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BY EMAIL and RESS

April 17, 2017
Our File No. 20160246

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

Dear Ms. Walli:

Re: EB-2016-0246 – 2017 TRM Filing – SEC Submissions

We are counsel for the School Energy Coalition. Pursuant to Procedural Order #1, this letter constitutes SEC's submissions on this matter.

Background

This Application seeks Board approval for a Technical Reference Manual (TRM) reviewed by the Technical Evaluation Committee (TEC), a collaborative group that included the affected utilities, representatives of customer and environmental groups, independent experts, and, in the later stages, OEB staff. They were all advised by an independent expert consultant, Energy and Resource Solutions (ERS).

The Application also includes requests for approval of other documents that were not considered by the TEC or ERS.

SEC counsel Jay Shepherd was an active member of the TEC for the entire period during which the TRM was reviewed. These submissions are informed by the experiences of Mr. Shepherd as a member of that committee, and the lessons learned during that process, both good and bad.

The School Energy Coalition and its individual school board members have long been vocal proponents of utility conservation programs. Schools – who are often early adopters - have benefited from those programs, and it has always been the view of SEC and its members that expanding and improving utility conservation programs presents significant benefits to customers. All of the submissions from SEC should be read within that context, since SEC's only goal in this process is to ensure that utility conservation programs are as effective as possible.

The Submissions of BOMA and OSEA

SEC has had the benefit of reviewing the submissions of both BOMA and OSEA before filing these submissions.

With respect to the very thorough and helpful BOMA submissions, SEC comments as follows:

- ***The Principle of Measured vs. Assumed Savings.*** SEC agrees with the central premise of the BOMA submissions, i.e. that a shift away from assumption-based savings, and towards measurement-based savings, should be a top priority. This is consistent with the Board's views, previously expressed on numerous occasions. The value of utility conservation programs depends entirely on the willingness of customers to pay for them. If customers do not have confidence in the results, their willingness to pay will be eroded. Measurement of actual outcomes, as opposed to calculation of assumed (and therefore potentially fictitious) outcomes, is the best way to ensure that customer support for conservation will be maintained and strengthened.
- ***Application to 2015 and 2016.*** SEC does not agree that audits of 2015 and 2016 should necessarily include a random sampling of before and after measured gas use. This would, of course, be a great result. However, SEC is aware that the data is simply not available to do this level of empirical verification of results for past years. In our submission, the Board should encourage the Evaluation Advisory Committee (EAC), OEB Staff, and the utilities to use as much measured data as possible to support the 2015 and 2016 results. We do not believe it is feasible to go beyond that for past years. Minimum requirements for future years are, on the other hand, appropriate and valuable.

With respect to the OSEA submissions, SEC comments as follows:

- ***Integration of Cap and Trade Impacts.*** Again, SEC agrees with the key submission from OSEA, i.e. that the utilities and the Board should integrate the impact of GHG reductions, under the cap and trade regime, into DSM savings assumptions. As a principle, this seems to us to be unassailable.
- ***Avoidance of Double Counting.*** Turning to the practical side of the province's Climate Change Action Plan, programs that reduce gas consumption also collaterally reduce carbon emissions, and vice versa. In our view, a key future goal of the Board should be to ensure that the Cap and Trade compliance plans and the DSM plans are sufficiently integrated and co-dependent that there is no risk of double counting either outcomes or budgets for these two closely related activities.

The TRM - Substantiation Documents (Subdocs)

The guts of the TRM is the compendium of substantiation documents detailing the assumptions and calculations to be used for individual prescriptive measures.

SEC agrees with OEB Staff this this is an improvement over what was available in the past. However, SEC submits that the Board should not “approve” the subdocs. Rather, the Board should accept the subdocs component of the TRM for filing, with the understanding that the subdocs are a useful guideline that can add value to future assessments of utility-driven savings.

To understand the reason for this position, it is useful to understand the history of the TEC and its activities.

The TEC was established as a collaborative, with representatives from the utilities, the ratepayers, environmental groups, and two independent experts. It can be most easily understood as the precursor of the current Evaluation Advisory Committee, supervised by OEB Staff.

The biggest job the TEC had to undertake was to take an extensive collection of utility-drafted subdocs and, with the assistance of external DSM experts, turn those documents into a comprehensive manual for the calculation of savings for as many measures as possible.¹

The TEC started by developing and implementing a process to retain a third party consultant, ERS. It also spend considerable time on the format and structure of a usable TRM. It is probably fair to criticize the TEC members for allowing their own internal bureaucracy to delay the process for completing a TRM. It did take a long time.

The utilities tabled their many subdocs for review, and the TEC members sorted them into a prioritized list for review by ERS. Many of these subdocs were out of date, or had assumptions that were not supported by reliable external sources.

The process to get subdocs reviewed by the external consultants, and then reviewed by the TEC, took a long time. To shorten it, the TEC established a subcommittee to look at subdocs during the review process, but even at that the timing was not optimal, and the TEC members not on the subcommittee still had views on the resulting documents.

