

ONTARIO ENERGY BOARD

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. pursuant to Section 36(1) of the *Ontario Energy Board Act, 1998*, S.O. 1998, for an order or orders approving its Demand Side Management Plan for 2015-2020

**ENBRIDGE GAS DISTRIBUTION INC.
ARGUMENT IN CHIEF**

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Introduction

1. On April 1, 2015, Enbridge Gas Distribution Inc. (“Enbridge” or the “Company”) filed an application seeking approval of its 2015-2020 Multi-Year Demand Side Management (“DSM”) Plan. Enbridge’s Multi-Year DSM Plan was prepared in response to and in compliance with the Ontario Energy Board’s (“OEB” or “Board”) *Report of Board: Demand Side Management Framework for Natural Gas Distributors (2015–2020)* and the *Filing Guidelines* (EB-2014-0134) (hereinafter jointly referred to as the “Framework”). Enbridge’s Multi-Year DSM Plan draws upon 20 years of experience in the design and delivery of DSM programming in Ontario. Enbridge’s evidence in support of the application describes its Multi-Year DSM Plan and explains how the Plan meets the expectations and requirements set out in the Framework.
2. Pursuant to Procedural Orders issued by the Board, a joint hearing process to consider the Multi-Year DSM Plans for Enbridge and Union Gas Limited (“Union”) was established. That process included responses to written interrogatories, Technical Conferences and a joint oral hearing with Union that began on August 19, 2015 and concluded on September 4, 2015. The Board established a schedule for argument that provides for Argument in Chief to be presented orally on September 11, 2015.
3. The examinations of witnesses during the oral hearing of the application did not touch on all aspects of the case before the Board. In this Argument in Chief, Enbridge will focus on areas of the case that received attention during the oral hearing and it will not attempt to anticipate issues or positions in other areas.

4. Enbridge's Argument in Chief starts with a brief discussion of the background and context for Enbridge's Multi-Year DSM Plan. The main focus of the Argument in Chief is a synopsis of the proposed Multi-Year DSM Plan, leading to the conclusion that the evidence in this case strongly supports approval of the Plan by the Board.

Background and Context

5. The first regulatory framework governing DSM activities in Ontario's natural gas sector was established in 1993 under EBO 169-III. Since that time, Enbridge has been a leader in DSM activities which result in the efficient use of natural gas and the associated reductions in greenhouse gas emissions which the Company helps facilitate. Between 1995 and the end of 2013, Enbridge helped its customers save approximately 8.8 billion m³ of natural gas; the equivalent of 16.5 million tonnes of atmospheric carbon dioxide. The Company is proud of its energy efficiency efforts to date, and intends to play an integral role in the Province's efforts to combat climate change in the years to come.¹
6. Enbridge has a track record of success in DSM programs for more than 20 years, having designed and delivered successful energy efficiency programming since 1995. Enbridge is a recognized leader in DSM in North America, and has offered innovative, cost effective programming and results during these past 20 years. Over that time, Enbridge has evolved its DSM programming to include more sophisticated, complex and comprehensive approaches and solutions. The Company has a successful track record of working with stakeholders where possible, to reach mutually agreeable and beneficial outcomes in the development of DSM plans and their evaluation.²
7. In March 2014, the Minister of Energy issued a Directive to the Board, requiring the Board to establish a DSM policy framework for rate regulated natural gas distributors. The Minister's Directive set out a number of objectives to be achieved in a DSM framework, including a six-year term, mid-term review and a focus on cost effective programs.³
8. Shortly thereafter, the Board convened the EB-2014-0134 consultation to develop the Framework. The Board's consultation process started with a working group process that

¹ Exhibit B, Tab 1, Schedule 1, page 1.

² Exhibit K.1, EGDI Multi Year DSM Plan Overview Presentation for the Board, at slide 3.

³ http://www.ontarioenergyboard.ca/oeb/Documents/Documents/Directive_to_the_OEB_20140326_CDM.pdf

gave stakeholders the opportunity to provide their perspectives and suggestions for how the Board should approach and create the Framework. Next, the Board issued a draft Board Report and draft Guidelines, and gave stakeholders the opportunity to submit comments in response. Twenty-four parties, including most of the participants in this hearing, filed comments in response to the Board's draft materials.⁴

