed and that demand side initiatives will play a large role in that transformation. We caution the Board and the Government, however, that a well-balanced, rational approach is required, one that carefully considers how best to achieve tangible results. Claims that "savings" will be automatic should be rejected. A centrally mandated framework and approach through a Central Agency is, in our view the surest way to ensure that the benefits to Ontario consumers are maximized.

CAC and CCC's positions on the specific recommendations made by Board Staff are set out below.

RESPONSES TO BOARD STAFF RECOMMENDATIONS:

Recommendation 1: A hybrid framework using both market based and public policy approaches should deliver DSM and DR activities in Ontario's energy markets.

CAC and CCC acknowledge the importance of pursuing conservation and energy efficiency goals in Ontario. As set out above CAC and CCC have been supporters of DSM in the natural gas sector and support stepping up these activities in the electricity sector. The Government of Ontario clearly has a challenge in terms of assessing solutions to the current and presently projected supply/demand imbalance in Ontario. New supply must pay a role, but we acknowledge that demand side initiatives are critical.

We also acknowledge that the solution to our supply/demand imbalance in Ontario should include a hybrid framework. Relying strictly on market forces will not be enough due to the critical importance of electricity and gas in the Province in terms of economic well-being and for reasons of social policy. Correcting market failures is also crucial and, to the extent possible, this should be done through market mechanisms. The real

challenge is to find a framework that maximizes the potential for private sector/market driven involvement in demand side initiatives while recognizing the need for public policy initiatives to fill the gaps. CAC and CCC support the Board Staff recognition that a hybrid framework is the best model under which DSM and DR should be delivered in Ontario.

The lack of price transparency in the restructured electricity market has stifled demand response initiatives. Removing the price cap for designated customers represents a first step in moving towards greater transparency. In addition, the IMO's continuing efforts to facilitate transparency are critical. CAC and CCC acknowledge that the more price transparency we have in both the wholesale and retail markets the greater potential for effective demand response.

Recommendation 2: A Central Agency should be responsible for the design and delivery of DSM and DR activities in Ontario's energy sectors. The Ministry, the IMO, the Board and the Central Agency should work together to coordinate DSM and DR activities. The Ministry would be responsible for setting over-arching objectives for DSM and DR. Where necessary, the IMO would make changes in the Market Rules to implement DR, and the Board would change regulatory instruments to facilitate DSM and DR activity. Both organizations would continue to carry out their legislated objectives.

CAC and CCC advocate a centralized approach to facilitating DSM and DR in Ontario. There is considerable merit in establishing a "Central Agency" to oversee these activities and ensure that the resources devoted to them are used in the most cost-effective manner possible.

The Staff Report acknowledges that under a Central Agency model there would be respective roles for the Ministry of Energy, the Independent Market Operator ("IMO") and the agency itself. While the Ministry would be responsible for setting overarching objectives for DSM and DR, the Central Agency would develop a Province-wide plan. This may include analysis to assess demand and supply side options. The Staff Report does not propose a specific structure or governance for the Central Agency stating that the Ministry of Energy could create a new entity or designate the role to an existing agency.

CAC and CCC propose that a new agency would be preferable. This would allow for a level of independence from the Ministry of Energy. Like the IMO the agency should be subject to some level of OEB oversight. Annual budget reviews of budgets and performance measures would ensure accountability. We are sensitive to the concerns about creating a large bureaucracy, but are confident with the right framework, transparent reporting, and a clear definition of its mandate, creating a new agency will be the most effective way to facilitate DSM and DR.

If the Government has concerns about the cost of creating a new Central Agency, CAC and CCC would support the creation of a separate department within the OEB. Because

the OEB is an economic regulator and not currently mandated to facilitate these types of activities, it would represent a "second best" approach.

In any Central Agency model CAC and CCC envision broad and representative stakeholder involvement, both in terms of objective setting and establishing priorities. Stakeholder involvement should be facilitated through regular processes and on an ad hoc basis as required.

In our view the Central Agency would undertake the following:

- 1. Establish an overall business plan for its operations based on clear direction from the Government about its mandate and its objectives. An initial budget would be determined as a part of that process;
- 2. Determine priorities in the context of where to get the best results to fulfill the planned objectives, including the identification of the sectors to target and the types of activities best suited to those sectors. An in-house research capability will be critical in the ability of the Central Agency to fulfill its mandate, though certain research functions may be contracted out;
- 3. Develop protocols for screening the effectiveness of opportunities, programs and measures;
- 4. Develop its own initiatives where it is most practical (eg; a mass market information program) and seek public or private sector bidders for the development and delivery of programs;
- 5. Assess both demand and supply side options;
- 6. Develop selection criteria on which to evaluate bids;
- 7. Develop protocols for measurement and evaluation of programs and establish a well-defined audit/verification process to assess results. It is essential that the evaluation protocols be, to the extent possible, simple and transparent; and
- 8. Make public the results of all of activities in a yearly report.

