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**BY EMAIL & BY COURIER**

December 20, 2005  
Our File No.: 2050500

Mr. John Zych  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON  
M4P 1E4

Dear Mr. Zych:

**Re: Board File No. EB-2005-0523**  
**Electricity Conservation and Demand Management Activities**

Enclosed, please find ten (10) copies of the Written Submissions of the School Energy Coalition filed in respect of the above-noted matter. Also enclosed is one (1) CD in PDF format of same.

Yours very truly,

**SHIBLEY RIGHTON LLP**

Jay Shepherd

encl.

cc: EB-2005-0523 Intervenors (by email)

**GREAT LAKES  
LAW**



**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** the *Ontario Energy Board Act, 1988*, S.O. 1998, C.15, Schedule B.

**AND IN THE MATTER OF** a proceeding initiated by the Ontario Energy Board to make certain determinations respecting conservation and demand management (“CDM”) by Local Distribution Companies (“LDC”) activities as described in the Electric Distribution Rates (“EDR”) Handbook and Total Resource Cost (“TRC”) Guide pursuant to sections 19(4) and 78 of the *Ontario Energy Board Act, 1998*.

**WRITTEN SUBMISSIONS**

**OF THE**

**SCHOOL ENERGY COALITION**

1. By its Notice of Proceeding and Hearing (the “Notice”) dated November 11, 2005, the Board advised parties that it was initiating a proceeding to deal with certain questions relating to the conservation and demand management (“CDM”) activities of electricity distributors in their 2006 rate year. The Notice asked parties to deal with, essentially, three questions, as follows:
  - 1.1. **Budgets Beyond Third Tranche.** “Whether the Board should order an LDC to spend money on CDM in an amount that is different from the amount that is proposed by an LDC in a test year and, if so, under what circumstances?”
  - 1.2. **Free Ridership.** “With respect to section 2.1 [of the TRC Guide], whether the Board should require LDCs to demonstrate free ridership levels for all CDM programs on a program by program basis.”
  - 1.3. **Attribution.** “With respect to section 2.2 [of the TRC Guide], whether the Board should order that an LDC should only be entitled to claim incremental benefits associated with its participation in a CDM program with a non-rate regulated third party.”

The latter two issues were raised by a motion, filed by Pollution Probe, but subsumed within the proceeding initiated by the Board.

2. The School Energy Coalition (“SEC”) proposes that the Board answer the three questions as follows:
  - 2.1. **Budgets Beyond Third Tranche.** Yes. If an LDC is not proposing to invest sufficient resources on CDM in the test year to produce a reasonable level of CDM results, the Board should order the LDC to develop programs to reach a reasonable level of results, and to bring forward an application for approval of those programs as soon as possible. While the Board should be reluctant to order specific dollar levels in the absence of programs, the Board should give

utilities active guidance to help them establish optimum investment levels and priorities.

- 2.2. **Free Ridership.** In the current transitional period, the free ridership levels assumed in the TRC Guide should be considered a default for both planning and subsequent measurement purposes. However, if either LDC or intervenors lead evidence to challenge their application in respect of any specific program, the Board should make a determination based on the evidence, not the default number. The Board should receive such evidence either at the planning stage, or after the year is over for SSM calculation purposes. The Board should never allow an SSM payment to be based on “phantom” TRC benefits.
- 2.3. **Attribution.** In the event that an LDC partners with a non-rate-regulated entity on a CDM program, attribution of TRC benefits should be based by default on the relative financial contributions of the parties. Either the LDC or intervenors should be entitled, whether at the planning and approval stage or at the evaluation stage, to lead evidence to show that the value added by the LDC was different than the default attribution, and the Board should then decide based on that evidence the appropriate attribution level for that program.

3. The following sections of these submissions set out the reasons behind the answers proposed above.

### **Budget Beyond Third Tranche**

4. **Gross Amounts Already Approved for CDM or Applied for in 2006.** The Board has approved approximately \$163 million of “third tranche” CDM spending by a total of 85 LDCs over the course of the 2005 through 2007 years. Of this, less than \$60 million is to be spent in the 2006 test year. With gross LDC revenues of about \$12 billion, this represents 0.5% or less of the LDC revenues for the year.
5. However, even the figure of 0.5% is misleading, because a substantial amount of that spending is on utility-side conservation, load management, and smart meters. As Mr. Neme points out in his affidavit [page 6-7], for the five largest LDCs, who together will spend more than 60% (\$37.6 million) of the CDM money in 2006, only 28.6% of their spending will be on true customer-side energy efficiency programs (\$10.74 million). If this is extrapolated to the full \$60 million of 2006 spending, the total is only \$17.1 million on efficiency, or 0.14% of LDC revenues for the year.
6. As Mr. Neme points out [page 7], this is a far cry from the percentage of LDC revenues spent on conservation in many other jurisdictions, including some, like Quebec (ten times as much) and B.C. (almost twenty times as much), that we in Ontario would normally consider natural comparators.
7. It is submitted that the above information inevitably leads to the conclusion that, whether immediately or at some time in the future, it would be appropriate for Ontario LDCs to increase their spending on CDM programs for the benefit of their ratepayers and the province.
8. Two issues are raised, however:
  - 8.1. **Timing.** How quickly should the LDCs ramp up their CDM spending?
  - 8.2. **OEB Role.** What is the appropriate role of the Ontario Energy Board in ordering, encouraging, or otherwise influencing the LDCs to increase their CDM spending?
9. **Evidence of Less Than Wholehearted Commitment by LDCs to CDM.** Mr. Heeney gave evidence [page 9 of Exhibit A to his affidavit] that he reviewed the applications for 2006 rates filed by Ontario

LDCs, and found only eleven that have applied for more CDM funding for 2006 than their third tranche amount. The additional amounts applied for total only \$3.5 million, or 6% of the year's third tranche amount. Only one of the five largest LDCs in the province (Enersource Hydro Mississauga) has applied for additional funds [Exhibit A to Neme Affidavit, p.7].

