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April 20, 2018

**VIA RESS, EMAIL and COURIER**

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

Dear Ms. Walli

**Re: Enbridge Gas Distribution Inc. (“Enbridge”)  
Ontario Energy Board (“Board”) File Number EB-2017-0324  
2015 Demand Side Management (“DSM”) Clearance of Deferral and  
Variance Accounts – Argument-In-Chief**

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In accordance with the Board’s Procedural Order No. 2 dated April 10, 2018, enclosed please find Enbridge’s Argument-In-Chief in the above noted proceeding.

This submission has been filed through the Board’s Regulatory Electronic Submission System and will be available on the Enbridge website at:

<https://www.enbridgegas.com/about/regulatory-affairs/>

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Stephanie Allman  
Regulatory Coordinator

cc: Mr. Dennis M. O’Leary, Aird & Berlis LLP (via email)  
All Interested Parties EB-2017-0324 (via email)

## ONTARIO ENERGY BOARD

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

**AND IN THE MATTER OF** an application by Enbridge Gas Distribution Inc. for an order or orders approving the balances and the clearance of certain Demand Side Management Variance Accounts into rates, within the next available QRAM following the Board's approval.

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### ARGUMENT IN CHIEF OF ENBRIDGE GAS DISTRIBUTION INC.

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## **A. INTRODUCTION**

1. Enbridge Gas Distribution Inc. (“Enbridge”, or the “Company”) is applying to the Ontario Energy Board (the “OEB”, or the “Board”) pursuant to Section 36 of the *Ontario Energy Board Act, 1998*, as amended (“Act”) for an Order or Orders approving the final balances in certain 2015 Demand Side Management (“DSM”) Deferral and Variance Accounts (hereinafter “Application”). The Company is also seeking approval for the disposition of the balances in these accounts through a one-time adjustment in rates, within the next available QRAM following the Board’s approval.<sup>1</sup>

2. As outlined in the Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134) (“Guidelines”):

Consistent with past practices, recovery and disposition of DSM related amounts (i.e., DSM Variance Account (“DSMVA”), DSM Incentive Deferral Account (“DSMIDA”), and LRAM Variance Account (“LRAMVA”)) will be filed by the natural gas utilities annually, based on the actual amount of natural gas savings resulting from the utilities’ DSM programs in relation to the annual plans targets. The DSM amounts include program spending, shareholder incentive amounts and lost revenues in relation to the DSM programs delivered by the natural gas utility.<sup>2</sup>

3. The deferral and variance accounts which are the subject of this proceeding relate to DSM activities in 2015. Though the OEB’s current DSM Framework for Natural Gas Distributors<sup>3</sup> (“DSM Framework”) encompasses 2015-2020, the Board directed that 2015 would act as a transition year and the “gas utilities should roll-forward their 2014 DSM plans, including all programs and parameters (i.e., budget, targets, incentive structure) into 2015.”<sup>4</sup>

4. The specific accounts which are the subject of this Application and the balances recorded are as follows:

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<sup>1</sup> Exhibit A, Tab 1, Schedule 2.

<sup>2</sup> Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134), page 36.

<sup>3</sup> EB-2014-0134, Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020) (hereinafter, “DSM Framework”)

<sup>4</sup> DSM Framework, Section 15.1, page 37.

Table 1

<b>2015 DSM Deferral and Variance Accounts and Balances</b>	
Demand Side Management Variance Account (“DSMVA”)	\$ 825,460
Demand Side Management Incentive Deferral Account (“DSMIDA”)	\$ 10,077,695
Lost Revenue Adjustment Mechanism Variance Account (“LRAMVA”) (Reimbursable to Ratepayers)	\$ (72,589)
<b>Total Amount Recoverable</b> (*Numbers may not add up due to rounding)	<b>\$ 10,830,567 *</b>

5. Enbridge filed the Application on December 19, 2017 together with supporting evidence concerning the disposition and recovery of the above 2015 deferral and variance accounts and requested approval for the disposition of these amounts. Board Staff and intervenors filed written interrogatories by March 9, 2018, to which Enbridge filed responses on April 6, 2018.
6. On April 10, 2018, the Board issued Procedural Order No. 2, requiring Enbridge to file its Argument in Chief by April 20, 2018. This document is Enbridge’s Argument.
7. New to the evaluation and audit process for the 2015 DSM year, as directed by the Board, was the transfer of responsibility for oversight of the annual evaluation, measurement and verification (“EM&V”) process from the utilities to OEB Staff.<sup>5</sup>
8. This Application reflects all 2015 verified program results as presented in the Evaluation Contractor’s (“EC”) final report: The Ontario Gas DSM Evaluation Contractor 2015 Natural Gas Demand Side Management Annual Verification report by DNV GL (“DNV” or the “EC”) dated December 20, 2017<sup>6</sup> (“the EC Report”) with the exception of the incomplete Net-to-Gross (“NTG”) Study<sup>7</sup> findings (encompassing Custom Commercial, Custom Industrial and Run It Right offers) which Enbridge submits should not be applied to 2015 results for the reasons stated in this Argument.
9. The retroactive adjustment of 2015 results using NTG Study findings estimated in 2017 and outlined in the December 20, 2017 EC Report will have a major negative impact on the

<sup>5</sup> Exhibit A, Tab 1, Schedule 3, page 2, paragraph 4.

<sup>6</sup> Filed in EB-2015-0245.

<sup>7</sup> “2015 Natural Gas Demand Side Management Custom Savings Verification and Free-ridership Evaluation” was filed in EB-2015-0245.

shareholder incentive to be recovered through the Demand Side Management Incentive Deferral Account (“DSMIDA”). Table 2 below compares the DSM values as set out in Enbridge’s pre-audit results, the EC’s recommended amounts and the post-audit amounts which Enbridge submits should be approved in the Application.