9. In the meantime, beginning in December 2013 and continuing throughout 2014, Enbridge engaged in significant stakeholder consultation with its customers, channel partners, delivery agents and Intervenors. In the fall of 2014, Enbridge held seven program design roundtables to gain insight on proposed program approaches, followed by a discovery and discussion session regarding financing in January of 2015.⁵ A summary of those discussions was presented to the full DSM Consultative group on December 2, 2014.⁶
10. In December 2014, the Board issued the Framework. It included the *Report of Board: Demand Side Management Framework for Natural Gas Distributors (2015–2020)*⁷, and *Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020)*.⁸
11. Given the extent of the consultation process and the breadth of the participation by various ratepayer and stakeholder groups in the process the Board used to develop the Framework, it is reasonable to conclude that the Framework represents the Board's view of the appropriate balance that the gas utilities should apply for the purposes of the development of their multi-year DSM plans. While the Minister's Directive refers to obtaining all cost-effective DSM, it is clear that this cannot occur in a single year, and thus the Board necessarily weighed the rate impacts of DSM (i.e., budgets) against this objective, consistent with its statutory obligations to approve rates that are just and reasonable.

⁴ Materials from the EB-2014-0134 Consultation are collected at the following link :
<http://www.ontarioenergyboard.ca/oeb/Industry/Regulatory%20Proceedings/Policy%20Initiatives%20and%20Consultations/DSM%20Framework%20for%20Gas%20Distributors%20%28EB-2014-0134%29>

⁵ Exhibit B, Tab 1, Schedule 1, page 5.

⁶ Further detail regarding Enbridge's stakeholder consultation efforts are provided in Exhibit B, Tab 3, Schedule 2.

⁷ http://www.ontarioenergyboard.ca/oeb/ Documents/EB-2014-0134/Report_Demand_Side_Management_Framework_20141222.pdf

⁸ http://www.ontarioenergyboard.ca/oeb/ Documents/EB-2014-0134/Filing_Guidelines_to_the_DSM_Framework_20141222.pdf

12. During the course of the hearing, the requirement set out in the Minister's Directives that the DSM Framework shall enable the achievement of all cost-effective DSM was raised on numerous occasions. Importantly, as acknowledged by GEC expert, Mr. Chris Neme, under cross-examination, the Minister's Directive dated March 26, 2014, specifically provides that the Board should consider such other factors as it considers appropriate. Mr. Neme was not certain that such a requirement exists in Massachusetts or Rhode Island [Tr. 11, pp. 66/67]. Indeed, in the State of Massachusetts, which has an all-cost effectiveness requirement, GEC admitted that it appears that the 20% of budgets devoted to commercial and industrial programs may not yet be capturing all cost-effective C&I efficiency resources (GEC Undertaking J10.1)
13. While more will be stated on the subject of rate impacts later in this argument, the observation being made here is that the requirement to pursue all cost-effective DSM should not be pursued and supporting budgets developed without consideration of other relevant factors. The Board received submissions on numerous factors that it should consider for the purposes of the development of the Framework and, relying upon the submissions of the various parties, the Board's Framework provides guidance in respect of budgets and the approximate maximum bill impact on residential ratepayers. While certain parties may not agree completely with the Board's determinations as set out in the Framework, this proceeding should not become a forum for parties to re-argue the positions that they took in the Framework consultative proceeding and/or in prior proceedings.
14. The Framework responds to the Minister's Directive and establishes the parameters under which rate-regulated gas utilities are to establish 2015 to 2020 DSM Plans. Among other things, the Board's Report sets out the specific components that must be part of the gas utilities' DSM plans – items such as DSM Targets, DSM Budgets, Shareholder Incentive, Program Descriptions, Programs Evaluations, Input Assumptions. Cost-Effectiveness Screening, the Integration and Coordination with LDC CDM programs, and IRP.
15. In the first part of the Board's Report, the OEB highlights that it believes that ratepayer funded DSM programs should focus on the following goals:
 - (a) *Assist consumers in managing their energy bills through the reduction of natural gas consumption.*

Customers who participate in the DSM programs should see a decrease in their energy bills.

- (b) *Promote energy conservation and energy efficiency to create a culture of conservation.*

DSM programs should advance conservation and energy efficiency beyond the program participants to the broader public in Ontario.