10. At least one LDC (Newmarket Hydro) has said [Newmarket Hydro response to GEC IR #1] that it does not intend to continue its own CDM programs after it has spent its third tranche funds. It anticipates that the OPA and the Ministry of Energy will take over responsibility for CDM, and it will only act as a local delivery agent for their programs.
11. Perhaps the best recent example of less than wholehearted commitment is found buried in Toronto Hydro's response to GEC IR#4. There, Toronto Hydro lists the thirty-four people at the LDC that have any part of their job related to CDM. Two things are striking about this. Despite the inclusion of all aspects of CDM, including meters, in the consideration of this list, none of the individuals has more than 42% of their time devoted to CDM. Thirteen of the thirty-four are less than 10%, with two at 2% and two at 1%. The total unweighted FTEs is 5.56 full-time staff. What is more shocking, though, is the converse of that. Toronto Hydro, with more load than any other LDC in the province, and with an overall revenue requirement of more than \$2.2 billion [both figures from Exhibit A to Neme Affidavit, p.7] has not one single person on its payroll that is 100% responsible for CDM. Even its "Director, Demand Management" spends less than half his or her time on CDM.
12. In addition to these more recent examples of limited commitment, we saw over the past two years even stronger examples. The fact that it took several months in 2004 for LDCs to apply for any third tranche CDM programs was clearly the result of their reluctance to venture into new waters. The fact that a few LDCs, given essentially a free pass to increase their profits in the long term in return for short-term CDM, chose not to apply at all, shows resistance to DSM. Over the last year there have been many incidents that show that some LDCs, at least, are very tentative about CDM.
13. Mr. Williams talks about this lack of commitment, and the reasons for it, in his evidence. In essence, he says:
  - 13.1. LDCs are at the learning stage here, and like everyone new to something they will be tentative in what they do until they gain confidence. "Ontario electricity LDCs are operating in a new territory with respect to CDM." [para. 10 of his affidavit]
  - 13.2. There is a great deal of policy and regulatory uncertainty with respect to CDM spending beyond the third tranche [para. 11 of his affidavit]. He lists three types of uncertainty:
    - 13.2.1. "LDCs ability to recover costs and lost revenues". In cross-examination, he added to this, referring to uncertainties surrounding the TRC calculation [page 27], what documentation will be required [page 28], and when SSM or LRAM amounts could be recovered [page 27-28].
    - 13.2.2. "The criteria for assessing prudence of CDM spending". In cross-examination, he expanded on this [page 22], saying that part of this problem is the lack of experience of the LDCs in CDM spending, and therefore an inherent nervousness about whether expenditures will be considered prudent. He went on to say that the other problem is that the rules the Board would apply to determine prudence of CDM spending are unknown.
    - 13.2.3. "The ongoing role of LDCs and the CDM activities they should be pursuing vis-à-vis the OPA, the IESO, and other entities."

14. Mr. Heeney, at pages 14-15 of his cross-examination, agrees in general, and says that where the LDCs perceive risk from CDM, “I think that undermines their willingness and ability to deliver conservation.”
15. ***When Should the LDCs Increase CDM Spending?*** Mr. Williams agrees that the government wants CDM to be ramped up quickly, but says that LDCs have good reasons to resist, and agrees that there is a natural tension between the two goals [page 20 of his cross-examination]. In his view, the LDCs should have a transitional period of three to five years before anyone starts pressuring them to spend more on CDM [page 18 of his cross-examination].
16. However, says Mr. Williams, even then there are preconditions to the Board or anyone else being in a position to push LDCs for more spending. He identifies three key preconditions:
  - 16.1. ***Framework Certainty.*** What Mr. Williams calls the “framework rules” must be clearly defined. This includes things like free rider rates and attribution, avoided costs, etc., but also the timing of recovery of SSM, and the other issues referred to in s. 13.2.1 above.
  - 16.2. ***Clarity of Roles.*** The respective roles and responsibilities of the Board, the Ministry, OPA, IESO and others must be agreed by all parties. The following exchange is instructive:
 

*“Q. One of the things you said is that it is very important for the roles of the LDCs to be clarified relative to OPA, to the Board and other players. If the Ontario Energy Board simply said, “Look, LDCs, this is the role we want you to play”, is that enough, or does it have to be agreed – does everybody else have to sort of weigh in with their opinion as well?*

*A. I think everyone else needs to be on board.*

*Q. So you need some sort of joint decision between government, the OPA, the OEB, like that before they are really clear to go ahead; is that fair?*

*A. Yes.”*
  - 16.3. ***Deemed Prudence.*** If the Board pushed an LDC to spend more than they originally asked for in their application for CDM approval, then whatever expenditures they make under that plan must be deemed prudent and never reviewed by the Board [pages 13-14 of his cross-examination].
17. Mr. Williams does not talk, in his affidavit or his cross-examination, about how the government’s objectives of rapid CDM deployment would be achieved in the face of LDC reluctance to embrace CDM. It is submitted that his essential thesis is that the Ontario public and the Ontario government should simply wait while the LDCs get more comfortable with CDM.
18. While other parties will certainly go to greater lengths on this point, it still bears repeating. Ontario is in an energy crisis, and CDM is both government policy, and a relatively inexpensive and fast solution (partial solution, perhaps) to that crisis. It requires only creativity, intelligence, and a strong will to deliver it. It is absolutely true that LDCs should be as careful and thorough as possible in designing and implementing CDM programs. However, they should not let thoroughness be a convenient label for what is really inertia. Rapid deployment of CDM initiatives should still be a key goal of the LDCs, and of their regulator, the OEB.
19. ***Role of the Ontario Energy Board.*** As can be seen from the above quotes, in the view of Hydro One, Powerstream, and any other LDCs whose views Mr. Williams is expressing, the Board is not currently vested with the appropriate policy mandate to regulate the CDM activities of Ontario LDCs,

other than those funded by the third tranche, and those additional activities proposed by the LDCs.

20. Mr. Williams is prepared to take this to fairly extreme lengths. He says, for example, that if an LDC decides, as Newmarket apparently has done, to stop spending money on CDM after their third tranche spending is done, it is not clear that the Board should order them to continue CDM activities [page 18 of his cross-examination]. In the case of an LDC that didn't even apply for its third tranche spending, and simply refuses to do CDM, he admits that it is OK for the Board to order the LDC to act, but says that it is not the best tool for the Board to use. First, he says, the Board should look for other ways to ensure that the ratepayers of that LDC have access to CDM programs [page 16].
21. Mr. Heeney expresses a more subtle and perhaps more practical approach. He says [pages 6-9 of his cross-examination] that it may not be the best thing for the Board to simply order an LDC to spend \$X on a specific CDM program or sector. "I'm not sure how the Board would make that determination", he says [page 7]. However, he does envision a more activist Board, looking at what the LDCs are doing, and asking the LDCs to explain why they aren't doing more, either in general or in particular sectors. He also accepts that in the most extreme cases, it may be necessary for the Board to be more directive [page 9], but that it should be avoided if possible. The following exchange captures his thinking well:

*"Q. It sounds like what you are saying is that the Board sort of has a hammer, if you like, to order the utility to do something, but it would be better generally if the Board expresses its desire that the utility do more, and have the utility then initiate better programs in that area?"*

*A. That would certainly be preferable, yes.*

*Q. So use persuasion with the hammer in the background, as it were?"*

*A. A prod, perhaps, rather than a hammer."*

22. It is the view of the School Energy Coalition that the activist Board envisioned by Mr. Heeney, "prodding" the LDCs but reluctant to actually use its directive powers, is the best way to ensure that CDM activities are pursued diligently and thoughtfully on the fastest reasonable track.

23. **Conclusions – CDM Budgets.** We therefore submit that the Board should decide the first question as follows:

23.1. Rapid deployment of CDM programs by LDCs, including programs beyond the third tranche spending, should be encouraged by the Board. The Board should set as a target causing each LDC to pursue CDM at the fastest rate that the particular LDC can handle given its resources, and still produce reasonable TRC benefits for its ratepayers.