Table 2<sup>8</sup>

2015 DSM Accounts	Enbridge Pre-Audit	Audit Opinion of EC <sup>9</sup>	Enbridge Application
Shareholder Incentive (DSMIDA)	\$10,318,594	\$6,207,339	\$10,077,695
Lost Revenue <sup>10</sup>	\$28,800	\$16,405	\$28,976
DSMVA	\$825,460	\$825,460 (not reviewed)	\$825,460

10. This Argument has been organized as follows.

- a) The first part (Section B below) deals with the inappropriateness of applying the results of a NTG Study completed in 2017, outlined in the EC report dated December 20, 2017 to the 2015 DSM program results. Briefly stated, Enbridge submits that a retroactive adjustment to 2015 DSM program results by the EC as directed by Board Staff using the findings made in the incomplete and flawed NTG Study is inconsistent with the Board ordering that 2015 be a rollover transition year and the requirements of the DSM Framework and the Board’s decision following the 2015-2020 Multi-Year DSM proceeding.
  
- b) The second part (Section C below) deals with the specific concerns that Enbridge has in respect of the NTG Study. The most significant of these concerns is the omission of secondary attribution in the NTG calculation. Other concerns are also discussed. The issues noted in relation to the NTG Study raise questions about its credibility and reliability not only for 2015 but in respect of its application to the results of subsequent years and its use even on a prospective basis. These

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<sup>8</sup> Reproduced from Exhibit A, Tab 1, Schedule 3, page 4,

<sup>9</sup> Filed in EB-2015-0245. Note that the EC original report October 12, 2017 was corrected following Enbridge identifying errors made by the EC. The revised report was dated December 20, 2017. Table 2 values reflect amounts in December 20, 2017 report.

<sup>10</sup> The above table includes the EC calculated and the Enbridge calculated Lost Revenue value for comparison to align with audit opinion category presented in the EC’s Annual Verification Report. For clarity, the LRAMVA value requested for disposition in this Application is outlined in Table 1 which amount is reimbursable to ratepayers.

concerns are corroborated as being real and material by the expert reports of Navigant Consulting, Inc. ("Navigant")<sup>11</sup> and Research into Action, Inc. ("RIA").<sup>12</sup>

11. Ultimately, Enbridge submits that the Board should approve the Application as filed, including clearance of the 2015 DSM accounts as indicated in Table 1, above.

**B. The Board did not intend 2015 DSM results to be adjusted retroactively**

12. The difference<sup>13</sup> between the amounts sought for clearance in this Application, and the amounts indicated in the EC Report relate almost entirely to Board Staff's direction to the EC to retroactively apply the NTG Study adjustment factors to historic results. Enbridge submits that approach is not appropriate.

13. Enbridge's view is that the Board's Decision and Order of January 20, 2016 as confirmed in its revised Decision and Order of February 24, 2016 (together the "DSM Plan Decision") in respect of the utilities' 2015 to 2020 DSM Plans (EB-2015-0029 / 0049)<sup>14</sup> along with the DSM Framework do not provide that the NTG Study values are to be used in the determination of the Company's 2015 DSM program year results in a retroactive manner. Enbridge submits that the direction regarding retroactivity promoted by Board Staff is inconsistent with the DSM Plan Decision for the purposes of the evaluation of the Company's 2015 DSM results.

14. Simply stated, Board Staff directed the EC to take the values as proposed in the NTG Study and use those to adjust the Company's 2015 DSM Program results using these revised values.<sup>15</sup> Board Staff did not direct the EC to at the same time adjust the targets for 2015 (which were set based upon the Board's direction that 2015 should be a roll over from 2014). The consequence of the direction by Board Staff is that an entirely different set of NTG values (developed using an entirely different methodology) was used to set targets for 2015 and different NTG adjustment values, being those generated by the NTG Study, would

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<sup>11</sup> Navigant Consulting, Inc., "Net-to-Gross Policies: Cross-Cutting Jurisdictional Review" and Memorandum titled "Discussion of Selected NTG Estimation Issues", December 14, 2017, filed at Exhibit B, Tab 6, Schedules 1 and 2. (Hereinafter, the "Navigant Reports")

<sup>12</sup> Research into Action, Inc., "Review and Analysis of Net-to-Gross Assessment Issues for Natural Gas Demand Side Management Custom C&I Programs", August 25, 2017, filed at Exhibit B, Tab 6, Schedule 3. (Hereinafter, the "RIA Report")

<sup>13</sup> The different amounts at issue are summarized in Table 2, above.

<sup>14</sup> EB-2015-0029/0049, Decision and Order dated January 20, 2016 and revised Decision and Order dated February 24, 2016.

<sup>15</sup> Exhibit A, Tab 1, Schedule 3, pages 12-13.

be used to adjust 2015 results. Aside from this being a comparison of “apples to oranges” it is contrary to the DSM Plan Decision. This is explained more fully in the following paragraphs.

**(i) 2015 Was a Roll Over Year**

15. In the DSM Framework, the Board directed the gas utilities to

roll-forward their 2014 DSM plans, including all programs and parameters (i.e., budgets, targets, incentive structure) into 2015. ... [Further] ... The gas utilities should increase their budgets, targets and shareholder incentive amounts in the same manner as they have done throughout the current DSM Framework (i.e., 2013 updates to 2014 should now apply to 2014 updates to 2015).<sup>16</sup>

The Company complied and increased targets, budgets and the shareholder incentive in the exact same manner as the 2014 Plan. Similarly, 2015 values involved a roll over and incorporation of the same inputs, assumptions and NTG values approved in the 2014 audit.