Throughout this process, the consultant ERS did not exercise its independent expert judgment with respect to most of the substantive issues that arose. In fairness to them, the TEC, with several top experts on the committee, did not provide a broad scope of expert freedom to ERS. No independent studies were done by ERS, and at no point did ERS draw on its third party

¹ The TEC had a number of other projects, many of them important, but the creation of a comprehensive TRM was the biggest task facing the committee.

expertise to insist that its conclusions were correct, in the face of either the subdocs or the committee members.²

Eventually the TEC came up against a deadline to produce a finished TRM, and in SEC's view rushed the final product without full consideration of the substance. SEC's representative on the committee objected to filing the result as a consensus document, because the issues had not been fully canvassed.³

During the process, the Applicants sought to file annual updates to their DSM assumptions as if they had been approved by the TEC. At the insistence of the TEC members, the filings of those updated assumptions carried a strict caveat that only a small number of subdocs had actually been reviewed and accepted by the TEC. The following wording, from EB-2012-0441, is typical:⁴

"With respect to this Update to the measure assumptions, the TEC comments speak only to the new measures and to specific changes to the individual assumptions as noted for existing measures as described in the attached substantiation documents. The TEC has not reviewed the remaining assumptions for existing measures in the Update or the assumptions for other measures listed on the Measure Assumption Table."⁵

The result of this less than optimal process at the TEC was that the filed TRM was not a consensus document, and was not the independent expert work of ERS, the consultant that compiled and edited it.

SEC believes that, as a result of the process itself, and the deadline for completion, the TRM that was filed with the Board does not represent a thoughtful and comprehensive view of the appropriate assumptions the Applicants should use in assessing prescriptive measures⁶. It is, in our submission, an improvement over what the Board has had to date, but not achievement of the goal the TEC set out to achieve originally.

This conclusion is consistent with the many shortcomings of this TRM, including the following (which are only selected examples):

- None of the subdocs are informed by independent market penetration studies⁷.

² The many statements by the Applicants that the TRM is the independent expert work product of ERS are exaggerations. See, e.g. BOMA #17, BOMA #18, SEC #15, SEC #18, SEC #19, SEC #20, among others.

³ The statement in Energy Probe Interrogatory #1 that our objections were limited to three measures is factually incorrect.

⁴ The response of the Applicants to SEC Interrogatory #1 is inadvertently misleading in this regard, since it provides the cover for this Application, rather than the previous updates.

⁵ EB-2012-0441 DSM Assumptions filing.

⁶ The statement in EP #1 that the TRM was filed with the "full agreement" of the TEC is unintentionally misleading. The TEC members agreed that the document should be filed. There was no consensus on its contents.

⁷ OEB Staff #1.

- Baselines do not include “industry standard practice (ISP)”, but instead generally revert to Code or minimum compliance⁸.
- No persistence study has been done⁹.
- Adaptive thermostats is a new measure that has not been considered by the TEC, or anyone except the Applicants.¹⁰
- The TRM includes numerous measures that are not cost-effective, but that the Applicants believe they should be allowed to offer in their sole discretion¹¹.
- The TRM does not use the dual baseline approach for early replacement projects, although that method is the one being used by the EAC today for the audit of the 2015 custom projects.
- There are inconsistencies in measure lives between Table 1 and the subdocs, and while the Applicants agree that the subdocs are right¹², the inconsistencies have not been corrected.
- The common assumption for heat content of natural gas is not consistent with the current Union Gas heat content of delivered gas, nor the current actual (and planned regulatory) heat content for Enbridge¹³. The differences are material.
- All baselines assume that all conditions would otherwise have remained unchanged throughout the technical life of the new measure, e.g. a leak would have remained unrepaired for 20 years¹⁴.
- The Applicants decline to provide an independent source for showerhead assumptions¹⁵, claiming they are relying on ERS, which in fact did no independent review.
- The Applicants have no independent source for heat reflector panels, and rely on ERS, which in turn simply accepted the assumptions provided by the manufacturer¹⁶.

These are among the many examples of flaws in the assumptions used in the TRM. This is not to say that the TRM is therefore useless or wrong. It remains an improvement over the utility-developed assumptions that had been used in the past. Many of the individual subdocs are in fact the product of a thorough review by the TEC in conjunction with ERS.

⁸ BOMA #15 and #17. The suggestion that ERS researched ISP is not accurate.

⁹ SEC #14. The statement in BOMA #18 that ERS dealt with persistence is not accurate.

¹⁰ SEC #3.

¹¹ SEC #7.

¹² SEC #13.

¹³ SEC #15.

¹⁴ SEC #16.

¹⁵ SEC #18.

¹⁶ SEC #20.

SEC is concerned, however, that the Applicants appear to be seeking blanket approval of the TRM as a binding set of rules for the calculation of DSM savings outcomes. We have already seen many examples, on audit committees and now on the EAC, where the Applicants revert to reliance on the numbers in the subdocs, even if there is better information available.

