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Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, ON M4P 1E4

Re: Ontario Energy Board (the "Board")
File No.: EB-2008-0346
Demand Side Management ("DSM") Guidelines for Natural Gas Distributors

Dear Ms. Walli,

I would like to take the opportunity to respond to your invitation to comment on your new DSM guidelines.

Firstly, let me provide some background on Firebridge.

Firebridge is an engineering firm that specializes in industrial process systems that involve large amounts of energy usage. Typically our customers are heavy industry (steel, automotive, mining, etc.) as well as large commercial users with large consumptions. Typically the fuel costs for a facility that we would target would be at least \$750,000/hr and up. We operate in Canada (mostly Ontario), the US Midwest and Chile and we expect to expand our services further in the US and Latin America.

We have participated in the DSM programs of both Enbridge and Union since the inception of the programs and we typically do 3 or 4 applications/year. I will restrict my comments to points 2&4 of "**Issues for Further Comment**" as our experience is most relevant there.

I might preface my remarks by stating that the enterprises that we deal with must have an adequate business case to implement any improvements. There are typically two barriers to developing the business case in these enterprises.

The first is to baseline their existing process which typically involves installing metering and retrieving and recording the data.

The second is the energy audit itself which details the current conditions and provides sufficient technical detail and “business quality” costing of proposed improvements to support the business case.

Neither of these barriers is easily overcome without some assistance but the implementation of the suggested improvements has always proceeded if there is an adequate business case. This is typically a two year simple payback and the typical reduction in energy usage is in the 25-30% range and often higher. I would suggest that none of the projects would have proceeded without the acquiring and analysis of the data and the support of the utilities during that phase.

Issue #2

Do industrial and commercial DSM programs with significant incentives create competitive advantages for the participants of the programs relative to their competitors?

I would say that the competitive advantages lie largely in the implementation of the improvements, not the incentives, and in fact the incentives probably have more to do with leveling the playing field than providing advantages as the larger enterprises have more resources available to them than the smaller players. When you assess the ‘competitors’ of most of our clients they are mostly in the USA or offshore and usually have significant advantages already in either scale or labour and materials costs.

In order for the Ontario industrial manufacturing sector to remain sustainable, they must achieve the highest levels of efficiency and I believe they need to find innovative ways improve on current standards wherever possible.

What programs, if any, are appropriate for these sectors? Should there be a focus on monitoring consumption, data analysis or benchmarking energy use in buildings and industrial processes?

As I mentioned above, monitoring consumption and the data analysis and development of the subsequent business case are essential to implementation and should continue to be supported. Benchmarking industrial processes is useful in terms of understanding what results you can possibly aspire to but is not all that helpful if you don’t know where you are nor does it give you a road map as to how move forward.

Should DSM programs in these sectors focus more on energy audits and efficiency training or case studies to highlight best practices and new technologies, rather than financing equipment and installation costs for specific DSM projects?

I would reiterate my support for the Energy Audit and most of the process lines we look at are unique in one way or another so while case studies and best practices may be useful in terms of giving direction, the specifics and business case for implementation are necessities. The incentives for the equipment and installation costs will, of course, capture more of the opportunities because it will move the opportunity up the capital expenditures ladder to a higher priority as well as moving some of the more marginal cases into the satisfactory payback area.

What should be the natural gas utilities' role, if any, in undertaking R&D and pilot programs funded through distribution rates? Should utilities work with key industry leaders to encourage further changes in building codes and improve standards in heating equipment?

There are many significant potential improvement opportunities that could be implemented with some additional industrial development work. Typically these improvements would provide not only improvements in the domestic market but would provide export opportunities as well. The barrier to implementing these by companies such as ourselves is twofold. The first is cost. The second is risk.

The development cost for an industrial level improvement varies of course but it can easily be \$100,000 and more depending on what it is. In order for most enterprises to take a little risk, the improvement has to at least be far enough down the road that the risk is assessable and it is difficult for companies like Firebridge to commit substantial funding without some partnership or assistance in order to get developments far enough along, that the risk to the enterprises that might implement is low enough to proceed. I think that the gas utilities would be excellent facilitators for this type of program and could also draw in funds from MEDT (Ministry of Economic Development and Trade) and NRC.

I think that this is an area that is underfunded when it comes to industrial applications.

The only comment I have regarding building codes and heating equipment is that the potential usage reduction is much greater in the industrial usage.

I thank you for accepting my input.

Respectfully,

Russ Chapman, P. Eng.
President.