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May 26, 2009

**VIA COURIER**

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

**Re: Enbridge Gas Distribution Inc. ("Enbridge")**  
**EB-2009-0103 2009 DSM Input Assumptions**

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In accordance with the Ontario Energy Board's (the "Board") Notice of Application and Hearing and Procedural Order No.1, enclosed please find the submission of Enbridge.

This submission has been filed through the Board's RESS, two copies are being delivered by courier and it will be available on the Enbridge website at [www.enbridge.com/ratecase](http://www.enbridge.com/ratecase).

If you have any questions, please contact the undersigned.

Yours truly,

A handwritten signature in blue ink that reads "Bonnie Jean Adams".

Bonnie Jean Adams  
Regulatory Coordinator

cc: EB-2009-0103 Interest Parties (via email)

**IN THE MATTER OF** the *Ontario Energy Board Act 1998*,  
S.O. 1998, c. 15, (Schedule B);

**AND IN THE MATTER OF** an application by Enbridge Gas  
Distribution Inc. seeking approval of certain demand side  
management input assumptions for the 2009 program year.

**REPLY SUBMISSION OF  
ENBRIDGE GAS DISTRIBUTION INC.**

**Introduction**

1. Enbridge Gas Distribution Inc. ("EGDI") appreciates the opportunity to provide the following response to the written submissions filed in respect of the input assumptions EGDI proposes for the 2009 DSM program year. EGDI notes that the primary focus of Intervenor is on process rather than substantive issues. The following submissions are in response and provide information to address any specific questions or concerns raised.

**Context of EB-2009-0103 Proceeding**

2. On February 11, 2009, the Board issued a letter and the draft report of Navigant Consulting Inc. which considered DSM input assumptions for 2010 (EB-2008-0346). The input assumption portion of that process just recently concluded with a Board Decision on April 29, 2009. On April 1, 2009, EGDI filed with the Board its updated Input Assumptions and Market Transformation Programs for the 2009 DSM Plan. On April 14, 2009, the Board issued a letter requiring the Utilities to file a one-year plan for 2010 under the DSM framework approved in EB-2006-0021 (EB-2009-0154). A short summary of relevant timelines is set out on the next page.

<b>Date</b>	<b>EB-2009-0103</b>	<b>EB 2008-0346 and EB 2009-0154</b>
February 11		Draft Navigant Report on 2010 Assumptions released by the Board
March 13		Utility and intervenor comments on Draft Assumptions for 2010 submitted as per Board schedule
March 30	Utilities circulate full 2009 assumption package and back-up substantiation to EAC	
April 1	Utilities submitted 2009 Assumption Update to OEB	
April 14		Board letter released requiring one-year plan for 2010 program year
April 29		Board Decision released related to input assumptions for 2010
May 4	Procedural Order released by OEB with circulation to interested parties for 2009 input assumption proceeding	
May 19	Intervenor Comments due to Board	
May 26	EGDI Receives Final Intervenor Submission	
May 26	Utility response due to Board	
End of May		EGDI to file 2010 DSM Plan

3. EGDI has been operating within the rules outlined in the Board's EB-2006-0021 (DSM Generic Hearing) Decision and is not requesting that the Board re-open this Decision. Similar to past assumption updates, EGDI's April 1, 2009 filing was done based on the best available information at that time. This reflected information from the last completed audit (2007 Audit filed with the OEB July 31, 2008), comments received from any parties, including the Evaluation and Audit Committee ("EAC"), and any updated studies or information that was considered "best available

information” at the time of the April 1, 2009 filing. This included a detailed review of intervenor recommendations for similar input assumptions made in March 2009 as part of EB-2008-0346. Following the April 1, 2009 filing date, EGD I has been amenable to receive additional advice or information.

