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Ontario Energy Board
2300 Yonge Street
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Attn: Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: EB-2017-0127/8 – DSM Mid-Term Review – Preliminary Questions

We are counsel for the School Energy Coalition. Pursuant to the Board's letter of June 20, 2017, this letter constitutes SEC's comments with respect to the two preliminary questions posed by the Board.

Introduction

In the context of the Mid-Term Review of the 2015-2020 DSM Framework for Union and Enbridge, the Board has asked interested parties to provide comments on two issues:

1. ***Implications of DSM programs for large final emitters ("LFEs").***
   "*Consideration of the relationship between the current suite of DSM programs and actual C&T activities of customers with their own compliance obligations."*

2. ***Interplay between DSM programs and carbon abatement programs.***
   "*Consideration of the attribution of costs and savings to ratepayer-funded DSM programs where natural gas utilities offer carbon abatement programs in the market."*

In responding to these two issues, SEC starts with the second one first, because the implications of the first flow from the analysis of the second.

In summary, our conclusions are the following:

- The utilities should cease to offer DSM programs for LFEs.
- A separate category of "carbon abatement program" should not be established. All customer-funded conservation programs from the utilities should be carried out under the DSM Framework.
- The addition of carbon compliance obligations and the resulting price on carbon will make achievement of DSM targets easier. The DSM targets should be adjusted upward to reflect this reality. Additional budget may also be appropriate.
- Carbon compliance obligations should not generate additional shareholder incentives. The way to implement this is to keep the incentive levels as they are currently, while raising the targets.
- The Board should order a study of accounting for long term DSM/CA spending by utilities to reflect the fact that LFEs and their non-LFE competitors will have different accounting rules for their compliance costs.

Interplay Between DSM Programs and Carbon Abatement Programs

DSM and CA Programs Fundamentally the Same. SEC starts from the basic fact that both DSM programs and carbon abatement ("CA") programs are ratepayer-funded utility activities to reduce the use of natural gas by customers. At the broadest level, they are indistinguishable from each other.

Important Differences Between DSM and CA. However, there are a number of important differences as well, which will necessarily affect how the Board regulates the two activities, including the following:

a. ***Measurement.*** For the purposes of both cost-effectiveness, and achievement of goals (including incentives), DSM is mostly measured on a bottom-up basis. While there is a growing emphasis under the current Framework on before and after measurement/ metering, for the most part the cubic meters saved in DSM are still built up from engineering, behavioural, and other assumptions. It is a constant (and expensive) subject of conflict and uncertainty. CA is measured, if at all, on the basis of the overall throughput of the utility. The utility is required to have allowances or offsets for every tonne of carbon it produces, directly or through its customers (excluding LFEs). CA activities reduce throughput, and therefore reduce the calculation of the tonnes of carbon. There are no assumptions. It is what it is.

b. ***Causation.*** The success of DSM programs is based on rules and assumptions about the extent to which the programs "caused" reductions in natural gas use. This includes various aspects of attribution, such as free ridership and spillover. The utility does not get "credit" for savings that have actually occurred, unless they are determined to be the result of utility actions. Causation is irrelevant to CA programs. Because of the top-down nature of the measurement, only the final throughput matters. This has effects, not just on how results are viewed, but also on concepts like LRAM, discussed below.

c. ***Time Frames.*** Under the DSM Framework, a cubic meter that is forecast to be saved thirty years into the future has the same value as a cubic meter saved this year, and both are counted in the results. The utility's obligations for carbon are based on a legislated compliance period. While avoided cubic meters after the current compliance period will undoubtedly matter, they will not matter in the same way, nor will they have the same implicit value.

d. ***Motivation.*** Utilities are encouraged to carry out aggressive DSM programs by a comprehensive shareholder incentive mechanism, driven by scorecards that measure results. DSM is driven by the profit motive. Conversely, CA is a regulatory obligation. The utility must reduce gas use, or buy allowances or offsets, and must do so in a prudent manner. If the CA activities are more successful than expected, there is no incentive to the utility. This is not symmetrical, however. If they are less successful, there is the potential for a penalty if the incremental cost of additional allowances is not recoverable from customers.