16. The DSM Plan Decision approved Enbridge's 2015 budget, targets, metrics, scorecards and shareholder incentives as outlined in Enbridge's Multi-Year Plan. In its DSM Plan Decision, the OEB reconfirmed the direction provided in the DSM Framework that "2015 would act as a transition year to the new multi-year DSM plans and that the gas utilities should carry forward and increase their 2014 DSM budgets in the same manner done from 2013 to 2014".<sup>17</sup> The Board stated that it "approves the gas utilities proposed 2015 DSM budgets. The OEB finds that the gas utilities have appropriately carried forward their 2014 DSM budgets into 2015 and have reasonably addressed the key priorities and objectives outlined in the DSM Framework during the transition year."<sup>18</sup> The Board further stated in its Decision that it "approves Union and Enbridge's proposed 2015 metrics and targets for all scorecards. The OEB believes that it would be inappropriate at this time to make a change to the 2015 targets with the year completed."<sup>19</sup>

17. It should be recalled that during the 2015-2020 DSM Multi-Year Plan Hearing, certain parties expressed concern about Enbridge rolling over into 2015 without adjustments to its targets and incentive structures notwithstanding the clear wording of the Framework and the

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<sup>16</sup> DSM Framework, page 37.

<sup>17</sup> DSM Plan Decision, page 56.

<sup>18</sup> DSM Plan Decision, page 57.

<sup>19</sup> DSM Plan Decision, page 63.

Board's direction that 2015 should be a rollover year whereby the "OEB directed the utilities to set targets for their 2015 DSM programs using the same methodology they used from 2012 to 2014."<sup>20</sup> In its DSM Plan Decision as noted above, the Board confirmed that what Enbridge did was in compliance with the Framework, that is, that 2014 values were appropriately used to generate 2015 targets.

18. In the Company's view, since 2015 budgets and targets were the result of the Board's direction to roll over from 2014 budgets and targets, it is inappropriate to retroactively apply adjustments to a program year derived from a different set of input assumptions, including NTG values. Enbridge believes this is unreasonable and inconsistent with the spirit of the Board's instructions as part of the Multi-Year DSM Framework. In its revised DSM Plan Decision, the Board confirmed this interpretation by stating that: "input assumptions and net-to-gross adjustment factors are finalized for a given year based on the previous year's final DSM audit."<sup>21</sup> In this case, in accordance with the Board's statement, the input assumptions and NTG factors for the 2015 year results were finalized based on the 2014 final audit.

19. Retroactive application of the NTG Study outcomes to 2015 results unreasonably means that the shareholder incentive which was available in Enbridge's approved 2015 DSM plan is no longer available because different NTG adjustment values from those which the utilities were directed to rely upon for the establishment of 2015 targets, derived from a different methodology, are instead proposed to be used to calculate the shareholder incentive.

20. Where parties now assert that new NTG values can be used to evaluate 2015 DSM results, this is effectively a collateral attack against the Board's determinations in the DSM Framework and DSM Plan Decision that 2014 values would be rolled over for 2015. Enbridge submits that such a collateral attack is inappropriate as a matter of administrative law and should be rejected.

**(ii) DSM Plan Decision**

21. In section 5.2.6 of the DSM Plan Decision, the Board approved Enbridge's custom commercial and industrial offers as proposed. In addressing the custom commercial and industrial offers, the Board clearly stated that:

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<sup>20</sup> DSM Plan Decision, page 63.

<sup>21</sup> DSM Plan Decision (revised), page 3.

The OEB does not expect the gas utilities to rely on a predetermined free ridership rate for the duration of the 2017 to 2020 term. In 2016, the free rider rates will be updated based on the results of the net-to-gross study and the annual evaluation process. Annually, the evaluation process will continue to inform the free rider rates for custom programs.<sup>22</sup>

22. The explicit reference made by the Board that it does not expect the utilities to rely on predetermined rates for the **2017 to 2020 term** aligns with the Board's introduction of the Target Adjustment Mechanism beginning in 2017 and deliberately leaves separate the 2015 and 2016 program years, for which the Board approved specified "fixed" targets. By deliberately not including 2015 or 2016 in its statement, the Board has provided a clear distinction with regard to treatment in these years.
23. The Company submits that at the time of the DSM Plan Decision, in January 2016, the Board expected and anticipated that the NTG Study would be completed in 2016 in time to inform the development of programs in 2017 (in reality, however, the NTG Study is still incomplete). In other words, the NTG Study would be used prospectively. There is no indication in the DSM Plan Decision that the Board expected 2015 DSM results, which were based on a formulaic rollover, to be adjusted retroactively by an incomplete NTG Study released in October 2017 (finalized in December 2017).
24. Further support for Enbridge's understanding on this issue can be found in the revised OEB DSM Plan Decision (February 24, 2016) in the Board's response to Union Gas' written comments submitted February 3, 2016. In these comments, Union Gas requested clarity on the treatment of input assumptions and NTG adjustments by explicitly requesting confirmation as follows:

Union interprets the [OEB's Decision] to mean that input assumptions and net-to-gross adjustment factors are finalized for a given year based on the previous year's final DSM audit...This process ensures that targets and achievements are based on the same set of input assumptions and net-to-gross adjustment factors.

Given that the Board's Decision is effective for 2015 and based on the process outlined above, Union's 2015 results for the purpose of determining the 2015 DSM Incentive will be based on the same input assumptions and net-to-gross adjustment factors used for setting Union's 2015 targets. These inputs were finalized in Union's 2014 DSM audit.<sup>23</sup>

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<sup>22</sup> DSM Plan Decision, page 21.

<sup>23</sup> EB-2015-0029/0049, Union Gas Written Comments RE: Decision and Order, February 3, 2016, pages 2-3.

In its revised Decision and Order, February 24, 2016, the Board provided the following confirmation:

The OEB confirms that Union's interpretation is correct.<sup>24</sup>

25. It is clear from Union's request for clarification that it was referring specifically to the manner in which the DSM incentive would be calculated. Like Union, Enbridge relied upon the Board's response and concluded that no adjustments to NTG factors as determined by the NTG Study would be applied in a retroactive fashion for the purpose of calculating the 2015 shareholder incentive.<sup>25</sup> Consistent with the Board's confirmation, in calculating Enbridge's 2015 shareholder incentive, the Company used the inputs, including NTG adjustment factors for its custom commercial and industrial programs, based on the 2014 audit.