The Applicants note that the prescriptive measures represent about 20% for Union, and about 12% for Enbridge, of total claimed DSM savings¹⁷. This is true, but it is also true that many of the listed measures are included in custom projects, which make up the bulk of utility savings claims. It is common to see claims that rely on the assumptions in this TRM for custom projects.

SEC submits that there is no value in the Board making this TRM a binding document. This document is useful as a guideline for calculating savings, and in many cases the resulting calculations will be good ones. To go the next step and make this a rigid code requires, in our submission, a more thorough review of each of the code provisions (subdocs) that have been proposed by the Applicants.

SEC therefore submits that the Board should accept the subdocs for filing, and should approve their use as guidelines in calculating savings, but should expressly refuse to approve these subdocs as binding assumptions of DSM savings.

The TRM – Definitions and General Provisions

The draft TRM also includes definitions and general provisions. The TEC did not have time to engage in a thorough review of these provisions, and there are obvious problems with many of the definitions and explanations. Measure life, for example, is described a number of ways, and they are not consistent with each other, or with the proper definition, which should include persistence.

As with the subdocs, SEC believes that the Board should accept this part of the TRM for filing, with the clear understanding that it is not binding. It is a document providing guidance and assistance, subject at all times to the best available information (and correct definitions).

SEC also notes that the definitions and explanations would, on their face, apply to custom projects as well. While the Applicants are clear that the TRM is not intended to apply to custom projects¹⁸, SEC believes that the Board should make clear that the generic descriptions and definitions in the TRM are not intended to be used for custom projects¹⁹.

SEC believes that the EAC will prioritize the updating of the TRM, including the general provisions, so that a more reliable document can be reviewed by the Board. Until that time, in our submission a more cautious approach is appropriate.

¹⁷ BOMA #7.

¹⁸ SEC #8.

¹⁹ On at least some things, like measure life and baseline, the TRM definitions are directly inconsistent with the current EAC practice.

Schedule 2 to the Application

SEC agrees with OEB Staff, as expressed in their submissions, that Schedule 2 to the Application should not be approved by the Board²⁰. It is not an operative document, but rather a summary for the assistance of the Board in considering the Application.

Effective Useful Life (EUL) Tables

SEC is very concerned that the Applicants have sought to include in this filing approval for the EUL tables that apply to custom projects. Not only are many of these EULs controversial, but they have a significant impact where the Applicants' incentives are largely driven by undiscounted cumulative cubic meters over the lives of measures.

In our submission, common EUL tables have no place in a TRM like this one. Where in a subdoc the EUL is relevant, it is stated, and it applies specifically to that measure. The general EUL tables are for use in custom projects, which are not the purview of the TRM. We have already seen (at the EAC) that the EULs on these lists, which have never been expressly approved by the Board²¹, and are the product of utility analysis rather than independent assessment, are being treated as default values in the audit of custom projects for 2015.

Tens of millions of dollars of annual customer incentives and shareholder incentives rest on these EUL values. SEC submits that the Board should expressly deny approval of these EUL tables until the Applicants file evidence supporting the assumptions contained in the tables, and parties have an opportunity to test that evidence in a full process.

Conclusions and Recommendations

Based on the foregoing analysis, SEC makes the following recommendations to the Board:

- **Measured Outcomes.** The Board should reaffirm the principle that measured outcomes should be preferred over assumed or calculated outcomes, and should require, starting in 2017, that at least a valid sample of projects audited be based on before and after measurement of gas use.
- **Cap and Trade.** The Board should make clear in its decision that the integration of cap and trade compliance and DSM programs is a key priority, and should be included in the issues addressed at the mid-term review of the current DSM plans.
- **Approval of the TRM.** The TRM itself, excluding Schedule 2 and the EUL Tables²², should not be formally approved by the Board. Rather, the Board should accept the TRM for filing, and accept its value as providing guidance in the calculation of savings, while rejecting any proposal that the TRM have binding effect.

²⁰ The Applicants agree: SEC #3.

²¹ Unless approval of the utility DSM plans necessarily implies express approval of all assumptions underlying the plans, as the Applicants suggest: SEC #2.

²² Leaving a TRM made up of the definitions, general provisions, and subdocs.

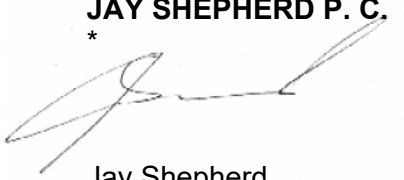
- **Schedule 2.** Schedule 2 is not properly part of the TRM, and should not be approved.
- **EUL Tables.** The EUL Tables are not part of the TRM, and should not be approved, If the Applicants seek approval of these tables of lives, they should file evidence supporting those lives, and customers and other interested parties should have the opportunity to test that evidence.

All of which is respectfully submitted.

Yours very truly,

JAY SHEPHERD P. C.

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Jay Shepherd

cc: Wayne McNally, SEC (email)
Interested Parties