e. ***Targets.*** The DSM Framework includes explicit targets that the utilities represent they can achieve, with incentives riding on success. CA programs will also have targets, which may or may not be as explicit, but subject to the prudence issue they do not appear to have consequences.

f. ***Budget.*** DSM budgets are fixed in advance, subject to limited flexibility but only if targets are achieved. CA programs are part of the overall cost of complying with legislated and regulatory obligations with respect to climate change, and are implicitly trued-up at the end of each plan period. Current expectations (which may change, of course), are that there will generally be no penalty for overspending (subject to the prudence review).

g. ***Cost-Effectiveness.*** The DSM Framework includes the TRC-plus test, which incorporates an add-on for environmental impacts. It is conceptually a test of cost-effectiveness from the point of view of all affected parties, not just the utility or its customers alone. CA programs are tested by reference to the cost to the utility of alternatives to meet the utility's carbon obligations. Those alternatives are solely from the utility's point of view, e.g. the cost to acquire allowances at auction. This is more like the Program Administrator test, which is generally not determinative of the cost-effectiveness of DSM programs.

h. ***Large Customers.*** Although it has been the subject of some debate, the DSM Framework still includes programs for large volume customers, and in fact a high percentage of the lifetime cubic meters saved comes from those large customer programs (whether large industrials, or other large natural gas users). The utility's carbon obligations do not include the emissions of LFEs, and so for many large gas users no CA programs are appropriate, even though DSM programs have CA impacts.

Different Types of CA Programs. In addition, it is useful to note that even the CA programs are themselves not one single category. There are potentially three types of CA programs a utility might offer:

1. ***Customer-Funded.*** The carbon compliance plans of each utility are paid for out of rates, and that would, at least notionally, include CA programs, even if they are similar, or identical, to DSM programs.

2. ***Government-Funded.*** It is expected that the utilities may be delivery agents for programs funded by the government, whether through the Green Ontario Fund or otherwise out of the proceeds of allowance auctions (consistent with the Climate Change Action Plan). These programs reduce throughput, and therefore carbon compliance obligations, but will likely have profit margins, and also risks associated with budgets, etc.

3. ***Competitive.*** Utilities may from time to time offer their services to LFEs and others in the competitive market, selling their expertise and being paid by the end-users. This may not be a regulated activity, but even if it is not regulated it raises issues of cost allocation and shared services.

Allocating Activities to Categories of Program. In SEC's submission, the various categories into which similar activities can be placed creates a regulatory problem for the Board.

At the simplest level, it is clearly not suitable to allow the utilities to decide where each activity should be placed for regulatory purposes. There are big differences in the regulatory rules for what are essentially similar programs.

Why, for example, would a utility embark on any CA activities? They have no profit margin. It is much better to funnel the same money into additional DSM activities, as long as it is possible to do so within the budget including adders already approved. Increasing the DSM results can generate additional profits. In addition, the relatively more forgiving (because they are bottom up) measurement rules for DSM would apply.

Conversely, if the DSM programs run into budget limits, but targets are not being met, the utility can shift the less productive DSM activities into CA programs, so that additional money can be spent within DSM to chase more productive activities. Doing the reverse – implementing productive programs as CA activities – reduces the ability to profit. Better to cherry pick the good stuff for the DSM programs.

In a more Machiavellian sense, the utilities are implicitly incented to allocate higher risk programs to CA, since the cost will be trued up anyway, and the test of cost-effectiveness is by reference to the cost of allowances, which is relatively easy to control or forecast.

Throughout all of this, including all three categories of CA programs, there will be common costs. Allocation of those costs to the various categories (including DSM) will have rate and profitability impacts, especially during an IRM period.

SEC believes that whether or not a utility actually games the system, the fundamental ambiguities inherent in the categories will create confusion and increase regulatory costs. That includes all of the categories, but is by far the most critical when dealing with the two customer-funded categories, DSM programs and customer-funded CA programs.