- (c) *Avoid costs related to future natural gas infrastructure investment, thus improving the load factor of natural gas systems.*

Gas utilities are expected to consider DSM initiatives in the context of infrastructure planning to help avoid or defer future infrastructure costs. This is consistent with the government policy of “Conservation First”.⁹

16. Taking those goals into account, the Board set out ten “guiding principles” for its DSM Framework. The Board indicated that the guiding principles will help the gas utilities in designing their DSM Plans (and the programs within), and may also be used in reviewing and approving the proposals that the utilities submit to the Board.¹⁰
17. The Board also highlighted, within the Guidelines, the key priorities that must be addressed within the DSM plans. These six key priorities draw on the Minister’s Directive, as well as the guiding principles that the Board established for DSM plans.¹¹
18. The Company has carefully considered both the guiding principles and the key priorities outlined in the Framework. Within Exhibit B, Tab 1, Schedule 2, Enbridge has outlined how its Multi-Year DSM plan is responsive to the Board’s direction and fully addresses the guiding principles and key priorities of the 2015 to 2020 DSM Framework. As set out in that evidence, Enbridge has addressed the Board’s guiding principles as follows:
- A. *Implement DSM programs that can help reduce and/or defer future infrastructure*
19. Even prior to the Board’s Decision in respect of the Union Gas and Enbridge Facilities applications¹², Enbridge had been active on this issue with respect to the Greater Toronto Area (“GTA”) Project Leave to Construct (EB-2012-0451). More recently, Enbridge has formally explored the integration of demand and supply planning

⁹ Report, at page 5.

¹⁰ Report, at pages 7-9.

¹¹ Guidelines, at pages 4-5.

¹² Decision and Order, January 30, 2014, EB-2012-0433 / EB-2013-0074 / EB-2012-0451.

processes as well as other areas that may be impacted when considering infrastructure planning at the regional and local levels. From these discussions, Enbridge has prepared an Integrated Resource Planning (“IRP”) study outline, filed at Exhibit C, Tab 1, Schedule 3.

- B. Development of new and innovative programs, including flexibility to allow for on bill financing options.*
20. The Collaboration and Innovation Fund (“CIF”) will allow Enbridge to explore innovative technologies and novel market approaches through pilot programs with LDCs, the IESO, and relevant third parties. During cross-examination by Mr. Shepherd, Board Staff’s consultant, Mr. Woolf, agreed at a general level that a fund such as the CIF was a good idea [Tr. 12, p. 40]. Preliminary information obtained from early development pilots show promise for those having a financing component. In addition, Enbridge is continuing to explore if and how it might appropriately layer an on-bill financing component to the HEC, Direct Install, and other DSM offers.
21. A fair amount of attention during the hearing was spent on the issue of whether the multi-year DSM program offerings of Enbridge are new and innovative. As noted by Ms. Fiona Oliver-Glasford during her evidence in chief presentation, 11 program offerings are new, and the balance of the 22 offerings have evolved. As an example, Mr. Shepherd identified one of Enbridge’s offers, Energy Leaders, as something which he had not seen before, going on to pose to the Company’s witnesses a number of ways in which they agreed the offering could be applied creatively to help efficient customers achieve leading-edge, hard-to-reach savings [Tr. 6, pp. 151-155].
22. As noted by Synapse in its report [Exhibit L.OEBStaff.1, page 3], Enbridge’s DSM Plan is “highly cost-effective”. To be operating DSM programs for as long as Enbridge has and to maintain so high a cost-effectiveness ratio is a clear sign that the Company has continually been productive. Indeed, Mr. Woolf of Synapse stated that Enbridge is in the top third of DSM Plans in terms of innovation [Tr. 11, p. 33].
- C. Increase collaboration and integration of natural gas DSM programs and electricity CDM programs*
23. Enbridge has established a solid foundation of relationships by reaching out to various electric utilities and relevant organizations. In many instances, these relationships have

been formalized (for example, the Conservation First Implementation Committee, CDM Working Group, etc.). This is in addition to the extensive informal direct dialogue the Company has undertaken with electric Local Distribution Companies (“LDCs”). These efforts hold promise for significantly greater coordination and integration between DSM and electric Conservation Demand Management (“CDM”) efforts in the medium to longer term. In the short term, there are significant institutional, administrative, and timing differences that exist. The Company commits to attempting to address these differences as diligently and expeditiously as possible. Further details about past and future collaboration with relevant entities are outlined generally in Exhibit B, Tab 4, Schedule 1 and more specifically in Exhibit B, Tab 4, Schedule 2.

24. In the interim, Enbridge has proposed a CIF to provide the Company with the flexibility to initiate and follow through on collaborative pilot opportunities. The CIF will be discussed further later in this submission.

D. Expand the delivery of Low Income offerings across the Province.

25. Enbridge, through its regular low income stakeholdering process and in response to the DSM Framework, has enhanced the breadth of its offerings in the low income market. In particular, the Company has: i) expanded its private multi-residential low income offering; ii) increased scope to include the promotion of energy efficient design features and construction practices in new affordable housing; iii) worked with various levels of government to leverage existing housing programs and expand its geographic reach; and iv) explored collaboration with electric utilities to expand low income DSM programming within the Company’s franchise area and beyond. Enbridge has also taken the important step of creating multi-lingual outreach materials to enhance accessibility for low income customers.