4. A full set of the proposed 2009 assumptions and backup substantiation was provided to the EAC on March 30, 2009. This provided over a month’s time for review and comment prior to a Procedural Order being generated by the Board. Many of the input assumptions are the same as or similar to those in previous proceedings and audit reviews that included input and agreement from the EAC. EGD I was also aware that one of the EAC members, Mr. Neme on behalf of GEC, was contracted on behalf of a group of intervenors to conduct a detailed review of many of the assumptions in the similar and parallel proceeding (EB-2008-0346). EGD I therefore has difficulty understanding GEC’s recent criticisms about its inability to review and comment.
5. Interested parties have had an opportunity to provide Board Staff with comments and information prior to the draft Navigant Report being issued. They then had a further opportunity to comment in respect of the inputs and assumptions set out in the Navigant Report, and they have had seven weeks to provide comments to the Board in respect of EGD I’s proposed 2009 input assumptions.
6. The fact of the matter is that there have been a number of concurrent proceedings, and it should come as no surprise that EGD I’s April 1, 2009 assumption filing did not incorporate relevant input assumptions approved by the Board in its April 29, 2009 Decision in respect of 2010. These are the factors which underlie the current situation, not any intentional conduct on the part of the Utilities.

**Summary of Recommended Approach for 2009 Program Year**

7. EGD I proposes that where specific input assumptions from the Navigant study approved by the Board in EB-2008-0346 are relevant to EGD I's 2009 DSM program year, that EGD I adopt these assumptions as the best available information, subject to necessary and appropriate additional information or corrections to reflect the realities of 2009. There are, for example, some programs and measures that will exist in 2009 that will not continue in 2010, and vice versa. Program specific information for 2009 may not be applicable to 2010. Accordingly, it is submitted that it is inappropriate to simply adopt the input assumptions approved for 2010 "as is" for the purposes of 2009.
8. Briefly stated, EGD I proposes that the assumptions approved by the Board in EB-2008-0346, where relevant for 2009, be acknowledged as the "best available information" and that such further changes and additional information required for 2009, as noted below, be accepted by the Board.
  - (a) The input assumptions based on best available information, as attached in Appendix A should be approved. This table is based on the information submitted by EGD I in its April 1, 2009 submission which has been updated (as indicated by cells highlighted in blue) to align with the 2010 input assumptions approved by the Board in EB-2008-0346 where they are applicable to 2009. All cells that are not highlighted indicate assumptions related to the 2009 DSM Plan that are not referenced in the EB-2008-0346 decision, either because they are programs that are not proposed for 2010, or because it is based on the 2009 program design. Cells highlighted in yellow indicate values that are specific to 2009 based on the incremental costs known for 2009.
  - (b) EGD I notes that one relevant technology assumption (residential and low income programmable thermostats) referenced in the Navigant Report appears to contain a clerical error. The savings values for natural gas and electricity are highlighted in green in Appendix A. The values in the February 6, 2009 Navigant report are based on load research, which EGD I agrees is the best available information. However, in the April 16<sup>th</sup> Navigant Report it appears that the savings values represent duplicate adjustments for behavioural factors. The value shown in Appendix A reflects the Navigant billing analysis value, without double-counting the behavioural adjustment. EGD I submits this amount should be used.

- (c) The Custom Resource Acquisition Measure life assumptions as outlined in document 2 of EGDI's April 1, 2009 submission should be accepted. EGDI understands that there have not been any concerns raised about these assumptions.
- (d) The 2009 Market Transformation programs as outlined in Document 4 of EGDI's April 1, 2009 submission should be accepted. EGDI understands that there have not been any concerns raised about these programs.