Merger of DSM and CA Programs. In previous submissions last year (EB-2015-0363, June 22, 2016), SEC took the position that

> *"DSM-type programs directed at abatement [i.e. CA programs] should not be treated in the same way as standard utility DSM programs. First, the programs need to be compared to GHG compliance alternatives, not to TRC or similar tests. While the latter may be relevant to identifying the other benefits of the programs, the incremental spending is justified by its ability to deliver GHG reductions at a lower cost. Second, there is no reason to have a shareholder incentive for these programs. Just as there is no incentive for purchasing allowances, or reducing facilities emissions, so there should be no incentive for incremental DSM that meets a statutory obligation."*

SEC still believes that there are significant differences between CA programs and DSM programs, as noted earlier, but those differences are not fundamental. Their goal and focus is essentially the same. The differences are mostly in the framework within which they are offered.

Given the similarity of DSM and CA programs, in our submission the DSM Framework should be expanded to include CA programs, rather than creating a separate regime for what are largely identical activities. To the extent that there are differences that have to be recognized, those differences should be dealt with through the way the CA programs are merged into the DSM Framework.

In combining DSM programs and CA programs, there are four basic issues: budgets, targets, incentives, and LRAM.

In dealing with each of these issues, SEC is excluding existing and future DSM programs and activities directed at LFEs. Those are dealt with separately in our answer to Question 1, later in these submissions.

Budgets. SEC proposes that the gas utilities be invited to propose expansions of their DSM programs, starting in 2018 or 2019, to take account of carbon abatement activities.

The activities that are to be funded using the additional funds should be justified from a cost-effectiveness point of view in the same way that any other DSM activities are justified, i.e. the TRC-plus test. It is no more appropriate to invest in DSM that fails the test if it is for carbon abatement than if it is not. The TRC-plus test looks at whether it is good social and energy policy to spend further dollars on additional DSM. Although the cost-effectiveness results for any given activities will be affected by the additional cost of carbon, the basic concept that activities failing the test are not a good use of funds is still correct.

On the other hand, the incremental budget must also be shown to be less expensive, from a program administrator point of view (assuming costs are amortized over the full lifecycle of the savings), relative to the cost of allowances and offsets. From a technical perspective, this means the utilities should calculate the carbon abatement impact of the existing suite of DSM activities, including both the amount of carbon abated and the cost per tonne to do so. They should then calculate the cost of the revised and expanded suite of DSM activities in the same way. In that way, it is possible to calculate the cost of the incremental tonnes of carbon being avoided through the incremental activities, and compare that to the cost of acquiring allowances

or offsets. This is, in effect, what the MACC does, so utilities already have forecasts of the incremental cost per tonne for specific abatement activities.

Cost Allocation. One of the related issues that arises relating to the budgets is cost allocation. The basic paradigm being used for the cost of carbon compliance for customer-related obligations is that the cost is the same for each cubic meter consumed, regardless of an individual customer's rate class. A tonne of carbon is a tonne of carbon.

DSM program costs are not allocated that way. The costs of programs directed to residential customers are allocated to the residential rate classes, and so on. That way, those that benefit pay the cost, a pretty basic regulatory concept. That means the unit costs are different for different rate classes.

If DSM budgets are expanded to achieve carbon abatement, in SEC's view they should still be considered to be DSM program costs. Thus, they should be allocated to customer classes in the same way as existing DSM budgets, following the principle that those who benefit pay the cost. Although it is true that everyone benefits from carbon reduction, customers who are incented to reduce gas use – even if the utility goal is carbon abatement – will still benefit from lower costs. Therefore, rate class allocation should, in our view, still be used.

Targets. Additional DSM budgets should mean increases in targets, including minimums, maximums, and base target levels, for all scorecard components that are affected by the increased budgets. If Enbridge, for example, proposes to spend an additional $100 million on residential DSM to reduce carbon emissions, there would also be a forecast of the cubic meters saved by those additional funds. As noted above, the forecast savings and budget would be compared to assess the cost-effectiveness of the incremental spending using the TRC-plus test. In addition, the incremental cost would be compared to the costs of allowances and/or offsets. The end result of this process is a cubic meter increment that should be added to the existing targets for each scorecard element that is affected. The same would be true of non-cubic-meter scorecard metrics.