E. Implement DSM programs that are evidence-based and rely on detailed customer data.

26. Enbridge is supportive of DSM programming that is informed by detailed data. Allowing customers the ability to receive, understand and act upon their usage is important if not central to energy literacy and energy management. However, the Company notes that without interval metering and sub-metering infrastructure, these programs do not provide a “silver bullet” and may even require “interpolated” assumptions to mitigate human

factor impacts (i.e., baseline assumptions, usage differences, work shifts being added or removed, etc.).

27. Specifically, in terms of determining gross savings, as noted by Company witness, Ms. Sigurdson, in terms of best practices, there are typically three different approaches that can be taken. Enbridge uses each of these three methods as appropriate, being deemed savings, statistical analysis, or measurement and verification [Tr. 6, p. 100]. Ms. Sigurdson further confirmed that of Enbridge's 22 program offerings, 5 use metered savings [Tr.6, p. 93].
 28. Enbridge has been a leader in performance-based programming amongst utilities through its RiR program, launched in 2012. An enhanced version of the RiR will continue through the course of the 2015–2020 Multi-Year DSM Plan. In addition, new operational and behavioural programs will be introduced, including Comprehensive Energy Management (“CEM”) and My Home Health Record. Enbridge will also be participating in a pilot initiative called Performance Based Conservation Pilot Project. Two notable government initiatives, Natural Resource Canada's Portfolio Manager and the Ministry of Energy's promotion of the Green Button data protocol, are intended to enable customers to receive, understand, and act upon metered or bill usage data. Enbridge is building both of these initiatives, as well as other metering and benchmarking activities (e.g., Energy Compass and partnership initiatives such as CivicAction's Race to Reduce), into its portfolio and long term business practices.
- F. Ensure that programs take a holistic approach and identify and target all energy saving opportunities throughout a customer's home or business*
29. By its very nature, the Cumulative Cubic Meters (“CCM”) metric, which is a key metric on the Company's Resource Acquisition scorecard, drives and incents longer term savings. The Company's comprehensive programs, which include Home Energy Commissioning (“HEC”) and Comprehensive Energy Management (“CEM”), focus on supporting longer term practices and measures to save energy. As well, new build offers, beyond minimizing lost opportunities, also inherently pursue long term energy savings as building stock typically remains in place for decades.
 30. The new build market is the most effective sector in which to minimize lost opportunities. Enbridge has accordingly expanded its current suite of new construction programs in this

Application to include a pilot for small commercial new construction and a new build commissioning offer. Enbridge has also expanded and introduced new elements to its holistic residential offering. In summary, Enbridge has modified its DSM portfolio and customer incentives to drive deeper and more comprehensive savings when a customer invests in energy efficiency.

31. Enbridge notes that in growing its holistic programs, total budgets have increased. Not surprisingly, there is an organic increase in annual budgets over the course of the 2015–2020 Multi-Year Plan. Programs like RiR, HEC and CEM are relatively expensive and are responsible for a considerable portion of the increase in budgets.

Summary of the Enbridge Multi-Year DSM Plan

32. Having provided some context about the manner in which Enbridge’s Multi-Year DSM Plan was developed, and how it meets the Board’s expectations, what follows now is an overview of the key elements of the Plan and how the Plan was developed. Before turning to the Plan specifically, it is worth noting the following excerpt from page 12 of the Framework which provides:

“The Board is of the view that the natural gas utilities process a significant amount of relevant and critical information that will allow them to appropriately develop and propose performance targets for the Board’s consideration as part of their multi-year DSM plan applications. The Board expects that the gas utilities will rely on their most recent achievable potential studies, experience to date, and projected market opportunities and constraints to inform the development of their annual and long-term natural gas savings targets.”

33. Enbridge submits that as we review aspects of its Multi-Year DSM Plan, it will become clear that it has met these expectations of the Board.

2015 Transition Year Rollover (Exhibit B, Tab 1, Schedule 3)

34. The Company has proposed a rollover increase from its 2014 budget of 2%. This is consistent with section 15.1 of the Transitional provisions of the Framework being the same rate of increase used to arrive at the Company’s 2014 DSM budget. Enbridge has similarly increased the maximum shareholder incentive and its targets by the same rates at which they escalated from 2013 to 2014. In addition, the Company is proposing an additional incremental 15% to its budget to meet the goals and objectives set out in the

Framework as contemplated under section 15.1. This additional funding is referred to as the Incremental Budget.