### **EAC Opportunity to Provide Comments/Timing**

9. In the submission of the 2008 Assumption Update (EB 2008-0384), EGDI indicated that the updated assumption list for 2009 would be filed by the end of first quarter 2009. The EAC accepted and endorsed this timing. Ideally, any updates to input assumptions during the multi-year plan should be approved prior to the start of a program year. Due to the consultation process for the 2007 DSM Audit and 2008 Input Assumptions, EGDI was not in a position to file for 2008 assumptions until late in 2008, which was agreed by both EGDI and the EAC to be later than preferred. Both EGDI and its EAC agreed on the deadline of Q1 2009 to submit updates to 2009 input assumptions.
10. It is appropriate to provide a brief high-level list of the opportunities that the EAC have had to review draft assumptions and provide input that relate to those filed for 2009.
  - Past audit process which included detailed discussions of assumptions relevant to 2009 (conducted over many meetings with the Auditor and/or EGDI between spring 2008 and fall 2008).
  - Recent EGDI Consultative meetings held July 29, 2008, November 25, 2008 and April 28, 2009.
  - Advice provided for recent studies including programmable thermostat statistical modeling, and studies by Summit Blue (free ridership, spillover and deemed savings).
  - Detailed discussion and review through GEC (Mr. Neme) of similar assumptions referenced by Navigant in EB-2008-0346.

- Review of EGDl comments on Navigant assumptions, which were closely aligned with the assumptions in this proceeding.
- March 30, 2009 circulation and request for comments on the 2009 assumptions that were submitted in this proceeding.
- Formal comment process as outlined in EB-2009-0103 Procedural Order.

11. EGDl operates under the assumption that if an EAC member or other stakeholder has information they consider relevant to an input assumption, the information will be forwarded to EGDl without the Board first constituting a proceeding to consider input assumption updates. EGDl is prepared to receive and review such information on an ongoing, informal basis. If there is additional information in the possession of any stakeholder, presumably it would have been forwarded to EGDl earlier and would now have been placed on the public record.

#### **Changes to the Generic Decision (EB-2006-0021) Framework**

12. CME and IGUA have recommended that the Board re-open the EB-2006-0021 Decision and apply retrospective decision making on program assumptions for SSM purposes (i.e., "...best available information at the time of the 2009 audit..."). This would be a significant deviation from past Board decisions that have reviewed this issue and, importantly, is inconsistent with the complete settlement these parties reached as part of the Generic Proceeding (EB-2006-0021). To EGDl's knowledge, all previous Board decisions, including the Generic Decision, have rejected what CME, SEC and IGUA now propose.
13. IGUA supported the proposed change on the basis that "...the Utilities are in a period between the current DSM program framework as set by the Generic Decision and the next generation DSM program framework." This is factually incorrect. EGDl's 2009 DSM plan was approved in EB-2006-0021. 2009 is not a transition year. 2009 is part of the current multi-year plan and is subject to the framework approved by the Generic Decision which was the subject of a complete settlement, which CME, SEC and IGUA supported.

14. In its April 14<sup>th</sup>, 2009 letter in EB-2008-0346, the Board has ordered the gas Utilities to file a one-year DSM plan for 2010, which does not contemplate any changes to the DSM framework. Specifically, the Board stated that:

“It is expected that the 2010 plans will be filed under the current DSM framework...”

15. In addition, it should be noted that the threshold required to trigger a review of the framework established by the Generic Decision is one of “undue harm”. Accordingly, it is incumbent upon CME, SEC and GEC to establish that exceptional circumstances exist which warrant revisiting any aspect of the framework. EGDI submits that the required threshold of exceptional circumstances is even more pertinent and necessary where the party now seeking the change was a signatory to a complete settlement in respect of the framework in the first instance. EGDI states that CME, SEC and GEC are simply attempting to expand the scope of this proceeding beyond what the Board contemplated, and their request should be dismissed.

#### **GEC’s Concerns Related to Low Flow Showerheads**

16. GEC’s May 15, 2009 submission commented on the Board-approved savings value for low flow showerheads. The load research value recommended by Navigant and ultimately approved by the Board is based upon the highest standard of information (i.e., load research), rather than a theoretical value. This approach resolves the previous theoretical problems highlighted in the Summit Blue Report and subsequently highlighted by the most recently completed audit. Each comment provided in the GEC submission is addressed below.