Aside from increasing the targets to reflect the increased spending, SEC is not proposing any changes in how targets are calculated or used. It is more appropriate, in our view, to leave that review to the next DSM Framework.

Incentives. Despite proposing to increase the budgets and targets, SEC does not believe that the incentives should be increased. Both the incentive if the target is reached, and the maximum incentive, should remain the same. They would just be earned at higher scorecard levels.

We say this for three reasons.

First, carbon compliance is an obligation. The utility should not be paid an incentive out of ratepayer funds to meet a legal obligation. To avoid the potential for gaming, and to keep the regulatory framework manageable, DSM and CA are merged in our proposal, but by increasing targets without increasing incentives, SEC is seeking to achieve the result that the CA component is effectively not incented. While from a mathematical point of view it is (since CA savings would count towards targets), the lack of any incremental incentive means that complete success with the DSM+CA programs generates the same total incentive as complete success with the old DSM programs alone, and so on.

Second, it should be easier to meet existing targets, because carbon pricing makes DSM more attractive for many customers. It is not just the additional cost, which already reduces paybacks and increases cost-effectiveness. It is also because it will be an additional justification ("fighting climate change") for the activities needed to reduce load. SEC anticipates that the utilities will be speaking to a more receptive customer base as a result of the government's policy direction, and the public acceptance of it. Earning their existing shareholder incentives should be easier, absent any increase in targets. By increasing the targets, the Board would be equalizing the effort and level of success needed to earn those same incentives.

Third, carbon compliance is in some senses a survival activity for the gas utilities. Their business is the distribution of a fossil fuel, so in a lower carbon future their business will be under siege. Their obvious strategy – even absent carbon compliance obligations – is to ensure that their use of natural gas, and that of their customers, is as efficient as possible. Waste increases the extent to which their legacy gas distribution business may be in jeopardy. Thus, in the longer term the gas distributors are protecting their own enterprise by pursuing DSM, and therefore carbon reduction, aggressively.

LRAM. The point of the LRAM is to remove the demand destruction disincentive from utilities engaging in DSM programs. For this reason, it only applies to reductions in throughput that arise out of utility programs. To the extent that price elasticity, technical standards, or other factors reduce throughput, those reductions are not made whole through the LRAM.

In Ontario, declines in use for the general service classes are adjusted through a normalized average use adjustment. That obviates the need for an LRAM for those classes. For the contract classes, there is a forecast at every rebasing, but in between the utilities are protected from some declines – those directly resulting from DSM programs – using an LRAM. It is then reset at each rebasing.

At least in theory, demand destruction arising out of CA programs should not be protected through an LRAM. The demand destruction is coming because of carbon compliance, an obligation of the utility. If the CA program were not the compliance method, it would be allowances or offsets, the cost of which would cause throughput to decline. That is, after all, the whole point of cap & trade, i.e. the reduction of emissions through price signals. If it becomes more expensive to emit, you emit less. Since the declines in demand arising from those price signals are not protected, why would there be protection from the same declines arising from CA programs?

SEC believes, however, that the LRAM should include all DSM programs for the contract classes, including the additional CA programs added to the DSM Framework. We propose that for practical reasons. Some of the benefits of managing DSM programs and CA programs together would be lost if the utilities were still forced to make an artificial distinction for LRAM purposes.

We also note that, if the Board agrees with our submissions on LFEs, the LRAM would in any case decline for that category of customers.

Conclusion on the Second Question. SEC submits that the interplay between DSM programs and CA programs should be resolved, from a regulatory point of view, by requiring CA

programs to be treated as DSM programs, subject to certain specific adjustments and calculations as outlined above.

Implications of DSM Programs for Large Final Emitters

LFEs vs. Large Volume Customers. While it is a convenient shorthand to treat LFEs as equivalent to the large volume customers that have been the subject of some debate in the past (essentially, the members of IGUA or, for Union, the T1, T2 and R100 customers), that is not in fact correct. While some of the LFEs are and will be large industrial users, others will not.