23.2. The Board should be reluctant, except in the clearest circumstances, to order LDCs to carry out CDM programs that the LDC thinks are not appropriate. However, the Board should be willing to push LDCs hard to a) explain why they are not doing more, either in general or by sector, and b) develop and propose incremental programs in areas beneficial to the LDC's ratepayers.

### **Free Ridership Rates**

24. **Two Part Question.** The cross-examinations of Mr. Williams, Mr. Brophy, and Mr. Heeney reveal that the question of whether the free rider rates in the TRC Guide should be adopted is actually not one question, but two:

24.1. **Use of the Guide.** Should the free rider rate in the TRC Guide be a conclusive number, a

default (subject to being overridden by better evidence), or have some other role?

- 24.2. **Locking In.** Is the free rider rate used by an LDC for planning purposes locked in when actual TRC benefits are being calculated, or should more recent or more comprehensive evidence, if available, be used to calculate the actual TRC benefits generated by CDM programs?
25. Another way of looking at this is to ask a) whether the TRC Guide is conclusive at the planning and approval stage, when programs are being approved by the Board in advance of the test year, and b) whether the TRC Guide, or any other planning assumption, is conclusive at the evaluation stage, after the test year when the TRC benefits and the SSM are being calculated. In either case, if the TRC Guide is not conclusive, then it is open to environmental and/or ratepayer groups to lead evidence proposing different free rider rates. In the absence of any LDC evidence, this more specific evidence is likely to be persuasive, meaning that for all practical purposes the LDC has to file evidence in response.
26. It is important to note here that the third tranche spending creates a special case. When the CDM plans and programs were submitted and approved for third tranche spending, there was no TRC Guide and none of the plans or programs were based on any free ridership or other assumptions. Therefore,
- 26.1. In practical terms the use of the TRC Guide at the planning stage is really for future programs only (although LDCs might also use it to modify or replace programs already included in the third tranche).
- 26.2. For most third tranche spending, any discussion of use of the TRC Guide is really a discussion of the locking-in rule.

In the affidavits of Mr. Williams and Mr. Brophy, it is clear that it is the locking-in rule that is central to their views.

27. **Use of the Guide.** While the experts seem to have strong and consistent views on the locking-in issue, there is a range of opinion on whether the free rider rates in the TRC Guide are the ones that should be locked in. The experts supporting mandatory use of the TRC Guide appear to have confusion about their actual views on this issue.
28. A good example is Mr. Heeney. On page 7 of his report, Exhibit A to his affidavit, Mr. Heeney says:
- “The Board should not require LDCs to demonstrate free ridership levels for all CDM programs on a program by program basis.”*
29. However, then on page 9 of his report, Mr. Heeney says:
- “The regulatory burden is reduced if the Board encourages LDCs to address free riders at the planning stage, and to use the “rules of thumb”, or alternative values if the LDCs feel different values are justified. Reducing the regulatory burden will help LDCs to focus efforts on program delivery and achieving savings.”*
30. But Mr. Heeney then faced the inherent unfairness in that position, if only the LDC can provide evidence on an issue in a proceeding. When cross-examined about that [pages 25-26 of the Heeney Cross-Examination], Mr. Heeney agreed that the intervenors have to have the same right:

*“Q. You say that if the TRC Guide says free riders for program X is 10 percent, the LDC should be free to come in and say “We are doing program X but here is our more detailed data and it shows that the free ridership should be 8 percent”. They should be allowed to do that?*

*A. Yes.*

*Q. In the same situation in which the LDC is doing program X, but they are happy with the 10 percent, should the ratepayers be allowed to come in exactly the same way and say “We have additional evidence that for this particular application of program X, it should be 12 percent”?*

*A. At the plan stage, yes.*

*Q. So at the time the program is being approved?*

*A. Yes.”*

31. Mr. Williams also argues [para. 6 of his affidavit] that LDCs should not be required to demonstrate free ridership rates, but should be entitled to rely on the TRC Guide. He says:

*“Spending time to determine [free ridership rates] now could significantly delay LDCs CDM efforts and would divert funds from CDM implementation.”*

32. Mr. Williams was not asked about this in cross-examination. However, in his affidavit, and throughout his cross-examination, he makes clear that the focus of his free rider evidence is not on the numbers in the TRC Guide, but on the need to have the numbers locked in at the planning stage, and not reviewed later.

33. Furthermore, his fundamental argument on use of the TRC Guide is found in para. 25 and 26 of his affidavit:

*“LDCs have developed their CDM plans and associated CDM programs based on the framework and rules governing third tranche CDM funding specified by the Board...Without the level of certainty provided through the Board’s CDM framework and rules, I expect that LDCs would likely have very different CDM plans...The Total Resource Cost Guide (TRC Guide) issued by the Board is a key element of the CDM framework for LDCs.”*

34. What Mr. Williams fails to note is that the TRC Guide was not in existence at the time the LDCs developed their CDM plans for third tranche funding and had them approved by the Board. Therefore, the only basis of his argument is to fix the TRC Guide assumptions for evaluation purposes, which is the locking-in issue discussed below. Indeed, he goes on at para. 30 of his Affidavit to talk about the reason why requiring the LDCs to demonstrate free ridership would be a problem. It is a problem because, in order to get certainty, he says, the LDCs would have to get all free ridership assumptions approved and locked in in advance. This, he says, would require the LDCs to put all conservation on hold in the meantime.

35. Mr. Brophy of Enbridge Gas Distribution is in a more difficult situation. He argues that the TRC Guide should be used for free ridership rates. His rationale is most succinctly stated in para. 23 of his Affidavit, where he says:

*“The Board has already conducted a proceeding to review the Draft TRC Guide. As part of this process the Board already considered parties’ comments (including Pollution Probe’s submission) before issuing the Final TRC Guide. Enbridge feels that reopening this issue after it has already been addressed will create more uncertainty to the LDCs when pursuing C&DM/DSM initiatives.*



36. Unfortunately for Mr. Brophy, his position in cross-examination was less categorical. There, his position is summarized in the following exchange:

*“Q. What Mr. Heeney said was that you should think of the Guide – I’m paraphrasing, you will see the transcript – but you should think of the Guide as the default number and either the LDC or intervenors could come in and say “No, here is better information than what the Guide says and so use the better information to fix the free rider rate for program X”. Do you agree with that, all prospectively?*

*A. Yeah. So if they have better – either an intervenor or and LDC has better information for their next rate case and they bring it forward, it should be used prospectively. I agree with that.”*

37. It should also be noted that Enbridge has always demonstrated its own free ridership rates on a program by program basis, and has no plans to change that [pages 12-13 of Brophy Cross-Examination]. It has never used an external “guide”, but always relied on evidence put before the Board [see also Exhibit A to Neme Affidavit, page 14].

38. We note that Mr. Ferguson’s Affidavit, at para. 28-29, also would answer the Board’s question with respect to free ridership in the negative. However, his rationale is that free ridership, like everything else related to CDM programs, should be established at the provincial level and should not be in the TRC Guide. It is submitted that the Board is not free, in this proceeding, to order adoption of the program delivery and funding model proposed by Newmarket Hydro, and therefore it is unnecessary to deal with the free ridership submissions of Mr. Ferguson.