35. It is important to note that Enbridge increased the metrics in its targets formulaically, as required under the transition provisions of the Framework. This means that certain programs which underperformed or over performed in 2014 have seen their metrics formulaically increased for 2015. As noted by Company witness Mr. Lister [Tr. 8, p.102] it would be inappropriate to only adjust the targets for one program offering as a result of past performance and not adjust other program offerings to reflect past performance results. The Company indicated that it attempted to reach an agreement with stakeholders in respect of 2015 targets and metrics but that there was simply insufficient time. Accordingly, all of the scorecards were rolled over on a formulaic basis.
36. The Company submits that it would amount to cherry picking if only certain portions of these scorecard metrics were adjusted. Either the scorecards and the metrics should be holistically reviewed and updated as the Company did for 2016, or the targets for 2015 should be increased across the board formulaically as the Framework has required. As noted by GEC expert witness, Mr. Neme, it is not appropriate to adjust the 2015 targets and budgets at this time given that “we are almost done with the year anyway” and that “it is hard to see what could be gained by significant revisions”. [Tr.9, p.181].
37. The Company has also proposed an incremental 15% increase to its budget (i.e., the Incremental Budget) to meet the goals and objectives set out in the Framework, as contemplated under Section 15.1. The Company has confirmed in evidence [Tr. 6, p. 25] that the CIF portions of the Incremental Budget amount will be ring fenced such that the monies will only be used for the initiatives identified in evidence.
38. This Incremental Budget will be used in 2015 and 2016 for the Company’s participation in, for example, the Green Button Initiative which will facilitate Enbridge’s customers access to energy usage data. The Incremental Budget will also be directed at collaborative pilot programs with electric LDCs. In 2015, Enbridge’s CIF is included within the Incremental Budget. In 2016 and beyond, the CIF will become a standard part of the Company’s DSM budget. While the pre-filed evidence confirms that the Company will not count any savings generated in 2015 from any of the initiatives contemplated by the Incremental Budget, to the extent that CIF activities undertaken in 2016 onwards

generate savings, the Company seeks approval to count savings generated from such activities so as to avoid creating barriers to collaborative and innovative activities.

39. The 2015 Incremental Budget also includes funding for the My Home Health Record Residential Behavioural Program which will be undertaken by OPower. While this program offering is new to Ontario, as noted by Synapse in its report, similar programs exist in the United States (Exhibit L.OEBStaff.1, p. 71). This innovative behavioural program is planned by the Company to ultimately be directed at the majority of its customers (1.35 million). The funding contemplated by the 2015 Incremental Budget is important to the successful rollout of the program.
40. Given that the Framework was issued in December 2014, and the Company's budgets for 2015, including the Incremental Budget, were not developed until the first quarter of 2015, it is not surprising that not all of the Incremental Budget has been used to date. While the Company often receives more invoices for expenditures during the latter part of a year during the winter heating season, for the purposes of ensuring that the various initiatives identified in evidence are fully pursued, the Company proposes that the DSMVA be used to record any monies not expended in 2015 so that they can be used in 2016 for such purposes.
41. As noted during the oral portion of the hearing, the HEC program in 2015 had to shut down because of a lack of budget. The Company has used all of the tools available to it to continue with this successful program by accessing up to 30% from other budgeted areas and the DSMVA. However, the program necessarily cannot be funded indefinitely. As well, Enbridge did not want to abandon other program offerings to continue funding successful offerings without end. This was noted by Company witness, Mr. Lister [Tr. 9, p. 22]. While the temporary shutdown of the HEC program is unfortunate, the Company is committed to relaunching the program with marketing of the program in 2016, so that it will, once again, see a successful program offering.

Shareholder Incentive, Target Adjustment Mechanism

42. As confirmed by Board Staff's expert, Mr. Woolf, and noted by Mr. Neme, a shareholder incentive is intended to attract senior management's attention so that a utility focuses on generating DSM results [K11.2, p. 77 of 120]. Indeed, Mr. Woolf volunteered under cross

that he is of the belief that shareholder incentives are very important and that they should exist [Tr. 12, p. 195]. Accordingly, the shareholder incentive should not be a mirage. The value of the incentive is not merely its existence but rather the expectation that with reasonable effort and results, an incentive is achievable. Targets viewed as unachievable will defeat the purpose of a shareholder incentive and will not garner the attention of senior management.