The benefits associated with a Central Agency approach were debated through the Advisory Group process and set out in detail in the Report. CAC and CCC do not intend to repeat those at length in this submission. However, we will express some of our concerns with the alternative approach being advocated by others. Specifically, CAC and CCC have the following concerns with the LDC/Wires model as asset out in the Advisory Group report:

- 1. Ontario needs to focus on determining the most cost-effective approaches to deal with its demand/supply imbalance. No Ontario consumers should be expected to "foot the bill" while electric LDCs explore new ways to pursue DSM in their franchise area. The LDCs are not currently staffed or structured to design and deliver DSM and DR initiatives. It would be costly for each to set up the infrastructure required, whereas under a Central Agency model infrastructure and oversight would be in one place;
- 2. A "patchwork" of competing and inconsistent DSM approaches across the Province will not facilitate the most cost-effective results.
- 3. The regulatory infrastructure required to oversee LDC-driven DSM would be costly and complex. The approval of individual budgets and the calculation of shared savings mechanism ("SSM") inputs and lost revenue adjustments would be impossibly onerous. To the extent results were not properly verified ratepayers may be required to compensate the LDCs unnecessarily. In addition, LDC debates with their own stakeholders on these issues will result in adversarial processes. This all adds up to increases on the bill that may offset any DSM benefits.
- 4. Coordination with Federal Government initiatives would be difficult, if not impossible to achieve, as the LDC positions would be fragmented;
- 5. Under an LDC model there is the potential to lose the benefits arising from economies of scale and scope in programs, research and data collection, and in maintaining a core body of knowledge;
- 6. There will be issues around the lack of universal access to programs if their development is fragmented across the Province.
- 7. LDCs may be placed in a competitive position vis a vis retailers, whereas their primary role is the delivery of electricity to end use consumers.

Some parties advocate the LDC/Wires approach on the basis that there have been great successes with this model in the natural gas sector. Although clearly, there have been tangible results achieved in the natural gas sector, those results have at times been exaggerated depending upon how they are measured and reported. Under that model the LDCs have incentives to overstate the benefits. Real costs and real benefits are often disguised depending upon the measurement approach employed. Some of the programs areas where large "savings" were achieved (eg; water heater temperature turndown) could have been just as easily carried out through a centralized approach. In fact, a centralized approach may have been more cost-effective in terms of the development and delivery of many of the LDC programs.

The regulatory complexity experienced in the natural gas sector has been both costly and time consuming. The regulatory burden would only increase if this model is adopted in the electricity sector. CAC and CCC do not accept that the natural gas model is at all appropriate for the electricity sector and urge the Board to reject this approach.

Recommendation 3: Transmitters and distributors should be allowed to act as delivery agents of DSM and DR activities for least-cost planning and/or optimizing their distribution systems. This might include investing in DSM/DR enabling technologies such as meters, controllers, communications and/or gateway services. In doing so, distributors should comply with Central Agency protocols and compete equally with private sector players, without provision for a DSM variance account, lost revenue adjustment mechanism, or a shared savings mechanism. The Board should put in place regulatory mechanisms to induce gas distributors, electricity transmitters and electricity distributors to reduce system losses.

CAC and CCC recognize that there may be benefits in allowing distributors and transmitters to invest in initiatives related to least-cost planning. Accordingly, we support the Staff recommendation that they be permitted to act as delivery agents of DSM and DR for least cost planning and/or optimizing their distribution systems. The Central Agency should develop the protocols for LDC involvement and should also consider the extent to which LDCs play a further role in DSM and DR delivery.

With respect to the issue of system losses the current regulatory framework provides no incentives for LDCs to reduce those losses, as their costs are simply passed on to end-use customers. CAC and CCC advocate the implementation of regulatory mechanisms that will encourage initiatives to reduce overall system losses.

CAC and CCC recognize the concern expressed by many LDCs that conservation initiatives can lead to revenue erosion. Revenue erosion would also be experienced by transmitters and generators. CAC and CCC do not believe LDCs should be financially penalized because of Ontario's conservation efforts. They should be kept financially whole. The OEB will need to consider developing practical mechanisms that ensure LDCs are not penalized by these initiatives. There may be mechanisms that are more transparent and less complicated than attempting to calculate lost revenue resulting from DSM for each LDC in the Province. A consideration of those mechanisms should be included in the OEB's review of LDC regulation models going forward.

Recommendation 4: The recommended framework should replace the current gas framework within three years.

During the Advisory Group process most of the attention was focused on the electricity sector. Although the Board directed the group to consider the role of natural gas LDCs in DSM, limited resources and time were spent on the issue.