39. The two experts from the environmental groups, Mr. Gibbons and Mr. Neme, on the other hand, both support requiring the LDCs to propose and support free rider rates, rather than relying on the TRC Guide.

40. Mr. Neme, at page 13 and 14 of Exhibit A to his affidavit, sets forth a clear and cogent discussion of why the TRC Guide cannot provide reliable free rider rates, including detailing the factors that influence actual free ridership, and the poor program design that results from using free rider rates that are independent of program design. It is submitted that his analysis is appropriate, and his conclusions are correct. However, they do not tell the whole story, as we note below.

41. Mr. Gibbons, at para. 19-33 of his affidavit, sets out in considerable detail, with examples, why fixing free rider rates independent of program design is unfair and produces results that are directly contrary to the government’s and the OEB’s goals in promoting CDM spending by LDCs. It is submitted that his analysis is appropriate, and his conclusions are likewise correct, but like Mr. Neme they do not tell the whole story.

42. The problem is one of practicality. Conservation is an urgent goal in Ontario. We need to get the LDCs going, and in some cases cut corners to get there. This is why the OEB approved \$163 million of spending on what everyone understood were hastily developed, flimsy CDM plans. There was no time for more study. It was time for action, and so the Board enabled that action, knowing that the planning wasn’t perfect. Doing something was better, in the short term, than doing nothing.

43. The TRC Guide is another example of that same pragmatic approach. It was designed to allow the LDCs, whose plans had already been approved, to launch actual programs under those plans with insufficient study of the underlying parameters. This was cutting corners. In a normal situation, the Board wouldn’t do that. But this was not a normal situation, and it was not practical to allow the

initial conservation efforts to be delayed while individual utilities did the proper background research on their programs. *You don't always have the luxury of full research. Sometimes you have to just let people do something and see what happens. That, in effect, becomes your research, but if you're lucky you also achieve some conservation benefits while you're learning.*

44. How would Mr. Gibbons and Mr. Neme deal with that issue of practicality? Mr. Gibbons, in para. 33 of his affidavit, urges the Board to get rid of the free rider rates in the TRC Guide. LDCs, he goes on to say, would then have two choices:

- 44.1. File evidence seeking pre-approval of free rider rates for programs not yet started (presumably locking in those free rider rates), or
- 44.2. Wait until the time of the SSM claim, and file evidence of actual free rider rates as part of the SSM claim process.

It appears clear that Mr. Neme would support a similar approach, although he does not state it as succinctly.

45. Mr. Gibbons' and Mr. Neme's solutions to the practical issue are, it is submitted, not sustainable:

- 45.1. Pre-approval would – to the extent that it is possible at all for existing CDM plans - inevitably involve delay in implementation of the programs both Mr. Neme and Mr. Gibbons believe are desperately needed in Ontario. Mr. Williams estimates [para. 30 of his affidavit] that it would take six months to research, file, and get approval for free rider rates for all programs. This is probably an underestimate, given the busy regulatory calendar of the Board. It is submitted that this delay is not in the public interest, even though it is agreed that better programs, based on better assumptions, would be the result.
- 45.2. Waiting until the time of the SSM claim avoids the delay problem, but raises another one. If the primary reason for getting the free rider rates right is good program design, as both Mr. Gibbons and Mr. Neme make clear, by the time of the SSM claim it is too late to have an impact on program design. The program has already been implemented, and better evidence two years later is not going to affect it.

46. It is submitted that the above analysis leads to the following conclusions:

- 46.1. Mr. Heeney and Mr. Brophy (and likely also Mr. Williams) agree that at the planning stage, the TRC Guide should be a default, much like a rebuttable presumption, that could be challenged by either LDCs or intervenors at any time prior to program approval. They also agree that, at the evaluation stage, where SSM is being calculated, the TRC Guide should be absolute, with no-one able to challenge it. The basis for this is the locking-in rule and its justifications.
- 46.2. Mr. Gibbons and Mr. Neme agree that at the planning stage LDCs can operate without pre-approved free rider assumptions, or they can delay their conservation activities while they file evidence seeking pre-approval, which could be challenged by intervenors. Failing pre-approval, they agree that there would be no free rider rates on which to base the TRC benefits calculations, so before claiming an SSM the LDC would have to file evidence and get approval of free rider rates. Since delaying conservation programs is neither practical nor good policy at this time, it is submitted therefore that the positions of these two experts are also completely driven by their opposition in this case to the locking-in rule.

47. It is therefore submitted that all four, and perhaps all five, of the experts who filed evidence accept that, at the planning and approval stage, the free rider rates in the TRC Guide should be at best a default, or at worst ignored entirely. In all cases, at the planning and approval stage free rider rates would be open to discussion and evidence.
48. In our view, the better approach of the Board, as between the two groups of experts, is to allow the assumptions in the TRC Guide to be default positions, so that small utilities will have a guideline and will not have to waste precious budget dollars on free rider studies. We believe that the Board can rely on LDCs and intervenor groups to engage the evidentiary route, effectively eliminating the role of the TRC Guide on this issue, whenever big-dollar programs, or particularly contentious free rider issues, arise. It is submitted that, by allowing at the planning and approval stage the TRC Guide figures to be defaults, the Board would strike a balance between regulatory and financial efficiency on the one hand, and more rigorous free rider rates on the other hand.
49. **Locking-In Rule.** It is clear, though, that the main source of contention for all of the witnesses is the desire on the part of utilities to lock in the free rider rate in advance of the test year, so that the LDC will have “certainty”. Both Mr. Gibbons and Mr. Neme would also allow the LDCs to lock in their assumption, but only if they bring forward evidence in advance to support the assumption being locked in.
50. The School Energy Coalition opposes the use of the TRC Guide, or any other locked-in assumptions, as the basis for free rider rates of programs at the evaluation and SSM/LRAM stage.
51. In our submission, LDCs should never be reimbursed under an LRAM, nor incented under an SSM, for TRC benefits that did not actually take place. The operative principle should not be “certainty”, but rather compensating LDCs for actual results. Reimbursing or incenting “phantom results” is an unfair waste of the ratepayers’ money, and will have the result of undermining public acceptance of the investment by LDCs in conservation.
52. The locking-in of planning assumptions for SSM and LRAM purposes has its genesis in the “2003 rules”, a set of rules that arose out of an ADR agreement for Enbridge in its 2003 rate case [see, for an explanation, pages 20-22 of Exhibit 1 to the Brophy Cross-Examination].
53. The 2003 rules do not just apply to free rider rates. As with the TRC Guide, they apply to fix many of the factors that go into the calculation of TRC benefits. There are, in fact, nine such factors. Of those, all but two – participants and program spending – are locked in beforehand under the 2003 rules [page 9 of Brophy Cross-Examination; pages 10-11 of the Heeney Cross-Examination, and page 5 of Exhibit 1 of the Williams Cross-Examination and the Heeney Cross-Examination].
54. The rationale provided by all three of the utility-side experts for locking-in free rider rates is the need by the LDCs for certainty. This is perhaps most clearly put by Mr. Williams at page 32 of his cross-examination, where he says:

*“I think the key point here is certainty, right? Give them certainty and let them focus on the key variables and keep the rules – you know, lock in the rules so they can go on and get the job done.”*

We find similar a statement by Mr. Heeney at page 11 of his cross-examination.

