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12 December 2008

Ms. Kirsten Walli, Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON
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Dear Ms. Walli:

Re: EB-2008-0384 Enbridge 2008 DSM Assumptions

Pursuant to the Board's notice of December 4th we can provide the following comments in regard to the current process and Enbridge's proposed 2008 DSM assumptions.

A. General

1. The Board's August 2006 Decision With Reasons describes the process for updating input assumptions as mechanistic and noted that the Board "anticipates that the recommendations that come from the evaluation and audit committee would, in effect, be the substance of the comments process employed".

2. While the Union Gas Audit & Evaluation Committee came to a consensus on Union's assumptions for 2008, this has not occurred in the Enbridge Committee and Enbridge is approaching the Board on its own seeking approval for certain updated or new assumptions for 2008. While GEC supports most of the assumptions listed for Enbridge's use in its submission, GEC is not at this time able to support the following changes to assumptions in Enbridge's application:

   - Energy Star Homes (New Construction)
   - Air curtains (commercial)
   - Prescriptive School boilers (15a, 15b)
   - Industrial Steam Trap measure life
   - Spillover for custom projects replacing free ridership

3. Below we discuss the specific reasons for our reservations. In the absence of EAC agreement and recommendation to the Board and the ability to mechanistically approve the assumptions, and the lack of an interrogatory process to put studies or other relevant information on the record, GEC suggests Enbridge's proposals must be denied. The utility still has the option of applying for credit for installations done in 2008, but will need to satisfy the audit process that its claims are reasonable – a forum which is able to review Enbridge's claim and work through the details. In the case of spillover, GEC endorses the CME suggestion that EGD should re-file its assumptions to include the

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sector-specific free rider rates for custom projects that were provided in the Summit Blue study, in the same manner as Union has done.

4. It should be noted that one of the main purposes of "pre-approval" of assumptions for the LDCs is to provide certainty and to enable the LDCs to manage their portfolios during the year. However, the 2008 DSM year is effectively now over, and so approvals for these assumptions at this date cannot provide any further certainty in any case.

B. Specific Concerns

5. If the Board concludes it must review contested assumptions in more detail than suggested above at this stage, we describe GECs specific concerns below.

6. Intervenors are faced with the difficulty of commenting on assumptions where, in our submission, the problem to date has been Enbridge's failure to respond to information requests, failure to conduct adequate and timely evaluation and to engage in constructive dialogue. As is evident from the agreement reached with Union it has not been any reluctance on the part of intervenors to engage productively that has lead to this situation.

7. The current Board process does not provide for interrogatories to overcome the company's reluctance to share information and given that this is only a one week process we are not in a position to conduct independent analyses. Accordingly, our comments are preliminary in nature based on the information we do happen to have at hand.

8. Enbridge has filed only summary information sheets rather than the underlying studies that support (or may conflict with) their proposals. We are concerned that should Enbridge now be allowed to selectively file further information the Board will have an untested and incomplete record. Accordingly, we make proposals for dealing with contested assumptions without further filings in this process.

Energy STAR Homes

9. The Phase II process established assumptions for Energy Star Homes for one year only, since the new building code, effective in 2007, with its higher minimum efficiency requirements, makes those assumptions obsolete. The original assumptions have expired. Enbridge proposes new assumptions based on a study by Bowser Technical which is not filed, but is summarized in its filing. This study was undertaken only at GECs suggestion in mid-2008, well after Enbridge committed to continue with its program into 2008 in the absence of knowing the new costs and savings under the new Building Code.

10. GEC has asked a series of questions about what we believe to be flawed software modelling assumptions in the Bowser study which have simply gone unanswered.[1] Union's response to these questions included that the program is barely cost-effective

[1] Large gas savings are said to arise from the inclusion of drainwater heat recovery but the consultant used an outdated method for calculating these assumptions, even though Union and & Enbridge sponsored the updated method, which is available on the internet. The new method produces savings of less than half the old method. In addition the source of electricity savings and HOT2000 modelling assumptions remains unclear.

even with these proposed assumptions and therefore the LDC has concerns about further erosion of savings. Union subsequently agreed to cancel the program at the end of 2008, as reported in its cover letter for its 2008 Assumptions submission. We dealt with Union since they had commissioned the study.