43. In this regard, as Ms. Oliver-Glasford noted in evidence [Tr. 13, p. 40], Enbridge has never received its maximum shareholder incentive. Given this and the fact that Enbridge's 100% targets have been influenced where appropriate by historical results as well as the Company's experience and knowledge, it is reasonable to conclude that there is little prospect of Enbridge achieving the maximum shareholder incentive going forward, particularly given the fact that the 150% of target figure is such a stretch. Moreover, if the shareholder incentive at the 100% target is perceived as much of a mirage given the fact that results may be adjusted for information that becomes available after the year of a program's offering, thereby reducing the results for the purposes of the shareholder incentive, it is reasonable to assume that this would act as a disincentive to the Utilities to aggressively pursue DSM.
44. As discussed in cross with Board Staff expert, Mr. Woolf, where seemingly unfair retroactive changes to results reduce what a utility believes has been a successful delivery of a particular program, the resulting disincentive of this impact on the Company could have a negative impact on ratepayers in future in that the Company will be less inclined to aggressively pursue such results.
45. It should be recalled that the Framework provides that a utility is only entitled to receive 40% of the maximum shareholder incentive if it achieves the challenging but achievable 100% target. If a utility does not achieve 75% of the target, it receives zero incentive.
46. One long standing issue with shareholder incentive mechanisms in Ontario is whether or not the use of best available information, which is used to adjust for LRAM calculations, should be applied on a retroactive basis to adjust a utility's results for the purposes of the shareholder incentive. For what Enbridge submits are obvious and appropriate reasons, Synapse confirms in its report (Exhibit L.OEBStaff.1, p. 119) that best practices

in North America are to not adjust a utility's results retroactively so as to negatively affect the shareholder incentive.

47. Enbridge submits that this is an obvious conclusion from the following example. Where a utility has developed its plan based upon best available information and undertakes and achieves its 100% target based upon inputs and assumptions believed to be reasonable during the development of the plan, the utility would be disincented if in the evaluation of its results following what the utility believed to be a successful year, it was denied the shareholder incentive as a result of new best available information. This would be particularly troubling where the new information would have the impact of decreasing the utility's results to less than 75%. In other words, the utility would have secured and applied its resources believing that its market activities were successful in a particular year, only to be denied the incentive which motivated its efforts in the first place. And this would all be the result of information that is obtained in the year after the utility undertakes its activities.
48. During cross-examination, GEC expert, Mr. Neme, confirmed that his views on the matter have not changed since his evidence filed as Exhibit L, Tab, 5, in the Generic Proceeding (EB-2006-0021), which was included in Enbridge's Compendium (K11.2), at page 77. Specifically, Mr. Neme stated that there is value in locking in assumptions, at least for a year at a time on variables that the utility cannot affect without changing program design for the purpose of calculating shareholder incentives.
49. This view was also held by the experts retained by the Board, Concentric Energy Advisors, for the purposes of undertaking a review of the DSM Framework in 2010. In its response to stakeholders written questions dated May 20, 2010 (EB-2008-0346), at page 22 of Enbridge's Compendium [K12.8, page 22 of 28]. Concentric confirmed that while the updating of input assumptions is appropriate to use best available information for the purposes of current and subsequent program years as a result of the annual evaluation, the input assumptions would not, however, be adjusted retrospectively for the prior program year that the evaluation report covers.
50. Enbridge has therefore proposed a Target Adjustment Factor (TAF) which is complementary to the best practice as identified by Synapse. Rather than simply not adjusting results for purposes of the shareholder incentive on a retroactive basis, the

Company is proposing that where best available information is used to adjust for DSM results, it should similarly adjust targets for the year in question using the same information. This means that the Company's DSM performance will always be compared on an "apples to apples" basis in that its level of achievement would always be judged against targets set using the same parameters.

51. It should be recognized that if the best available information had been available at the time that the DSM plan for a particular year was developed, it would have been used and the resulting targets would have been set using that best available information. With the creation of the new Evaluation Advisory Committee by the Board which is tasked with providing ongoing input, there should be additional comfort that the process followed by the Utilities for the development of their DSM Plans has been and will be based upon the best available information.
52. The Utilities and various stakeholders, including Mr. Shepherd and Mr. Neme, have participated on a Technical Evaluation Committee for several years and have been working on the technical reference manual and they are in the process of proceeding with various studies. These include a boiler baseline study and a net to gross study, both of which could have a material impact on a program's results if applied in a retroactive fashion. Of note is the fact that Mr. Woolf admitted he was not aware of the boiler baseline study [Tr. 12, p. 196]. It should be noted that the impact of these studies may have a material impact, either positively or negatively, on program results. For example, spillover, which Synapse identified as an appropriate adjustment factor where free ridership values are also being applied (Exhibit L.OEBStaff.1, p. 125), may have a positive impact but no credible forecast as to the impact of these changes can be made at this time.
53. Importantly, Enbridge, being aware of the fact that these studies were going to be coming forward in the coming years, developed its Multi-Year DSM Plan on the basis of current best available information. Knowing that these studies could change input assumptions and target adjustment factors, the Company proposed the TAF so that the best available information which is ultimately determined by the studies is used in an appropriate fashion to measure the Company's program results. This will ensure that the Plan is relevant for the full six-year duration of its term.