#### **A. Use of recent load research vs. previous theoretical value**

17. The concerns expressed in respect of the use of theoretical values prompted the move to the more research intensive load research approach. EGDI believed that the previous values significantly underestimated the benefits to ratepayers, but used



these for 2008, since load research was not possible in the timeframe provided. The problems were highlighted by the authors of the previous study, as follows:

Several aspects to savings from showerhead retrofits—related both to baseline showering behavior and to potential changes in behaviour after retrofit—contribute to uncertainty in savings from showerhead replacement (Table E-1 - Recommended annual savings values are shown in a column labeled as such). Recognizing that some parameters have not been well studied in Ontario (or elsewhere), we built an uncertainty analysis into our methodology. Results of this analysis suggest about 50% uncertainty in savings estimates, owing primarily to uncertainty in several key inputs, including (but not limited to) the degree to which shower flow is throttled by users. Excluding adjustments related both to baseline showering behaviour and to potential changes in behaviour after retrofit, the uncertainty in the estimates drops from 50% to between 20% and 30%. Field research in the Enbridge and Union Gas service territories is recommended on the factors shown in table E-1 to provide better estimates of these parameters (or direct estimates of retrofit impacts) in order to mitigate this uncertainty.”<sup>1</sup>

18. In addition, the most recently completed DSM audit did not recommend use of the previous theoretical values in the manner GEC is suggesting. The external third party auditor recommended:

**“Develop savings values for showerheads using a sample of metered Enbridge customers.** Meter tests for showers. Enbridge should conduct a study on low-flow showerheads that involves metering a randomly selected sample of participants before and after the new showerhead is installed.”<sup>2</sup>

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<sup>1</sup> “Resource Savings in Selected Residential DSM Prescriptive Programs”, Summit Blue Consulting LLC. June 4, 2008. Page 1.

<sup>2</sup> “Audit Report on Enbridge Gas Distribution 2007 DSM Evaluation”. EcoNorthwest. June 24, 2008. Page 22.

**B. Sampling of Load Research Data**

19. The homes that took part in the showerhead study were a sample from the franchise-wide sample that is used for ongoing load research work. It is a stratified random sample from all areas of EGD's franchise area and is representative of the population base. Every house in the sample that did not have low-flow showerheads and for which we had a full year of clean water heating load data was included in the study. Water heating consumption load was isolated for purposes of data collection. Using water heating specific monitoring data from this existing sample of customers was the most cost-effective and least intrusive method for collecting data for the load research analysis.