11. GEC also has concerns with the 5% free rider rate for the program. Enbridge's 2007 Auditor noted the $100 incentive, the lack of supporting evaluation work and observed: "Given the small rebate relative to overall home building costs and the incremental costs associated with meeting the higher standard, it seems unlikely that this program is having any significant effect on the new construction market." (EB-2008-271, B-2-1, p.8) This suggests the program has a very high free rider rate, not a very low one.

12. The Board does not have Enbridge's study or any other relevant information on the record for proper testing of a complete evidence record. GEC suggests no assumptions be approved for this program, leaving Enbridge the option of applying for these savings at year-end and supporting its case in the 2008 Audit process. In the alternative, as was agreed with Union, GEC would support the use of the proposed assumptions for 2008 if the program were terminated at the end of 2008, with any new New Construction program being brought forward following research and program design.

Air curtains

13. No assumptions were approved for air curtains in the Generic proceeding Phase II process. Enbridge indicated in its Phase III DSM Plan that "the Company plans to introduce this program in 2007 and will come forward with program assumptions. The values presented here are for illustrative purposes only." The company has not persuaded the EAC that the assumptions proposed are reasonable, and it has not filed the supporting research for the Board to review. GEC and other intervenors have raised many concerns about the behavioural nature of this measure and large uncertainties exist about whether it saves any significant amount of gas. The information used to support its savings assumptions appear to be based on very few buildings, and only summaries of the work have been provided to the EAC. Union has agreed not to pursue air doors as a full program until proper research demonstrates verifiable savings and reasonable assumptions. GEC submits that the Board should not adopt prescriptive assumptions for Enbridge at this stage. If Enbridge wishes to claim savings at year-end, it must satisfy the audit process that they are reasonable.

Prescriptive school boilers

14. Enbridge's proposal is to create prescriptive assumptions where these boiler replacements were treated as custom projects in the past. Enbridge has not answered GECs two concerns about the savings estimates which are outlined below. First, GEC has great concern about the magnitude of the prescriptive savings being proposed by EGD. Given the differences between base case combustion efficiency (i.e. 81.5%) and combustion efficiencies for "mid-efficiency" systems (average of 83.5%) and "high efficiency" systems (average of 86.5%), one would initially estimate the savings per average boiler to be about 6% of baseline consumption. Enbridge is assuming about 21% savings. The difference appears to be Enbridge's assumptions that (1) no baseline units have modulating features; (2) all mid-efficiency and high efficiency systems have

modulating features; and (3) that the savings from modulation are dramatic enough to account for the other 15% savings. However, the company has put forward no evidence to support any of these three assumptions.

15. Second, even if the issues above were resolved, there is no good rationale for an entirely prescriptive measure. Beyond differences in modulating features of boilers, savings and incremental cost at each school is a function of the size of the load being served. Thus, at most (i.e. even if one took EGD's assumptions about modulation on faith), the measure should be semi-prescriptive, with savings (and incremental cost) a function of the size of the boiler being installed (boiler capacity can be a reasonable proxy for size of load; also, boiler capacity ought to be among the most basic project elements reported and tracked in a DSM database). Indeed, this semi-prescriptive approach is being used successfully by Union for infrared heaters and condensing boilers. We are aware that Enbridge sought a simplified approach to reduce complexity and facilitate participation. The semi-prescriptive approach would achieve that end, with greater savings accuracy.

16. GEC submits no prescriptive assumption should be approved and the matter be referred, as above, back to the audit and evaluation process for resolution.