54. The Company submits that there is no evidentiary basis to conclude that any harm would befall any person or entity other than the shareholder by reason of the Board's continuation of the practice of adjusting results for purposes of determining the shareholder incentive using best available information on a retroactive basis. The fact that these two studies are forthcoming and may have a material impact on program results in future stands for the proposition that current regulatory precedent should not continue. The fact that the Framework provides for a 6-year plan is a further reason. There has been much investment in time and energy by all parties to this DSM Plan proceeding to develop challenging yet achievable targets. There is a real danger that these efforts will become increasingly offside with what is reasonably achievable if the current practice of retroactively applying new information continues.

2016 – 2020 Budgets and Targets

55. While the development of the budgets for 2016 through 2020 was guided by the budget maximum set out in the Framework and the requirement to limit the monthly bill impact on residential ratepayers to approximately \$2.00 per month, as noted by Ms. Oliver-Glasford in evidence (Tr. 5, p. 4), Enbridge followed a bottom up / top down approach to the development of its program offerings. More specifically, the bottom up included:
- (a) As noted earlier, the Company undertook extensive consultations with stakeholders, customers, channel partners, delivery agents, industry associations, and various levels of government.
 - (b) The Company looked at its historical results.
 - (c) It relied upon its program delivery staff and their experience in the marketplace for the purposes of understanding evolving trends.
 - (d) It looked to the Potential Study for high level guidance.
56. These steps began prior to the issuance of the Framework. Once the Framework was issued, the Company used the guiding principles and priorities to update its portfolio structure and content. The Plan was then adjusted "top down" using the Board's guidance on rate impacts. New and restructured program offerings were screened for cost-effectiveness using the TRC Test and the PAC Test to ensure that the Plan would result in Enbridge continuing to deliver highly cost-effective DSM.

57. Greater detail in respect of how the Company developed budgets for each of its program offerings and the targets proposed in its Plan is found in Enbridge's response to GEC 16 (T2.EGDI.GEC.16). While it is not practical to review this 10-page response in detail, the Company would like to highlight several aspects of the response.
58. In respect of Large Commercial and Industrial projects which make up a significant portion of the Resource Acquisition CCM target, the Company has experienced a decreasing trend in the CCM achieved in the 2012-2014 period, even though the number of projects are increasing. These savings levels are confirmation of the fact that Enbridge is increasingly pursuing smaller projects. This means that many of the projects that Enbridge forecasts may have shorter rather than longer payback periods. If a payback period threshold in respect of such projects is introduced, both the budget and targets set for Large Commercial and Industrial customers will have to be fully revisited. While more will be said about paybacks later, it should be noted that at Tr. 9, page 128, Company witness Mr. Lister confirmed that the impact of such a threshold would be material.
59. For the Ontario Building Code, Low Income Part 9 and Part 3 program targets, the CCM target was developed using three-year historical result averages (2012 – 2014). In respect of Part 3 multi-unit projects, the market outlook expects a decline in respect of social housing. The Company, however, believes that its private multi-residential low-income projects and the expansion of the program outside of Toronto may offset the decline.
60. In respect of Low Income programs and in response to Mr. Neme's comment about the Single Family Homes program offering appearing to be a "bit low" by using the 2012 – 2014 average CCM per dollar, Ms. Lontoc, the Low Income Program manager for Enbridge, explained that the target and budget increases for 2013/14 resulting from the Settlement Agreement disproportionately increased the target by more than 30% in comparison to a 2% target increase from 2012 levels [Tr. 9 p. 2]. The 2016-2020 targets are a reflection of this.
61. In respect of the Savings-by-Design – Commercial program offering, the Company initially increased the target by approximately 50% over the three-year average. In

2017, the target logically decreases due to the implementation of the new 2017 Ontario Building Code.