**(iii) There are valid policy reasons against retroactive treatments**

26. Not only is the retroactive application of new NTG factors inappropriate in light of the specific direction provided by the Board in the DSM Framework and the DSM Plan Decision, there are also policy reasons why such retroactive adjustments are inappropriate.

27. Retroactive adjustments change the "rules of the game" after the game has been played. Targets and results should both be based on the same set of assumptions to ensure the Company can effectively plan, execute and deliver its business strategy. Had Enbridge known that input assumptions and values could be changed to rearrange outcomes, the Company would have been disincented to expend the degree of time and effort on Commercial and Industrial Custom projects as it did. Applying input assumption changes retroactively creates an unstable and unfair policy environment, which is contrary to the guiding principles enunciated in the DSM Framework. Without question, the application of revised NTG values on a retroactive basis will materially disincen Enbridge from attempting to achieve higher customer participation levels and minimizing lost opportunities<sup>26</sup> (contrary to Guiding Principles 5 and 6).<sup>27</sup> It will also result in the utilities being discouraged from

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<sup>24</sup> DSM Plan Decision (revised), page 3.

<sup>25</sup> Exhibit A, Tab 1, Schedule 3, page 27, paragraph 66.

<sup>26</sup> Exhibit A, Tab 1, Schedule 3, page 28, paragraph 68.

<sup>27</sup> Guiding Principles 5 and 6 (Design programs so that they achieve high customer participation levels and Minimize lost opportunities when implementing energy efficient upgrades) are described at page 8 of the DSM Framework.

pursuing commercial and industrial projects that often have long measure lives that produce long term energy savings contrary to Guiding Principle 8.<sup>28</sup>

28. In addition, Enbridge submits that the retroactive application of NTG Study adjusted values is in direct conflict with Guiding Principle number 9 which provides that the amount of shareholder incentive will depend on a utility meeting or exceeding its DSM targets and will take into consideration the relative difficulty in achieving other goals.<sup>29</sup> There is no suggestion in any documentation that Enbridge did not undertake its 2015 DSM portfolio programs with the usual degree of dedication, commitment and purpose. It committed the time, effort and resources necessary to achieve its results based upon the goals (i.e., targets) which were approved by the Board. To subsequently “move the goalpost” is inconsistent with a key underpinning of the Framework, which is to provide a principled approach and certainty to DSM.
29. Enbridge undertook its 2015 DSM programs using the inputs which were finalized in Enbridge's 2014 DSM audit as directed by the Board. It should be recalled that the values approved by the Board for 2014 which the Board required to be rolled over into 2015 included NTG adjustment factors for commercial and industrial custom offers that were based upon an earlier study by Summit Blue.<sup>30</sup> It is important to recognize that the Summit Blue study employed a method to estimate NTG which is inconsistent with the methodology used by the authors of the recent NTG Study. Summit Blue employed a completely different survey instrument, utilized a different scoring algorithm, a different sampling methodology and the study was executed by a different “in person” / “onsite” interview group versus the telephone interviews undertaken by the current EC. In short, it is inconsistent to compare targets based on NTG factors which utilized an approach and set of methodologies which are functionally different than the NTG factors determined by a different approach employed in the recent NTG study.

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<sup>28</sup> Guiding Principle 8 (Programs should be designed to pursue long-term energy savings) is described at page 9 of the DSM Framework.

<sup>29</sup> Guiding Principle 9 (Shareholder incentives will be commensurate with performance and efficient use of funds) is described at page 9 of the DSM Framework.

<sup>30</sup> The Summit Blue Study titled “Custom Projects Attribution Study” is produced in response to SEC Interrogatory #52, at Exhibit I.EGDI.SEC.52.

**(iv) Summary**

30. In summary, Enbridge submits that by reason of the fact that 2015 was a rollover year and given the Board's determinations in both the Framework and the DSM Plan Decision, Enbridge's 2015 DSM results should not be adjusted retroactively by using the NTG Study.
31. While there are other reasons to question the findings and credibility of the NTG Study (these are explained below), Enbridge submits that for the purposes of 2015, no retroactive adjustments should take place regardless of the NTG Study results.

**C. Specific Concerns with the NTG Study which affect its credibility**

32. As described in the sections below, the determinations of NTG ratios in the NTG Study by the EC are inappropriate and flawed. The NTG Study deviated from the appropriate Scope of Work and lacked the appropriate and necessary degree of transparency to ensure a fair and credible process and result.
33. For these reasons, discussed in further detail below, Enbridge submits that the Board should not have confidence in the determination of the NTG Study values. To be clear, Enbridge is not seeking any order from the Board in this proceeding which would in effect rectify the serious methodological problems with the NTG Study referenced below. This is a matter for the EAC and/or perhaps the DSM Mid-Term Review proceeding in future. The material methodological issues raised below are important in the context of this proceeding because Board Staff have directed the EC to use the results of the NTG Study and apply them retroactively to Enbridge's 2015 DSM Program results. In Enbridge's view, the NTG Study results are not reliable. Enbridge's concerns, as noted below and corroborated in the evidence of the experts engaged by Enbridge and Union Gas<sup>31</sup>, are real and material.

**(i) Exclusion of Secondary Attribution in Calculations**

34. In the development of the original Scope of Work for the NTG Study, there was considerable discussion regarding the time frame that was appropriate in assessing the utilities' influence, i.e., if the Study was aimed at evaluating the effect/influence of the programs over time, then a longer time horizon should be used.<sup>32</sup> Ultimately there was consensus among the TEC and the EC that the primary objective of the free ridership estimation was to capture the

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<sup>31</sup> Exhibit B, Tab 6, Schedules 1, 2 and 3.