Industrial Steam Trap measure life

17. The one change EGD is proposing to make to prescriptive measure life assumptions for commercial and industrial measures is to steam traps. EGD is proposing to increase the assumed life from 3 years to 13. GEC has several concerns with this proposal. First, EGD has not filed any documentation to support its proposal. Second, and more importantly, the unfiled analysis that EGD is using for the change appears flawed in several respects.[2] To begin with, EGD's analysis is based on data from just four customer sites. As such it cannot be a statistically valid representation of EGD's customers as a whole. In addition, the company only got data on steam trap failure rates either two years or four years after the measures were installed. They then assumed that the failure rate over two years or over four years could be linearly extrapolated indefinitely into the future. Most equipment does not work that way. Failure rates of equipment are often low in early years and then rapidly increase before tailing off. In other words, they typically have something like a bell curve pattern. If Enbridge applied this approach to analyze the failure rates of refrigerators that were purchased four years ago and found that only 4% had failed during those four years, they would have assumed that the average refrigerator would last 100 years – a result that is obviously absurd.

18. GEC therefore submits the change should not be approved and the matter be referred, as above, back to the audit and evaluation process for review of all the background information and resolution.

Spillover for custom projects replacing free ridership

19. We have reviewed the submission of CME, and fully support CME's approach. Inclusion of spillover is premature, is a matter for the Board's Consultation process and

[2] We state "appears flawed" because all we have ever seen from the Company on this issue is a two-page summary of the analysis that it performed.

next multi-year Plan, not the current one, and is unsupported by evidence. Enbridge should be required to refile its assumptions incorporating the free rider results for each sector as reported in the Summit Blue study, as has been done in Union's case.

Low, unsupported freerider rates

20. When gas DSM was launched in Ontario in 1993 two principles were adopted in the EBO-169 Decision that remain in use today. One is the "best available information" concept and the other is the "learn by doing" principle. That is, use the information you have, proceed with programming, learn from experience and improve information as we go. This made sense in 1993 and for most purposes remains useful today. However one problem arising from them needs correcting. When starting new programs LDCs have often neglected to do any proper research on what free rider rate a program may have, and inserted a very low placeholder value of five or 10%. With a shareholder incentive in place however, there is no incentive for the LDCs to rigorously research or evaluate what a reasonable estimate would be, since it would normally erode their benefits and shareholder incentive. As long as the LDCs remain in control of the Evaluation function, this problem will persist. There are too many very low free rider rates remaining in the assumptions at this point to continue. This fall we suggested to Enbridge that a policy should be adopted where a higher default or placeholder rate is used for new measures or programs until properly researched values can be put in place, a suggestion EGD rejected. Many DSM administrators or regulators use this approach, including the OPA, which uses 30% as a placeholder until better information is available. GEC suggests the following measures should utilize a 30% placeholder free rider rate based on this principle:

- Energy Star homes, now 5% [3]

The Assumption filing backup sheet indicates only that the 5% was arrived at in ADR in 2006, with no specific supporting research.

- Commercial rooftop units, now 5% [4]

No measure information sheet has been filed in this process, but the original one from the Phase II Decision in EB-2006-0021 indicates the 5% was from the 2006 ADR process, with no specific research or evaluation support.

- Air doors, now 5%

Enbridge's filing measure information sheet indicates this assumption was originally approved not in the Phase II Assumptions process, but in the Phase III DSM Plan stage, when assumptions were not specifically tested. Their DSM Plan indicated that the 5% filed at that time was "for illustrative purposes only" and would be replaced with other assumptions when the program was launched.

[3] [4] GEC's support for Union using the same values for 2008 is based upon commitments made by Union regarding evaluation. The other 2 measures in this section are Enbridge-only measures.

- Energy Efficient multi-residential washing machines, now 10%

The measure information sheet with the proposed 2008 Assumptions does not even include a source for the 10% value. When the 10% was originally introduced, during the Phase III DSM Plan in 2006 it did not have a source indicated either.

21. This is a simplified approach that will avoid the need for the Board to adjudicate on these technical matters in this proceeding and that will also provide Enbridge with an incentive to provide timely evaluations.

22. We submit that Enbridge has had ample time to complete proper studies and evaluations and has either failed to do so or failed to provide adequate information to the EAC to satisfy its concerns.

23. In the current Board consultation on the future gas DSM framework we have proposed further structural changes to address the problem of disclosure, delayed and incomplete evaluation, by removing the evaluation function from the LDCs.

24. GEC submits that it has acted responsibly in this Application, and requests that it be awarded 100% of its costs.

Sincerely,

David Poch

Cc: All parties