55. As we have noted earlier in our comments on additional budget, this “certainty” argument is part of a theme being presented by LDCs and other utilities: conservation is special, its new, its hard, and so

LDCs should be given special protections (risk reductions) before embarking on conservation activities. Why? Mr. Heeney says, at page 16 of his cross-examination:

*“I think the main reason is that those other things [uncertainties that the LDCs have to manage] relate to their core business and the things that we are talking about for CDM or DSM are a relatively small part of activities that are not part of their core business in which they are doing because they are rate regulated...organizations. And that they would not be engaging in those activities through the rate-regulated company if there was not either a requirement or expectation that they engage in those activities.”*

In effect, the argument seems to be that because we are forcing them to do conservation, we should be easy on them when it comes to regulating that activity.

56. The problem with the “certainty” argument is that it means that TRC benefits reported and compensated are not real benefits. All of the LDC witnesses admit that the locking-in rule can produce TRC results, and SSM payouts, that are not based on actual TRC benefits [pages 33-34 of Williams Cross-Examination; pages 10-11 of Brophy Cross-Examination; page 12 of Heeney Cross-Examination].

57. Mr. Heeney even acknowledges that this disconnect between results rewarded and actual results can undermine the perception of conservation in the eyes of the public. At pages 12-13 of his cross-examination, he engages in the following exchange:

*“Q. And so one of the results is that you can be in a situation where the board orders an SSM payment to a utility knowing that it’s rewarding results that didn’t actually take place, correct?”*

*A. Yes. And, as Mr. Williams pointed out, it’s also possible that they could be under-rewarding because the results are – because the calculated results are less than the actual.*

*Q. You’ve been involved in conservation for many years, right?*

*A. Yes.*

*Q. I guess the question I would ask you is, isn’t there a concern that if you reward results that didn’t actually occur, that you undermine the public perception of conservation activities?*

*A. There’s a – yes, that you would undermine the perception of – the public perception...”*

58. This is not a trivial matter, because as CDM becomes more successful, the dollars can be large, with the potential for substantial SSM impacts.

59. Attached to these submissions as Exhibit A are two exhibits from the Enbridge 2006 rate case, Exhibits K27.1 and K27.2 in that case.

59.1. The first is a report by Kai Millyard, a consultant to Enbridge, that recalculates the net TRC benefits for the 2003 year based on best available information, rather than using locked-in numbers under the “2003 rules”. He concludes that the actual net benefits Enbridge delivered was not the \$125.9 million calculated under the 2003 rules, but \$119.6 million, 4% less.

59.2. The second is the actual calculation of the Enbridge SSM for the 2003 year, also a report of Mr. Millyard. It shows that, on the \$125.9 million of net TRC benefits the locking-in/2003 rules calculated, the SSM for Enbridge was \$2.6 million. It is possible to calculate the SSM that would have been paid if the actual TRC benefits delivered had instead been used. The calculation is as follows:

	<u>Lock-In Rules</u>	<u>Actual TRC</u>
NPV DSM Plan (Net TRC)	\$125.9	\$119.6
Target/Budget TRC	<u>\$110.6</u>	<u>\$110.6</u>
TRC in Excess of Target	\$ 15.4	\$ 9.0
SSM @18% on first 10%	\$ 2.0	\$ 1.6
SSM @15% on remainder	<u>\$ 0.6</u>	<u>\$ 0.0</u>
Total SSM	\$ 2.6	\$ 1.0

59.3. The above calculation demonstrates that, *for 2003, Enbridge was given an extra \$1.0 million in SSM payout for TRC benefits it did not actually deliver.*

60. Mr. Williams, Mr. Brophy, and Mr. Heeney would have the Board order SSM payouts on the basis of TRC benefits that were not actually delivered, in the interests of providing certainty to the LDCs. Mr. Williams actually goes a step further. Noting in his affidavit at para. 34 that the Board retains a discretion to adjust incentive awards after the fact if it thinks they are inappropriate, he agrees [page 35 of his cross-examination] that this would allow the Board to correct any serious disconnects between calculated and actual TRC after the fact. However, he goes on to say [page 36 of his cross-examination] the Board shouldn't even do that:

*“Q. I’m not asking a legal question. I’m asking the policy question. Is it appropriate for them to do that?”*

*A. No, I don’t believe it is...It’s inconsistent with having them [free rider rates] locked in.”*

61. It is submitted that the views of these witnesses are based on a misplaced sense of priorities. In each case, they say that if the LDC delivers participants and controls program spending (the two TRC calculation factors not locked in under the 2003 rules), it should get SSM payments, regardless of the actual TRC benefits delivered, if any.

62. In the view of the School Energy Coalition, SSM and LRAM payments should only be based on actual TRC benefits achieved. Just as a salesperson doesn't get a commission if the sale isn't completed, regardless of whether they actually "made the sale" or not, so too an LDC should not earn an incentive unless it actually delivers what the incentive is supposed to incent.

63. The public right now supports conservation spending, even though there are short term negative rate impacts. It is that strong public support that will make conservation successful. If conservation spending starts to seem like nothing more than a boondoggle, increasing the profits of utilities without delivering the goods, we believe there is a risk that public support will weaken, and the cost that could produce is much more than any wasted SSM.

64. Given the potential impact, it is submitted that, before having its SSM or LRAM approved, an LDC should be required to demonstrate the volumes and TRC savings it actually delivered in the year in question, and the LRAM and SSM should be calculated on the basis of those volumes and TRC benefits. In the case of smaller utilities, the Board must obviously be cognizant of their more limited resources, and not require as detailed an evidentiary package as might be appropriate for larger dollar programs at bigger LDCs.

65. **Conclusion – Free Rider Rates.** It is therefore submitted that the Board should answer the question on free ridership as follows:

65.1. **Planning and Approval Stage.** When an LDC develops and seeks approval of a CDM

program, it can rely on the free rider rate in the TRC Guide as a default, but either LDC or any intervenor can lead evidence to show that the particular program can be expected to have a different free rider rate.

- 65.2. **Evaluation Stage.** When an LDC seeks approval of an LRAM or SSM payment, it should be required to demonstrate with evidence the volumes and TRC savings it actually delivered, including evidence on free ridership. LRAM and SSM payments should always be based on actual TRC benefits, using the most recent and most comprehensive information available at the time the payment is being made.