<sup>32</sup> See response to BOMA Interrogatory #3, at Exhibit I.EGDI.BOMA.3 (page 1).

effect of the program on the current project and that the effect on the current project of prior and indirect program experience would be captured in a secondary, less rigorous question sequence.<sup>33</sup>

35. This consensus decision (as agreed with TEC endorsement on July 30, 2015) culminated in the EC outlining two differentiated terms: “primary” and “secondary” attribution. Secondary attribution, for the purposes of this project, referred to the consideration of the longer-term effect of the program on participant decision making. Assessment of this type of influence is particularly relevant to a mature program that has been in market for many years and where the utility has provided long term support of customers prior to current year projects.<sup>34</sup>
36. Consideration of secondary attribution in the NTG Study was documented by the TEC and DNV in the original Scope of Work and DNV advised that the work plan would outline specifics for operationalizing this approach.<sup>35</sup> Consideration of secondary attribution is also reflected in DNV’s updated Scope of Work for the CPSV (custom project savings verification)/NTG verification.<sup>36</sup>
37. The Company is of the view that the limited consideration (a single question) given to assessing secondary attribution was not sufficient to capture the full extent of Enbridge’s DSM programs full longer term influence on its customers and that, therefore, the 9% overall value is understated.
38. When the EC distributed the draft results of the free ridership evaluation, the EC asserted that while it had provided a quantified measurement of secondary attribution in its finding, **it did not** incorporate these values in the free ridership results. In other words, free ridership values were not adjusted (i.e. lowered) to reflect secondary attribution. This is not in line with the original approach reviewed at the TEC and reflected in the original and updated scopes of work. Enbridge asserts that secondary attribution must be included in the NTG values in accordance with the original resolution with the TEC and DNV, and as outlined in both DNV’s original and updated scopes of work.<sup>37</sup> While Enbridge submits that it is

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<sup>33</sup> Measurement of NTG Factors and Custom Savings Verification for Ontario’s Natural Gas Custom Commercial and Industrial DSM Scope of Work, DNV-GL, December 14, 2016 (Exhibit 6, Tab 5, Schedule 2, page 129).

<sup>34</sup> See response to BOMA Interrogatory #3, Exhibit I.EGDI.BOMA.3 (page 1).

<sup>35</sup> Exhibit A, Tab 1, Schedule 3, page 22, paragraph 57.

<sup>36</sup> Exhibit B, Tab 5, Schedule 2, page 44.

<sup>37</sup> Exhibit A, Tab 1, Schedule 3, pages 23, paragraphs 58.

inappropriate to apply the NTG Study results retroactively, it is even more inappropriate to apply the results retroactively and selectively leave the impact of secondary attribution out.

39. If one were to appropriately include the secondary attribution values specified by the EC in the NTG adjustments and recalculate the CCM and DSMI values outlined in the EC's final 2015 verification, Enbridge's best calculation of the impact is provided in the table below:<sup>38</sup>

Table 3

	Audit Opinion of EC without inclusion of secondary attribution	Audit Opinion of EC with inclusion of secondary attribution estimates
CCM (lifetime) gas savings	539,787,741 m <sup>3</sup>	604,691,217 m <sup>3</sup>
Shareholder Incentive ("DSMI")	\$ 6,207,339	\$ 7,125,344

40. Simply stated, the NTG Study's results are not "net" without secondary attribution being determined and applied. The inclusion of secondary attribution was part of the Scope of Work and any application of NTG Study factors that is applied (whether for future years or for 2015 if Enbridge's position is not accepted) must include all determinations of utility influence.

**(ii) Time Delay**

41. While it could reasonably be expected that there might be some delay as a result of the transitioning to the new EM&V process, few could have anticipated an outcome which would include an evaluation process taking place 22 months after the end of the 2015 program year.<sup>39</sup> Even with all this time, one of the tasks assumed by Board Staff, the completion of the NTG Study, was not fully completed with the report failing to include an assessment of spillover as required by the original Scope of Work approved by the TEC as well as the revised Scope of Work.

42. Enbridge shared concerns about how delayed evaluation efforts impacted and inconvenienced customers who were being queried on projects that were implemented over a year, and in some cases, over two years in the past. The delay impacted the EC's ability

<sup>38</sup> See response to BOMA Interrogatory #3, Exhibit I.EGDI.BOMA.3 (page 2).

<sup>39</sup> The EC issued two reports on October 16, 2017 (final revised report issued on December 20, 2017 to correct errors made by the EC, identified by Enbridge, in the original EC generated report).

to connect with customers that had sufficient (or any) knowledge of specific projects and most certainly impacted customers' recall regarding project details and as a result, the responses and NTG Study results.<sup>40</sup> This delay is important as recall bias increases as time passes.

43. Enbridge's concerns regarding challenges with customer recall and recall bias were corroborated by research and opinion provided by experts retained by Enbridge: RIA and Navigant. These experts opined that:

a) The longer the time that has elapsed between the behavior and the self-report about the behavior, the more likely the respondent is to forget their intentions, the motivations, and other influences on their behavior (even if the respondent had been aware of them at the time of action).<sup>41</sup>

b) It is often important that the survey introduces the ways support was provided through the program. This would include making sure that program training, analysis, and support are described to the participant. These can be particularly difficult for the respondent to recall if the survey takes place 1 year or more after participation.<sup>42</sup>

44. Recall bias is an issue for any self-report study, but is particularly concerning in the case of the Run it Right ("RiR") customer surveys given that some of these customers implemented improvements three or more years prior to the time they were surveyed.<sup>43</sup>

45. Importantly, it should be recognized that recall bias only works against a utility's DSM results. Customers who are interviewed have obviously participated in a DSM program. As time passes and a business experiences the positive results of their participation, there is a natural inclination for people to take credit for their earlier decision and by extension to minimize the role of a utility in this process. The longer the time gap between the decision made to participate and the time a customer is asked about the reasons for such a decision, the more important it becomes to remind the person being interviewed of the role of the utility at the relevant time.