CAC and CCC recognize that the natural gas and electricity sectors in Ontario have had very different experiences with respect to the development of DSM as gas LDCs have

been involved in DSM for over ten years. Both Enbridge Gas Distribution ("EGD") and Union Gas have portfolios of DSM programs in place. Although at the end of the day there may be justifiable reasons for approaching DSM in the two sectors through a Central Agency approach the issue of symmetry needs to be more fully considered. The Board should undertake further consultation on this issue before mandating a common approach.

At a minimum, however, the problems that have consistently plagued the regulatory framework in the natural gas sector need to be addressed as soon as possible. Initially in EBO 169-III the OEB set up rules and guidelines for gas DSM. The LDCs moved forward with the development of DSM portfolios and sought stakeholder advice through consultative processes.

In recent years it has become clear that the rules and the framework need to be reconsidered. The history of DSM development at Union Gas and EGD have differed. EGD now has an LRAM, DSMVA and an SSM while Union has an LRAM and DSMVA (for 2004), but does not have an SSM. Stakeholders and the LDCs are not in agreement about a number of key issues and until they are resolved the issues will continue to come before the Board. This has resulted in DSM processes dominating a significant share of regulatory proceedings year after year. It is time to reconsider and clarify the "rules of the game". The immediate problems that need to be addressed are:

- What is an appropriate level of DSM for a gas utility to pursue? How should targets be set? How should this question be answered on an ongoing basis?
- How much of the LDC's annual operating budget should be allocated to DSM? What are acceptable rate impacts associated with DSM initiatives? How should this be determined on an on-going basis?
- How should the programs be screened?
- How should "savings" be measured and verified?
- Are incentives required and if so, how should they be structured?

CAC and CCC are not of the view that these issues can be resolved through the existing consultative processes. We urge the Board to initiate a process as soon as possible with both Union and EGD to consider these issues and establish an interim DSM framework going forward until the issue of gas and electric DSM symmetry has been resolved.

Recommendation 5: Electricity DSM and some retail DR activities should be funded by all electricity consumers through a transparent, non-bypassable consumption charge (kWh). Gas DSM initiatives should also be funded by a transparent consumption charge (m3). This charge would be levied on all consumers, including self-generators in electricity. The Central Agency would be responsible for setting the rate applied to electricity and gas consumption annually, subject to a review of a regulatory body. DSM funding should cover DSM/DR program administration and consumer incentives. It would not include funding for

lost revenue adjustment LRAM, variance accounts (DSMVA) or shared savings mechanisms (SSM)

CAC and CCC accept the proposition that DSM and DR initiatives in both the natural gas and electricity sectors should be funded through rates. It is also important to ensure to the extent possible that the costs of the initiatives should be recovered from those who benefit.

In the natural gas sector DSM program costs are recovered on this basis with residential, industrial and commercial program costs recovered from their respective rate classes. Both the lost revenue adjustments and the shared savings mechanism ("SSM") amounts are recovered in a way that matches the rate class recovery with the savings achieved.

Initially this may be harder to achieve in the electricity sector. Demand response by one group of customers may well benefit all customers through price reductions. Recognizing that a clear matching will be impossible it will still be important for the Central Agency to match costs and benefits to the extent practicable. For example, it makes sense to recover the costs of an informational program aimed at residential customers from that sector. Alternatively industrial program costs should be recovered from those customers.

Under a Central Agency model the agency would be responsible for managing this "conservation fund" recovered through rates. In order to ensure that the costs and benefits are matched to the extent possible stakeholder input on the use of the funds will be essential.

With respect to a DSM/DR consumption charge CAC and CCC advocate transparency. Customers in Ontario need to know that their bills include an amount that goes to DSM and DR initiatives. Although DSM costs are currently recovered from natural gas customers through their rates, the charges are not set out explicitly on the bill. It is important, in our view, that residential energy consumers see that charge and are provided information about where those funds are to be directed.

With respect to the recommendation to levy the charge against self-generators Board Staff has not set out the rationale for this proposal. It may not be fair to those generators to the extent they do not benefit from DSM and DR initiatives on the same basis as enduse customers. It is our expectation that the OEB will consider the various ways to implement the recovery of the conservation fund and propose rules around the rate mechanism and applicability.

The Government has proposed that approximately \$215-\$240 million be collected from distribution customers and targeted towards DSM in the coming year. It is not at all clear how the Government intends for those funds to be allocated or indeed if such that particular level of expenditure is warranted at this time. Some parties have interpreted the announcement to mean that LDCs will be free to spend their allocation of that money on DSM activities that they choose. Others have interpreted the announcement to simply

mean the amount will be targeted to DSM, but no decision has been made as to how the funds will actually be spent.