## **Attribution**

66. **Attribution and Free Ridership.** As Mr. Heeney, Mr. Williams, and Mr. Neme all make clear, attribution is really a specialized type of free ridership [page 36 of Williams Cross-Examination; page 19 of Heeney Cross-Examination; page 15 of Exhibit A to the Neme Affidavit].
67. A free rider is a person who participates in a utility CDM program, but would have implemented the CDM measure anyway without the utility's involvement. They are simply taking the money because it's there, but they were actually motivated, for example, by high electricity prices. The issue around attribution is whether a person who participates in a utility CDM program, but would have implemented the CDM measure anyway because of the actions of the utility's partners in the program, should also be treated as a free rider.
68. For example, if a person participates in Energuide for Homes, a federal government program, and takes the Enbridge \$50 in addition to the \$1,000 from the feds, but would have participated without Enbridge's involvement, should Enbridge get credit for the participation of that person in the program? The TRC Guide says the LDC gets credit for all participants, even if they would have participated without the utility's involvement. Some parties, such as Mr. Gibbons and Mr. Neme, believe that the utility should only get credit for those participants that it had a hand in convincing to participate. The representatives of the LDCs believe that the utility's role may include more than simply writing a cheque, and so the LDCs should have a greater share. They support the use of the 100% figure in the TRC Guide.
69. **Two Parts to the Question.** It is submitted that the problem here is the nature of the incentive. An SSM is designed to incent delivering TRC benefits through the activity of getting people to participate in CDM programs. In our view, the Board would be better to disaggregate the attribution question into two components:
- 69.1. **SSM Incentive.** How much of a joint program should be attributed to the LDC for SSM purposes?
- 69.2. **Partnership Formation Incentive.** What is the appropriate incentive for a utility that initiates a program in partnership with other non-rate-regulated entities?
70. **SSM Incentive.** In order to explore the first part of the attribution question, we created a hypothetical and put it to Mr. Brophy in cross-examination [pages 35-36]. In the hypothetical, an LDC simply piggybacks on an existing federal government program that is already operating in their franchise area. They add a small amount of money to the larger amount that the feds are providing, and then claim credit for all of the TRC benefits for the federal program. Asked about this, Mr. Brophy engaged in this exchange:

- “Q. They are saying, “You know what, sign up for it, here’s a cheque”.*
- A. I don’t believe that in that case they would be able to achieve 100 per cent attribution because of that financial contribution that they gave as an incentive in one year.”*
- Q. It wouldn’t be fair. It just wouldn’t be fair. It’s like a parasitic program. I don’t mean that in a perjorative way. It’s a program that’s just tacked on to somebody else’s.”*
- A. I don’t believe that would be fair, and I don’t believe it would actually happen.”*

71. It is submitted that this simple example points out the problem with giving full SSM credit for programs delivered in partnership. If the role of the utility is just to deliver part of the program, without any additional value added, it is simply unfair to allow the utility to claim full credit for someone else’s initiative.
72. **Partnership Formation Incentive.** The problem, of course, is that often the LDC does have an additional value added, and bringing that additional value to the table should be encouraged and incented. That is especially true if the utility was instrumental in creating the partnership program in the first place, as Enbridge was with Energuide for Homes.
73. To pursue this question, we created a second hypothetical. In this hypothetical, Toronto Hydro convinces the federal government to create and deliver a CDM program in the Toronto franchise area. Toronto Hydro has no participation beyond creating the idea and convincing the feds to do it (in effect lobbying for it), but everyone involved accepts that without THESL’s initiative, it would not have happened. This hypothetical was put to each of Mr. Heeney and Mr. Brophy, and they each answered two questions about it:
- 73.1. Should Toronto Hydro have the program’s results attributed to it at the outset? Mr. Brophy said yes, they should get attribution [page 24 of his cross-examination]. Mr. Heeney was more doubtful, but did say “That’s a difficult question, but I’m leaning towards yes” [page 20 of his cross-examination].
- 73.2. If the program continues year after year, should Toronto Hydro continue to have the program’s results attributed to it, even though it had no further involvement after the first year? Mr. Brophy still says yes, although he is more tentative about it [page 26 of his cross-examination]. Mr. Heeney is less willing to keep up the full attribution. He says [page 20-21 of his cross-examination]: “That’s a tougher argument. My leaning is that the share of attribution to which they are entitled ought to be revisited.”
74. It is submitted that the difficulty the two witnesses had in answering what (for those supporting the TRC Guide’s 100% attribution rule) should have been easy, is that they are trying to incent through an SSM activities that are not the purpose of an SSM.
75. In our submission, it is not reasonable for the Board to establish a standard attribution rate for all joint programs with non-rate-regulated entities. The range of value that an LDC can add in a partnership with other entities is too broad, and the number of different scenarios is too large. It is undoubtedly true that the LDC will almost never deserve 100% of the credit for the success of the program, of course. That is the one number that is pretty well certain to be wrong. But, leaving the extreme aside, whether the fair attribution is 10% or 90% will depend on a myriad of factors relating to who created the concept, who initiated the partnership approach, who carried the ball during development and negotiations, who brought in important third parties (such as existing channel partners), who made direct and indirect financial contributions, who took the early risk of program success or failure, and similar issues.

76. ***Conclusion – Attribution.*** We therefore urge the Board to answer the attribution question as follows:

76.1. For both planning and approval, and evaluation, purposes, the default attribution rule should be that TRC benefits are attributed to the partners delivering the program in proportion to their financial contributions.

76.2. Either the LDC or intervenors should be free to come forward with evidence demonstrating that attribution in percentages different from the default percentage is more appropriate, given the nature and extent of the LDC's actual contributions to the program, both in the test year and in prior years.

77. We note that, as with free riders, the locking-in concept is at work here as well. While our proposed resolution would not lock-in the plan attribution levels, in practice that may well be the result. If the Board determines at the planning and approval stage that an LDC should get 50% attribution for a particular program, given the LDC's planned contributions to the program, it would be unusual for that attribution to change after the fact. As long as the LDC did make the contributions it planned to make, the Board would have already assessed those contributions, and should not be expected to re-open that decision. Attribution would only change if the LDC's contributions to the program changed, which would be relatively rare.

### **Conclusion**

78. The School Energy Coalition believes it has participated responsibly in this proceeding, with a view to providing maximum assistance to the Board, and therefore requests that it be awarded 100% of its reasonably incurred costs.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

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Jay Shepherd  
Counsel to the School Energy Coalition



**MEMO**

August 5, 2005

FROM: Kai Millyard

TO: Enbridge DSM Audit Committee 2003

RE: LRAM and "true TRC" case

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The Committee asked Judith and me to assemble a list of potential LRAM adjustments which would represent an LRAM case that would meet the objective of using the 'best available information' in the LRAM calculation and to derive a best estimate of the 'true' TRC value of the savings produced in 2003.

The changes below were identified by both of us, as well as by Chris in his evidence in the current rates case. The "A List" are those items where the Committee has consensus, and the results are shown in the Table below compared to the volumes resulting from the SSM case. The B List includes one item that remains unresolved.

A List

- 1) Best estimates of savings in business market programs from ECONorthwest Report Table 3;
- 2) Efficient purchase DHW tanks: free ridership changed to 18%;
- 3) Water utilities and TAPS Partners: actual numbers of showerheads per household;
- 4) Condensing furnaces: change incremental costs to \$500 from \$1,314;
- 5) Condensing furnaces: change furnace savings to 385 m<sup>3</sup>;
- 6) Enhanced condensing furnaces: add gas savings of 321 m<sup>3</sup> plus electric savings of 730 kwh, plus incremental costs of \$1,200;
- 7) *EnerGuide for Houses* incremental costs changed to \$2,708;

B List

- 8) Window replacement: change free ridership from 25% to 80%.