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<sup>40</sup> Exhibit A, Tab 1, Schedule 3, pages 18-19, paragraph 49.

<sup>41</sup> Exhibit B, Tab 6, Schedule 3, page 20 of 39.

<sup>42</sup> Exhibit B, Tab 6, Schedule 2, page 18 of 19.

<sup>43</sup> See response to BOMA Interrogatory #4, at Exhibit I.EGDI.BOMA.4 (page 2).

46. The gap in time between the decision making that preceded projects implemented by customers in 2015 and the NTG Study resulted in free-ridership estimations that are exaggerated and not credible.

**(iii) Survey Instrument**

47. When developing the NTG Study (one of the EC's most significant evaluation efforts), the EC solicited comments from the EAC on the survey instrument, however, key commentary provided by Enbridge was dismissed.<sup>44</sup> For the study to truly deliver "net" adjustment factors it should have included quantification of spillover and secondary attribution, as originally contemplated by the TEC.

48. The EAC was provided with a draft participant interview guide (survey instrument) and a draft vendor survey and was asked to provide comments. Enbridge shared comments and concerns, both verbally and in writing on the following issues:<sup>45</sup>

a) Secondary Attribution

Rather than the question sequence anticipated in the original NTG Scope of Work, the survey instrument showed only a single question related to Secondary Attribution. Enbridge was concerned this would not accurately capture the longer term, indirect influence of the utility on participant decision making. It is Enbridge's opinion that as a result, Secondary Attribution was understated.

b) Scoring Algorithm

Enbridge's concerns with the scoring algorithm were first identified in comments on the draft survey. Following receipt of the draft results, Enbridge had further concerns with a lack of transparency into the process of translating survey responses into NTG score or values. Small variations in the subjective cut-offs used in this process can have significant impacts to the ultimate NTG score. Ultimately, a sensitivity analysis should be completed to assess the reasonableness of the scoring algorithm.

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<sup>44</sup> Exhibit A, Tab 1, Schedule 3, page 15, paragraph 41.

<sup>45</sup> The subparagraphs that follow summarize some of the concerns Enbridge shared with the EC, as described in more detail in response to Board Staff Interrogatory #11, at Exhibit I.EGDI.STAFF.11.

c) Incentive Focused Questions

Enbridge is of the view that the survey instrument employed by the EC focused the customer largely on the program's provision of customer incentive payments and did not sufficiently probe for the customer's impression of all the services, support and value provided by the utility. This likely resulted in a lower estimation of NTG.

d) Cancellation of Program Advisor (Energy Solutions Consultant) Interviews

Importantly, the NTG Scope of Work specified that the EC was to interview Enbridge's program advisors to ensure clear understanding of the program and the role of Enbridge consultants in working with its customers. DNV had outlined early in the process that this was an important step to appropriately frame questions in the survey process. Enbridge highlighted that this activity was not yet completed when the EC was preparing to initiate surveys with customers but was told a decision was made to eliminate these interviews.<sup>46</sup> This is concerning to Enbridge as the EC would not have had as much insight into the Enbridge offers and were not able to ensure the survey instrument included appropriately framed questions to accurately reflect Enbridge's offers (both the custom offer and RiR).

e) Vendor Influence

Enbridge is concerned that the survey instrument did not appropriately capture vendor influence. Though the full effect of vendor influence may be unknown to customers, the EC's methodology limited the assessment of vendor feedback such that the customer respondent was required to recognize and identify significant vendor influence in order for the vendor to be interviewed for the purposes of NTG.

Concerns identified by Enbridge in the early stages of the process that were not appropriately resolved led to significant concerns through the evaluation, and impacted results such that Enbridge is now unable to support the EC's findings.<sup>47</sup>

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<sup>46</sup> Exhibit A, Tab 1, Schedule 3, page 34, paragraph 78.

<sup>47</sup> See response to Board Staff Interrogatory #11, at Exhibit I.EGDI.STAFF.11 (page 6).

**(iv) Scoring Approach and Sensitivity Analysis**

49. Enbridge continues to have questions regarding the scoring approach employed by the EC in the NTG Study. The scoring process involves the translation of survey responses into NTG scores or values and includes the application of a scoring algorithm and the introduction of parameters to apply judgement in the survey.<sup>48</sup>

50. Enbridge's concerns were corroborated by Navigant. In their *Memorandum: Discussion of Selected NTG Estimation Issues*, Navigant clearly identified the importance of undertaking a sensitivity analyses to test the scoring methodology to better understand the implication that assumptions used in translating survey responses into NTG scores can have on NTG values:

The scoring algorithm is central to any resulting NTG estimates. As a result, it is important that the algorithms be as transparent as possible and undergo a stakeholder review process to build confidence in the approach. A process that allows for discussion of the scoring algorithms, includes sensitivity analyses to assess robustness, and is as transparent as possible is important for producing NTG values that will have buy-in from stakeholders.<sup>49</sup>

51. To illustrate Enbridge's concern with the scoring methodology, there were tables provided in Appendix C, Tables 8-17 to 8-23 of the 2015 Custom Savings Verification and Free-ridership Evaluation that compiled each respondent's verbatim open-ended responses.<sup>50</sup> In an EAC meeting, the EC explained that these questions were asked to ensure the results of the survey were in line with the overall feelings of the respondent.

52. Enbridge's concern with the scoring methodology is illustrated in these tables as there appear to be multiple examples where the verbatim response indicates that the utility clearly influenced the participant, and yet, this does not appear to be in line with the corresponding attribution, which is identified as "no".<sup>51</sup>

53. The verbatim responses appear to indicate there was inconsistency in the scoring methodology and further investigation as to the effectiveness of the scoring algorithm,

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<sup>48</sup> Exhibit A, Tab 1, Schedule 3, page 35, paragraph 79.

<sup>49</sup> Exhibit B, Tab 6, Schedule 2, page 3.