For example, some large users that are not required to be LFEs can become voluntary participants. It is likely that some – consider University of Toronto, for example, or a major hospital complex, or a large greenhouse business – will opt to do that. On the other side, gas generators are large volume users, but are not allowed to be LFEs, mandatory or voluntary.

DSM for LFEs. In the past there has been a debate over whether it is good policy to provide utility incentives for large industrial customers to do DSM. Union has gone to a Direct Access program to deal with that, but some stakeholders – in particular IGUA – continue to oppose DSM programs for these customers. SEC has in the past supported IGUA's position on this, and we continue to believe that it has merit.

Further, when the 2015 and 2016 evaluation reports are published, the Board will have more up to date and specific information on the extent to which these customers are free riders on utility programs, and by implication the extent to which money spent on those programs is not currently producing the benefits we want.

That debate must, however, change now that the government has divided customers up between a category of LFEs, who are responsible for their own carbon obligations, and non-LFEs, whose carbon obligations are managed by the gas utilities on a collective basis.

In SEC's submission, the utilities should now stop offering customer-funded DSM programs to LFEs. By defining the LFE category, the government has effectively carved out a category of customer, and decided that those customers can manage their own carbon obligations (and, by implication, their own natural gas use). Just as the utilities do not need to help them with their carbon obligations, they should not need to help those customers with their DSM activities. Those customers will already be reducing their use to respond to price signals. The existing free ridership will almost certainly increase due to carbon obligations and carbon pricing.

Further, the ability of utilities to engage LFEs will decline under this new reality. Large volume customers already have limited interest in utility engagement, as seen by the fact that they are unwilling to pay utilities to provide them with advice on gas conservation. As LFEs seek to expand their focus on demand management due to carbon obligations, their perceived need for utility assistance will decline further, and they will become a less receptive audience.

Finally, the Green Ontario Fund will be offering significant incentives to LFEs to make major long term changes to reduce carbon. In that context, the ability of the utilities to add incremental value will be negligible.

For these reasons, SEC submits that the Board should order termination of LFE-directed DSM programs (which would likely include all Large Volume programs) commencing in 2019 at the

latest. LFEs would continue to pay their share of administrative costs for carbon compliance, as the Board has already ordered, and their share of the cost of low income programs. They would, however, be exempt from all other DSM-related costs, including the cost of CA programs included in the DSM portfolio.

Accounting Issue. One of the issues that will arise with LFEs is that, as they manage their own natural gas use and carbon obligations, long term investments in efficiency or reductions in gas use will be amortized over an extended time frame. Their annual cost associated with efficiency and carbon reduction will not be their full cost, but only the component of that cost allocable to that year. This is standard accounting treatment.

Where a utility offers DSM programs and CA programs, it is usually achieving reductions in gas use and carbon emissions over a long period of time. However, from the customer's point of view the full cost to do so is charged to the customer through their delivery line as a current expense. This has the effect that the annualized cost of carbon reduction, and energy efficiency, to non-LFEs will necessarily be higher, on a unit basis, than for LFEs.

There is an obvious competitiveness issue where an LFE competes with a non-LFE, one that particularly disadvantages the smaller upstart company trying to compete against a larger company.

In addition, though, this difference highlights the fact that DSM and CA spending is inherently about investing for the future, but is accounted for on a current basis.

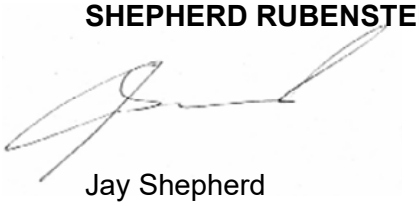
SEC does not believe it is appropriate to deal with this issue right now. The time to deal with it is during the development of the next Framework. However, we are flagging it because it may be useful for the Board to direct the utilities to study this issue, and develop proposals in time for the next Framework consultation. Alternatively, the Board may wish to put such a study on its own agenda for implementation over the next year or two.

Conclusion

SEC thanks the Board for the opportunity to comment on these important issues, and hopes that these comments are of assistance.

All of which is respectfully submitted.

Yours very truly,
SHEPHERD RUBENSTEIN PROFESSIONAL CORPORATION



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cc: Wayne McNally, SEC (email)
Interested Parties