Items 1, 2, 3, 5, 6, and 8 affect the LRAM. All items affect the TRC result.

The effect of all of these changes is to reduce the volumes saved from the SSM case by 3.4 percent in the LRAM A case, and by 3.5 percent in the B scenario. The TRC value of 2003 savings changes from \$125.9 million in the SSM Case to \$119.7 million in the LRAM A case and \$119.6 million in the LRAM B case. The volumes are shown on the Table below.

# Enbridge Gas Distribution F2003

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K27.1  
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Savings volumes for LRAM \*  
TRC value of savings

| Program                                       | Built into rates  | SSM Case          | LRAM Case A       | LRAM Case B       |
|-----------------------------------------------|-------------------|-------------------|-------------------|-------------------|
|                                               | m <sup>3</sup>    | m <sup>3</sup>    | m <sup>3</sup>    | m <sup>3</sup>    |
| <b>Residential Retrofit &amp; Replacement</b> |                   |                   |                   |                   |
| DHW Tank efficient purchase                   |                   | 3,582,540         | 2,937,683         | 2,937,683         |
| DHW Temp setback                              |                   | 5,970,900         | 5,970,900         | 5,970,900         |
| School kit                                    |                   | 130,700           | 130,700           | 130,700           |
| Water utilities                               |                   | 495,755           | 290,017           | 290,017           |
| TAPS Showerheads                              |                   | 1,416,874         | 1,416,874         | 1,416,874         |
| TAPS aerators                                 |                   | 258,998           | 258,998           | 258,998           |
| TAPS Pipe wrap                                |                   | 101,641           | 101,641           | 101,641           |
| TAPS Tank setback                             |                   | 191,230           | 191,230           | 191,230           |
| TAPS Bag Test                                 |                   | -                 | -                 | -                 |
| TAPS PARTNERS Showerheads                     |                   | 7,443,274         | 6,326,783         | 6,326,783         |
| TAPS PARTNERS aerator                         |                   | 943,138           | 943,138           | 943,138           |
| TAPS PARTNERS Pipe wrap                       |                   | 840,142           | 840,142           | 840,142           |
| TAPS PARTNERS Bag Test                        |                   | -                 | -                 | -                 |
| TAPS PARTNERS Programmable thermostats        |                   | 86,038            | 86,038            | 86,038            |
| Gas to gas furnace replacement                |                   | 3,429,113         | 1,944,342         | 1,944,342         |
| Enhanced Furnace Replacements (pilot)         |                   | -                 | 720,054           | 720,054           |
| Programmable thermostats - householder        |                   | 1,173,401         | 1,173,401         | 1,173,401         |
| Programmable thermostats - contractor         |                   | 240,238           | 240,238           | 240,238           |
| Window replacement                            |                   | 73,953            | 73,953            | 19,721            |
| Home Comfort Rewards                          |                   | 292,892           | 292,892           | 292,892           |
| Pool covers                                   |                   | 60,528            | 60,528            | 60,528            |
| <b>Program Total</b>                          |                   | <b>26,731,355</b> | <b>23,999,552</b> | <b>23,945,320</b> |
| <b>Residential New Construction</b>           |                   |                   |                   |                   |
| DHW Tank efficient purchase                   |                   |                   |                   |                   |
| DHW tank setpoint reduction                   |                   |                   |                   |                   |
| New Building Energy Efficiency                |                   | 12,000            | 12,000            | 12,000            |
| Construction heaters                          |                   | 1,513,392         | 1,513,392         | 1,513,392         |
| <b>Program Total</b>                          |                   | <b>1,525,392</b>  | <b>1,525,392</b>  | <b>1,525,392</b>  |
| <b>TOTAL RESIDENTIAL</b>                      | <b>35,860,287</b> | <b>28,256,747</b> | <b>25,524,944</b> | <b>25,470,712</b> |
| <b>Commercial</b>                             |                   |                   |                   |                   |
| Small Commercial – Furnace Replacement        |                   | 11,299            | 11,299            | 11,299            |
| Small Commercial – Thermostats                |                   | 3,019             | 3,019             | 3,019             |
| Steam Saver/Boiler Efficiency                 |                   | 3,216,288         | 3,216,288         | 3,216,288         |
| HVAC                                          |                   | 3,140,222         | 3,140,222         | 3,140,222         |
| Market Transformation                         |                   |                   |                   |                   |
| Monitoring & targeting                        |                   |                   |                   |                   |
| BUILDING ENVELOPE                             |                   | 54,514            | 54,514            | 54,514            |
| <b>Program Total</b>                          |                   | <b>6,425,341</b>  | <b>6,425,341</b>  | <b>6,425,341</b>  |
| <b>Multi-Residential</b>                      |                   |                   |                   |                   |
| Non profit                                    |                   | 362,240           | 362,240           | 362,240           |
| Water Conservation                            |                   | 1,826,723         | 1,826,723         | 1,826,723         |
| Private                                       |                   | 12,381,378        | 12,356,642        | 12,356,642        |
| <b>Program Total</b>                          |                   | <b>14,570,341</b> | <b>14,545,605</b> | <b>14,545,605</b> |
| <b>Large New Construction</b>                 |                   |                   |                   |                   |
| Buildings                                     |                   |                   |                   |                   |
| <b>Program Total</b>                          |                   | <b>1,834,137</b>  | <b>1,834,137</b>  | <b>1,834,137</b>  |
| <b>TOTAL COMMERCIAL</b>                       | <b>24,219,000</b> | <b>22,829,820</b> | <b>22,805,084</b> | <b>22,805,084</b> |
| <b>Industrial</b>                             |                   |                   |                   |                   |
| Agriculture                                   |                   | 5,031,081         | 5,031,081         | 5,031,081         |
| Heat recovery                                 |                   | 7,749,736         | 7,737,240         | 7,737,240         |
| HVAC                                          |                   | 2,203,511         | 2,203,511         | 2,203,511         |
| Market transformation                         |                   |                   |                   |                   |
| Monitoring/targetting                         |                   | 1,450,652         | 1,450,652         | 1,450,652         |
| Steam saver                                   |                   | 10,023,365        | 10,169,113        | 10,169,113        |
| <b>Program Total</b>                          | <b>30,330,000</b> | <b>26,458,345</b> | <b>26,591,597</b> | <b>26,591,597</b> |
| <b>TOTAL PROGRAMS DSM PLAN</b>                | <b>90,409,287</b> | <b>77,544,912</b> | <b>74,921,625</b> | <b>74,867,393</b> |
| TRC NPV (\$million)                           |                   | \$ 125.9          | \$ 119.7          | \$ 119.6          |

\* The volumes shown on this Table are 'fully effective' volumes. That is, they represent the first 12 months of savings after savings measures are installed. However, not all of these savings occur in the test year, which is what matters for lost revenue adjustment. The fraction of the volumes shown here which were initially built into rates, and which were actually recorded, varies. The difference in these fractions affects the final amounts in the LRAM account for clearance.