<sup>50</sup> Filed in EB-2015-0245, December 20, 2017, Appendix P: Final CPSV / NTG Report, page C-17

<sup>51</sup> See response to Board Staff Interrogatory #12, at Exhibit I.EGDI.STAFF.12 (page 3).

including a sensitivity analysis, is justified. Small changes in the methodology can have a significant impact to the results.<sup>52</sup>

54. Enbridge believes there are a number of assumptions in the scoring algorithm that should have undergone sensitivity analyses. A sensitivity analysis would provide context around the estimated NTG values. For example, the subjective “cut-off” used in the timing questions should have undergone a sensitivity analysis. To illustrate, the participant is asked to go back to the time of their participation decision and estimate what month in the future (out to 48 months) they might have undertaken the same or similar improvements in the absence of the program. This is a highly speculative and uncertain question, which is difficult to answer in real time, and is made more difficult with the respondent having to recall the situation in excess of two years prior.<sup>53</sup>

55. A four year timeframe was selected by DNV as a cut-off value with full attribution awarded for responses of four years or greater and only partial attribution for responses less than four years (of note, the utility does not have clarity on how the partial determinations are scored for answers between 0 and 48 months). The cut-off of four years is a somewhat arbitrary inflection point, and is not a consistent cut-off used across various self-report methodologies/scoring algorithms.<sup>54</sup> The EC would have the data to estimate the NTG that would result from using cut-offs of 12 or 24 months. Given that the EC indicated that timing was the component with the most significant impact on the NTG, testing how changes in the selected cut-off date affects NTG values would provide improved confidence in the scoring.

**(v) Statistical Precision**

56. The EC’s Scope of Work, dated December 14, 2016, states that the objective of the sample design is to “Achieve 90/10 precision at the desired stratification segment levels.” It further describes the Enbridge free ridership program segments to be Custom Commercial, Custom Industrial, and Run it Right. The EC defined precision in the NTG Study Scope of Work such that “90/10 precision refers to 10% relative [*emphasis added*] precision with 90% confidence.”<sup>55</sup>

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<sup>52</sup> See response to Board Staff Interrogatory #12, at Exhibit I.EGDI.STAFF.12 (page 3).

<sup>53</sup> See response to BOMA Interrogatory #4, at Exhibit I.EGDI.BOMA.4 (pages 2-3).

<sup>54</sup> See response to BOMA Interrogatory #4, at Exhibit I.EGDI.BOMA.4 (page 3).

<sup>55</sup> Exhibit B, Tab 5, Schedule 2, page 19.

57. The relative precisions identified in the Custom Savings Verification and Free-ridership Evaluation were as follows:

- a) Custom Industrial: 15% (representing 42% of program savings)
- b) Custom Commercial: 26% (representing 58% of program savings)
- c) Run it Right: 27%

None of the desired stratification segment levels achieved the 90/10 precision target.<sup>56</sup>

58. It is Enbridge's opinion that as a result of study design and execution, the results of the NTG Study are not robust. Enbridge does not have the expected level of confidence in the results in line with the stated 90/10 objective.<sup>57</sup>

#### **(vi) Transparency**

59. Despite repeated requests by Enbridge for the EC to provide details of the scoring methodology and data used in its determinations, in many regards, the EC has not provided Enbridge with detailed documentation or clear calculations which would allow Enbridge to replicate (and therefore understand and confirm) the EC's findings. Given that there were instances where Enbridge was able to work through the data to verify the EC's calculations and errors were found, the lack of detail and transparency leaves Enbridge uncertain of the determinations made by the EC. Enbridge is of the view that there should be full transparency in the process to allow the Company the opportunity to fully review adjustments.<sup>58</sup>

60. It is Enbridge's opinion that the anonymized NTG survey data should have been provided to the Company in a manner that protected the identity of the respondent but also clearly illustrated the link between the answers provided by the respondent and the final attribution score they received.<sup>59</sup>

61. Recognizing the EC's requirement to protect client confidentiality, given the significant errors identified by Enbridge in the EC's CPSV calculations, Enbridge believes there should have

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<sup>56</sup> See response to Board Staff Interrogatory #18, at Exhibit I.EGDI.STAFF.18 (pages 1-2).

<sup>57</sup> See response to Board Staff Interrogatory #18, at Exhibit I.EGDI.STAFF.18 (page 4).

<sup>58</sup> Exhibit A, Tab 1, Schedule 3, pages 15-16, paragraph 42.

<sup>59</sup> See response to Board Staff Interrogatory #12, at Exhibit I.EGDI.STAFF.12 (page 3).

been additional levels of detail provided by the EC detailing their NTG estimations in order to give the utility, the EAC, and the Board any confidence in the EC's determinations.

**(vii) Spillover**

62. In accordance with its Scope of Work, the NTG Study was to include the determination of a spillover value<sup>60</sup>. Despite this, the EC's Report inappropriately used a deemed spillover value from another jurisdiction. The spillover component of the NTG Study was not completed by the time the EC's Report was issued. Board Staff instead directed the EC to apply a deemed spillover value from Massachusetts as a proxy without EAC consultation.<sup>61</sup>

**(viii) Summary of Concerns with NTG Study**

63. The concerns articulated above regarding the EC's approach to the NTG Study amply justify why the Company, and it is submitted, the Board, should not have confidence in the NTG Study results. These are not EAC process issues but rather methodological problems with the Study itself. These concerns as noted above have been corroborated as being real and impactful by the experts Navigant and RIA in the reports filed in evidence.

**D. Improvements in Evaluation Process**

64. The Board's Procedural Order No. 2, dated April 10, 2018, states "The OEB expects that OEB staff will continually monitor the process and look for areas to improve."<sup>62</sup> Enbridge appreciates that the Board acknowledges the importance of continual improvement of the process and Enbridge recognizes that improvements have already been undertaken by Board Staff and the EAC in respect of the 2016 evaluation. Enbridge believes, however, there remain areas where there are opportunities for further improvement that have arisen out of the 2015 evaluation process.