As consumer representatives CAC and CCC want to ensure that these funds are used in the most cost-effective way possible. Simply allowing LDCs to undertake DSM without any framework or guidelines in place will undoubtedly result in gross waste and inefficiencies. We would advocate pooling those funds and having them allocated through the Central Agency. They could then be specifically directed to activities that would deliver the best results. Prioritizing the use of those funds is essential. The Board should urge the Government to provide some clarity on the use of those funds as soon as possible.

A key challenge for the Government will be to determine how much money to devote to DSM and DR on an ongoing basis. Ratepayers are being subjected to rate increases in the near future both through changes to commodity rates and distribution rates. It would be naïve to assume that they will immediately see tangible results resulting from conservation and energy efficiency efforts that will mitigate the impact of those increases. Results may take years.

There should also be a clear recognition that ratepayer funds used for DSM and DR should not be viewed as limitless. A Central Agency approach will ensure that the overall costs of DSM and DR are monitored and controlled. Under an LDC/Wires approach it would be far more difficult to control the overall costs.

Recommendation 6: In consultation with stakeholders, the IMO should design and develop economic DR to be put in place for 3-5 years as a transitional measure. Further the IMO should revise the Market Rules to facilitate load aggregation (e.g., statistical measurement, metering and settlement requirements). No one player should be mandated to play the role of load aggregator.

The Staff Report mentions the IMO's role in DR. Currently the IMO is focusing on DR initiatives and intends to move forward with a pilot program. CAC and CCC support these initiatives and see value in the IMO working closely with a central agency in developing further DR initiatives.

It is important to recognize that the most critical issue to address in Ontario is how to mitigate peak demand. Other initiatives may have longer-term benefits, but those benefits will not address our immediate peak demand problems. It will be important for the Central Agency to mandate DR initiatives as a high priority and focus initially on the development of such programs.

Recommendation 7: The Board is currently working on interim and long-term Standard Supply Service pricing strategies. These could include peak and off-peak time-differentiated prices altered seasonally. Until May 1, 2006 time-differentiated and seasonally adjusted commodity prices could apply to designated consumers. The Central Agency should consider pilots and demonstration projects for emerging

and innovative technologies that enable retail load management: eg. use of metering technologies, controllers, communications and/or gateway services.

The Minister has established that the OEB will be the agency that is charged with developing the Standard Supply Service ("SSS") pricing. That process will likely be underway soon. We support the overall responsibility for SSS pricing to remain with the OEB.

With respect to the role of a Central Agency CAC and CCC support the notion that it should develop and oversee pilot programs aimed at testing the use of emerging technologies. The benefits of these technologies relative to their costs are not yet clear. Pilots and research into viability of programs in other jurisdictions can demonstrate the value of these technologies and the extent to which broader implementation might be appropriate.

We see value in developing pilots to consider different pricing options. In addition, load controlled water heater demand response pilots should be considered. Until the benefits of these programs are clear pilots represent a responsible way to move forward.

Recommendation 8: The agencies involved in conservation in Ontario (the government, the Central Agency, the IMO and the Board) should coordinate consumer education plans to ensure consistent messages and avoid duplication. To help consumers understand their energy choices and the consequences of those choices in the Ontario market, the Board should design, develop and/or deliver information to consumers related to energy conservation, energy efficiency, load management and cleaner sources of energy.

CAC and CCC accept that consumers in Ontario will stand to benefit through increased consumer education. Communication efforts under the previous Government were not sufficient and led to many misconceptions about the restructured market. With conservation now a priority there will be many key messages that need to be communicated.

Having said that it is important to develop those key messages and ensure consistency of delivery across the Province. CAC and CCC believe that coordination and marketing messages and their objectives must be a key priority. One of our concerns is that education initiatives are now being undertaken by a number of bodies. The OEB has an expanded mandate with respect to education. In addition, the Minster of Energy announced the formation of a Conservation Action Team that will promote the Government's conservation initiatives. The Ministry of Energy is also developing a communication strategy. The LDCs regularly communicate with their customers.

If a Central Agency is formed to oversee DSM and DR, CAC and CCC believe it should be charged with the overall coordination and development of the key messages. How

those messages are delivered will have to be considered by the agency. Informational programs can be a key element of DSM.

Until that agency is set up, one body must be delegated the responsibility. We would recommend that the OEB be the body with the delegated responsibility. The importance of the independence of the messenger cannot be overstated. If Ontarians are to be converted to a culture of conservation, they must be assured it is not merely a political ploy. The messages must come from an independent authority. If communication efforts are to be funded through rates, consumers must be assured that the funds are used wisely. Ontario can draw on the experience of other jurisdictions to see what efforts might be useful and where mistakes have been made.

Again, CAC and CCC emphasize their strong support the development of consumer education initiatives but urge the Board and the Government to consider appointing one body, a Central Agency to oversee and coordinate the efforts. If funds to pursue education are limited having one responsible body providing oversight is critical.