# ENBRIDGE GAS DISTRIBUTION F2003 DSM AUDIT SSM REPLICATION

## FINAL REPORT

PREPARED FOR THE AUDIT SUBCOMMITTEE

AUGUST 4, 2005

## INTRODUCTION

This project consisted of two discrete tasks as a part of the audit of the F2003 DSM year at Enbridge Gas Distribution.

- 1) Review and verify the accuracy of all calculations leading up to the proposed SSM amount.
- 2) Verify that the calculations are consistent with the OEB-approved method.

The Board-approved post-ADR volume target and TRC value was 72.5 million m<sup>3</sup> and “approximately \$130 million”<sup>1</sup>. This target is shown in Table 1 below.

The Evaluation Report estimates the pivot point at \$109.2 million and Actual at \$125.6 million, with an SSM at \$2.8 million, using the declining block incentive structure approved for 2003.

The screening inputs provided by the Company in the 2003 Evaluation Report were used to replicate the TRC and SSM calculations. With the clear rules for this process from the 2003 rates case the exercise was expedited in comparison to past years.

The Budget (pivot point) case using these rules is not adjusted except for two reasons:

- In Custom Projects measure lives are “neutralized” as a performance variable, by adjusting the Budgetted measure lives in each program to coincide with the mix of Actual measure lives achieved during the year, and
- To make adjustments when there was a clear error in the Budgetted numbers, for example due to a mathematical error.

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<sup>1</sup> RP-2002-0133 ADR Agreement, N1/T1/S1 pp 64 to 67.



### *Custom project measure lives*

The Board-approved Budget generally used a “default” 15 year measure life that is longer than the average measure life in the Actual projects. The Budget was therefore adjusted to conform with actual average measure lives. While this does not affect the first year gas savings target, it has a significant effect on reducing the full value of the savings over time as expressed as the net present value of the total resource cost test. The impacts of the adjustments in the various custom programs can be seen in the Evaluation Report Table 5-2. This Table documents the decline in the Budget from the ADR version of ~\$130 million to the \$109.2 million in the Evaluation report.

### *Correcting errors*

In the 2002 process an error had been identified in the way water savings were accounted for in the multi-residential program. This error had carried through to the 2003 Budget as well. When corrected, as in 2002, the pivot point drops significantly. This is described in the company’s Evaluation Report at Table 5-2 as well.

There are a number of programs which include more than one measure, such as showerheads and aerators which are delivered together. In some cases, screening has been done to date by blending together the expected savings from the various measures into one gas savings value, one water savings value and so on. In the actual case however, the mix of measures that are successfully installed will change from the ratios assumed in the budget. The company has been applying a series of “adjustment factors” to the savings values to reflect these shifts, however this becomes very time consuming to audit, and is not transparent to reviewers of the Evaluation. I recommend that in future screening exercises discreet measures be separated out from one another, where possible. This will increase transparency and reduce auditing time and costs.

A number of small errors were also identified and corrected, and at the conclusion, the results of the calculations were reproducible.

### *ECONorthwest report*

At this point the ECONorthwest Report became available, raising further recommendations for changes to certain savings estimates and free rider rates. The Company agreed with many of these recommendations and they were incorporated into the TRC and SSM calculations. This includes adjustments to savings for a number of specific custom projects, most notably those involving steam traps.

ECONorthwest was also asked by the Audit Committee to estimate 'actual' savings in all custom projects, which may differ from reported savings, beyond those already adjusted as described above. Small adjustment factors were provided for certain custom programs, but with a caveat about their statistical significance. These adjustments have not been included in the SSM case.

There is a group of programs where the recommendation of ECONorthwest was not consistent with the 2003 rules and different values are used to calculate savings and the SSM. For Efficient tank procurement, TAPS and TAPS Partners measures (except setback thermostats) ECONorthwest suggested using a 20% free rider rate, which is a generic value used in California for all residential programs which have no better information available. However the 2003 rules state that prescriptive program inputs remain the same in the Budget and in the Actuals.

The rules are silent on a situation that occurs when a participant is defined as a household, but different numbers of showerheads for example may be installed than were budgetted. When the Committee considered this question for 2002, it decided that the number of showerheads per house was not controllable by the Company, and so this value was left constant in the Actuals case for SSM purposes. The same approach has been applied for 2003. This will be adjusted in the LRAM case however.

All members of the Audit Committee agreed on a treatment of these issues for SSM purposes. The final result for 2003 appears in Table 1 below.

## Enbridge Gas Distribution F2003

Table 1

| Program                                             | Initial<br>BUDGET<br>ADR  | Final<br>BUDGET<br>SSM    | ACTUAL                    | Initial<br>BUDGET<br>ADR | Final<br>BUDGET<br>SSM | ACTUAL                |
|-----------------------------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------------------------|-----------------------|
|                                                     | Net annual<br>gas savings | Net annual<br>gas savings | Net annual<br>gas savings | NPV DSM Plan             | NPV DSM Plan           | NPV DSM Plan          |
| Residential Retrofit & Replacement<br>Program Total | 23,485,174                | 23,485,675                | 26,731,355                | 54,924,804               | \$ 57,832,745          | \$ 62,681,066         |
| Residential New Construction<br>Program Total       | 4,456,000                 | 4,456,000                 | 1,525,392                 | \$ 5,688,638             | \$ 5,688,638           | \$ 260,222            |
| Commercial<br>Program Total                         | 10,052,441                | 10,052,441                | 6,425,341                 | \$ 14,542,291            | \$ 8,995,519           | \$ 4,141,720          |
| Multi-Residential<br>Program Total                  | 7,977,591                 | 8,513,091                 | 14,570,341                | \$ 31,085,474            | \$ 18,889,189          | \$ 22,560,457         |
| Large New Construction<br>Program Total             | 786,804                   | -                         | 1,834,137                 | \$ 1,763,898             | \$ 2,168,308           | \$ 2,496,931          |
| Industrial<br>Program Total                         | 25,771,436                | 25,771,436                | 26,458,345                | \$ 22,803,595            | \$ 19,690,216          | \$ 36,231,337         |
| <b>PROGRAMS DSM PLAN</b>                            | 72,529,446                | 73,065,446                | 77,544,912                | \$ 130,808,700           | \$ 113,264,615         | \$ 128,371,733        |
| Overheads                                           |                           |                           |                           | \$ 2,687,128             | 2,687,128              | 2,437,184             |
| <b>Total NPV DSM PLAN</b>                           |                           |                           |                           | <b>\$ 128,121,572</b>    | <b>\$ 110,577,487</b>  | <b>\$ 125,934,549</b> |
| TRC in excess of target (14.3%):                    |                           |                           |                           |                          |                        | \$ 15,357,062         |
| SSM @ 18% on first 10%                              |                           |                           |                           |                          |                        | \$ 1,990,395          |
| SSM @ 15% on remainder                              |                           |                           |                           |                          |                        | \$ 644,897            |
| Total SSM:                                          |                           |                           |                           |                          |                        | \$ 2,635,292          |