65. The Company submits that Board Staff's role in the evaluation and audit process should not involve it making direct unilateral changes to the EC's Scope of Work, or being the sole interpreter of Board Policy. Board Staff, in its role as the coordinator and overseer of the evaluation and audit process (as set out in the Board's August 21, 2015 letter, EB-2015-

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<sup>60</sup> Exhibit B, Tab 5, Schedule 2, page 4.

<sup>61</sup> Exhibit A, Tab 1, Schedule 3, page 5, paragraph 9; and page 13, paragraph 35. See also response to BOMA Interrogatory #2 at Exhibit I.EGDI.BOMA.2

<sup>62</sup> Procedural Order No. 2, April 10, 2018.

0245), is not the entity that should be, in effect, rendering a determination about how a Board Decision and Order should be interpreted and applied.

66. Board Staff certainly have the right to take a position before the Board in respect of issues and to adduce evidence in support of their position, but it is Enbridge's view that Board Staff's role does not contemplate a decision making function in respect of the interpretation of Board policies and rules.<sup>63</sup>

67. It will take a significant proactive effort to return to a reasonable timeframe for the execution of the annual EM&V process. Enbridge is committed to working with the EAC to reach this goal being mindful as well that efforts should be underway for the development of the evaluation framework for the period following the current framework term beginning in 2021.

**E. Alternative Approach: If results are adjusted retroactively, so too should targets**

68. While the Company submits that the DSM Framework and the DSM Plan Decision do not contemplate the use of after the fact developed data and information to adjust earlier program year results, if this is to occur, Enbridge strongly believes that it is necessary to also adjust the targets used for the year in question by the same values. While Enbridge submits that this is not something that the Board need consider for 2015, it is a matter that might be appropriate to consider for 2016.

69. It is apparent that at the time of the Board's DSM Plan Decision that the Board expected that the NTG Study which was in the works during the 2015 to 2020 DSM Multi-Year Plan hearing would be completed shortly thereafter. In its DSM Plan Decision, the Board stated that "in 2016 the free rider rates will be updated based on the results of the net and gross study and the annual evaluation process".<sup>64</sup> At the time, the Board had likely not contemplated the delays which were subsequently experienced in the execution and completion of the NTG Study with the 2015 final annual results reported in October 2017 as revised on December 20, 2017.<sup>65</sup> Obviously, the results of the NTG Study were not used for the purposes of updating targets for the 2016 DSM Plan year (and indeed, were unavailable for the purposes of updating targets for the purposes of the 2017 DSM plan year).

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<sup>63</sup> Exhibit A, Tab 1, Schedule 3, page 21, paragraph 55.

<sup>64</sup> DSM Plan Decision, at page 21.

<sup>65</sup> See response to Board Staff Interrogatory #2, at Exhibit I.EGDI.STAFF.2 (page 9).

70. Enbridge is of the view that the determination of how the NTG Study should be used in respect of the evaluation of 2016 (and 2017) DSM results is a matter that should be considered by the Board during the Mid-term review where impacts on targets and score cards can be appropriately considered and reassessed relative to the timelines of the 2015 and 2016 evaluation processes and in the context of the DSM Framework and the Board's earlier expectations.<sup>66</sup>

71. In the end, if the Board directs the utilities to apply the result of the NTG Study retroactively for the purposes of 2015, Enbridge submits that the NTG Study with the appropriate inclusion of secondary attribution, should be used as contemplated by the Board in its Decision and Order namely it should be used to adjust targets as well as results.

#### **F. Conclusion and Relief Sought**

72. The concerns expressed through this Argument and the evidence support the determination that for the clearance of 2015 DSM Deferral and Variance Accounts, the retroactive application of any revised NTG values from the NTG Study for 2015 is inappropriate and unfair. It is contrary to the Board's findings, and hence should not to be applied to 2015 results. In addition, this Argument and the evidence identified serious issues in a number of material areas with the execution and therefore the confidence in the outcomes of the NTG Study.

73. Enbridge is therefore applying for approval for the clearance of its 2015 DSM Deferral and Variance accounts based on the application of the DNV CPSV results (as well as the verified results determined for all other evaluated program results) with the application of the same 2015 NTG values that were inherent in the formulation of 2015 targets (each rolled over from 2014, in accord with the Board's instructions) and consistent with 2014 audited results. To be clear, with the exception of the NTG Study outcomes, Enbridge fully accepts the adjustments to its Final Report results as determined by DNV. Enbridge confirms that these adjustments are reflected in the amounts set out in Table 1, restated below (the differences are illustrated in Table 2, above).

74. For the reasons set out in this Application, Enbridge respectfully requests that the Board make the following findings, determinations and orders:

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<sup>66</sup> See response to Board Staff Interrogatory #2, at Exhibit I.EGDI.STAFF.2 (page 9).

- a) Approve Enbridge's deferral and variance accounts balances for DSMVA, LRAMVA and DSMIDA values as outlined in Enbridge's Application and Evidence, Exhibit A, Tab 1, Schedule 3, Table 1 and restated below:

<b>2015 DSM Deferral and Variance Accounts and Balances</b>	
Demand Side Management Variance Account (DSMVA)	\$ 825,460
Demand Side Management Incentive Deferral Account (DSMIDA)	\$ 10,077,695
Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (Reimbursable to Ratepayers)	\$ (72,589)
<b>Total Amount Recoverable</b> (*Numbers may not add up due to rounding)	<b>\$ 10,830,567 *</b>

- b) In the alternative to (a), in the event that the Board orders that 2015 results should be adjusted retroactively using the NTG Study, Enbridge requests that the Board order that secondary attribution be included in the NTG study results and the same adjusted NTG values be similarly applied to the targets set for 2015 so that both targets and results are determined using the same adjustment factors.

**All of which is respectfully submitted.**

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