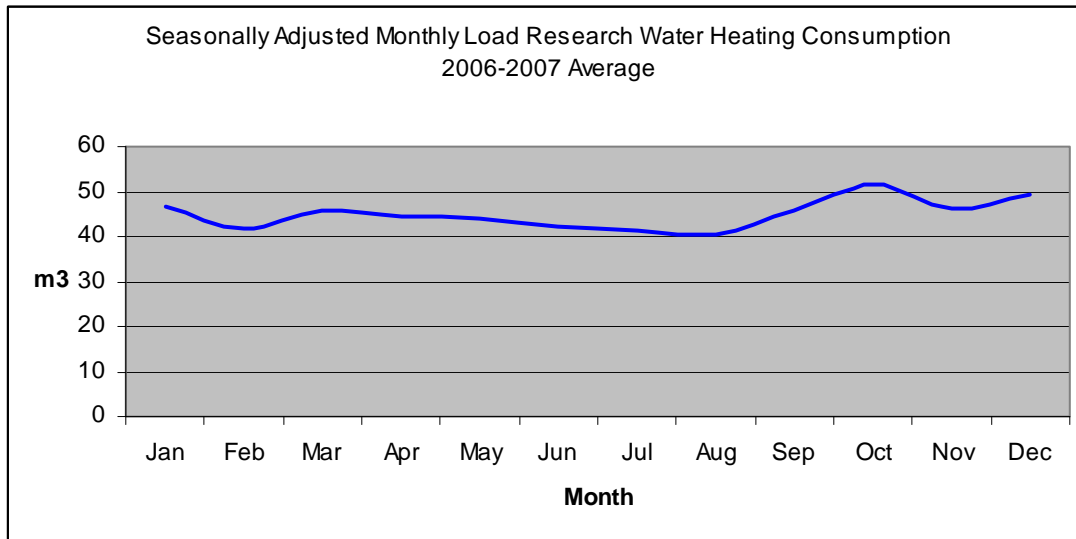
**C. Statistical Analysis**

20. It was recognized that members of the EAC are not statisticians. Accordingly, as part of the discussions with EAC members about this research, it was recommended that the statistical work be conducted by a third party firm. EGD Inc. agreed with this EAC recommendation and proceeded on this basis. Statistical analysis of the load research data was conducted by an independent third party expert firm SAS Institute (Canada) Inc. The primary modeler of the load research is a statistical expert that led the expansion of SAS expertise and offerings in data mining, statistics and time series analysis into the Canadian market.

**D. Seasonality**

21. Seasonality factors are used by the Company in the weather normalization process necessary for budgeting and planning. The seasonality factors are calculated using the ratio of each month's consumption relative to the average of summer consumption (July and August) and the factors are used to isolate baseload. As per standard practice, the load research water heating data was seasonally adjusted using the aforementioned seasonality factors.

22. For illustration purposes, a two-year average for seasonality factors is shown below. This shows that there are seasonal influences on domestic hot water use in a residential home. This trend is similar on an annual basis.



23. GEC suggested that there appeared to be a downward trend at the completion of monitoring (around the August-September timeframe) and that “this is the most troubling aspect of the report as it raises questions about the reasonableness of the conclusion that savings were quite substantial.” Although each individual year may vary slightly, it can be seen from the typical pattern above that the opposite occurs. In fact, around the August-September timeframe the seasonality pattern reverses from a decline to an incline. If seasonality factors had not been applied to the model, the savings would have been greater than what is stated in the SAS load research report.

#### **E. GEC Intuition**

24. GEC states that it is intuitive that “if both sets of households were to switch to the same low flow showerhead, one would expect the post-installation graphic lines to merge together.” However, the fact that the post-installation consumption is not identical in both groups after installation is completely consistent with expected behavior. Since people who have lower flow showerheads in their home may have

been involved in that decision, it is expected that as a group they may also exhibit more behavior that will lower consumption, such as taking shorter showers than those who were content to keep the highest flow showerheads. A significant benefit to load research is to capture hard to predict behavioral aspects. If customer behaviors were predictable in the manner GEC suggest, it would have removed the large uncertainties in the previous theoretical calculations, thereby making it unnecessary to conduct load research.

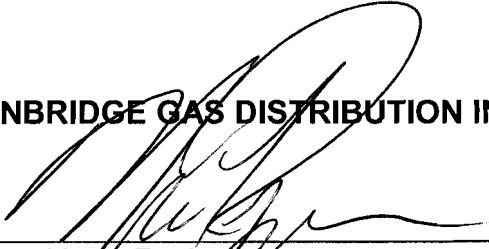
### **Conclusion**

25. In summary, EGD I submits that the load research values proposed by Navigant and approved by the Board are far superior to any previous theoretical calculations. EGD I recommends adoption of these values in 2009.
26. EGD I requests that the Board-approved Navigant 2010 Input Assumptions be accepted, subject to the several required changes and additions noted.
27. EGD I respectfully requests that the Board issues its decision in this proceeding as quickly as possible so as to assist EGD I in respect of its 2008 DSM audit filing and to eliminate any uncertainty about 2009 input assumptions for the purposes of the programs which EGD I is currently undertaking.

All of which is respectfully submitted.

Dated: May 26, 2009.

**ENBRIDGE GAS DISTRIBUTION INC.**



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Per: Norm Ryckman  
Director, Regulatory Affairs





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