62. The My Home Health Record program offering includes very aggressive targets of reaching 1 million participants in 2016 and 2017, and 1.35 million in each of 2018 and 2019. The budget is reflective of this number of participants and the fact that a significant portion of the programs' costs is due to postage.
63. Targets are also reflective of marketplace realities. As noted during the oral hearing, Enbridge competes with electric LDCs and competitive CDM offerings (T11.EGDI.BOMA.35) for available capital. While it is hoped that with greater collaboration this competition will lessen, it has put downward pressure on the Company's ability to generate CCM. As well, changes to the portfolio of program offerings relative to earlier years' results in fewer CCM per dollar. By focusing on smaller customers through direct install, HEC, adaptive thermostats, and small commercial new construction, while a broader range of customers will have access to program offerings, the costs per CCM, on average, increase (T2.EGDI.STAFF.4 and T3.EGDI.CME.3). As noted by Mr. Neme, it is often more expensive to generate savings in harder to reach customer groups (Exhibit L.GEC.1, p.3).
64. It also follows that as utilities deplete the lowest cost opportunities (i.e., the low hanging fruit), generating CCM savings will inevitably become more expensive as program offerings are directed at more projects, smaller projects, or projects which are not as highly cost-effective (T2.EGDI.CME.5).

Scorecards

65. The Board has directed that the Utilities use weighted scorecards and include metrics for alternative objectives to drive a wide variety of policy objectives. Specifically, the Board states at page 12 of the Framework that the gas utilities should:

“incorporate multiple performance metrics using a weighted scorecard approach. ... The scorecard should also include other performance metrics that will motivate the gas utilities to undertake the appropriate activities.”
66. In this regard, Enbridge has included participation rates as a metric in its scorecards, something which Synapse supports in its report (Exhibit L.OEBStaff.1, pp. 6 and 101).

Enhanced participation by a broader range of ratepayers is a policy objective of the Board.

67. Another is the avoidance of lost opportunities. The Residential Savings-by-Design and Commercial offerings include builder enrollments, homes built, and new developments enrolled as its metrics. Incenting builders to exceed the applicable Building Code and, importantly, to actually build homes to this specification, avoids lost opportunities. Including the number of homes on an increasing scale is consistent with this objective.
68. A further objective of the Board is the implementation of programs which rely on detailed customer data. An example of this is the Home Health Report program offering which will provide customers with energy usage data so as to behaviourally encourage conservation activities in addition to achieving high participation rates.
69. In respect of the RiR program offering and the Comprehensive Energy Management offering, the Company is proposing participants as the metric on its MTEM scorecard. This is because by the time that customers meet the definition of participant as set out at Exhibit B1, Tab 1, Schedule 4, pages 34 and 35, they will have reached either the final of the steps required that are inherent to the RiR offer or they have installed the metering and database infrastructure to allow for the measurement of energy consumed under the CEM offering. The Company believes that the metrics proposed for the scorecards reflect the level of effort the Utility engages in to secure results. In the case of CEM and RiR, the Company's experience is that the level of effort needs to be directed at securing and engaging customers [Tr. 9, p. 30].
70. As noted in the Board's Filing Guidelines, at page 14, and as echoed by Mr. Woolf during cross-examination [Tr. 12, p. 64], some programs are a mix of market transformation and resource acquisition programs and seek both outcomes – fundamental changes in markets and direct measurable energy savings. Elements of both do exist in respect of some of Enbridge's MTEM program offerings, and the metrics selected recognize this and the difficulty in determining resulting CCM savings.
71. It is important to note that the Framework provides that the Utilities are not entitled to any shareholder incentive where they do not achieve 75% of a scorecard's target on a weighted basis. The Utilities are therefore at risk that underperforming program

offerings will drive down performance and result in the Company not earning any incentive in respect of a particular scorecard. Ms. Oliver-Glasford confirmed (Tr. 5, p. 131) that the Company sees this as a downside risk. There is, therefore, an inherent incentive for the Company to manage and respond to underperforming program offerings.

72. The Framework, consistent with earlier versions, recognizes the need to provide the Utilities with sufficient flexibility so as to direct resources among differing programs with differing levels of performance. This is done by means of the 15% of additional funding made available under the DSMVA where a 100% target is met and also by the ability to move up to 30% of funds between programs. The Framework specifically provides, at page 3, that:

“To be successful, DSM programs need to be effective, flexible and sustained across Ontario.”

73. The weighting of the scorecards and the grouping of program offerings of similar kind, such as in the MTEM scorecard, ensure that there is an adequate critical mass of shareholder incentive to the various scorecards. Enbridge's goal is to be successful in respect of each of its scorecards. The Company believes that the assignment of incentive to each of the scorecards is appropriate in this regard.

Payback

74. Board Staff's witness, Mr. Woolf, recommended during his evidence-in-chief that a one-year payback period might be appropriate for certain custom/industrial programs. His belief is that a payback period will help reduce free ridership [Tr. 11, p. 186].
75. GEC's expert, Mr. Neme, stated that payback is a policy question to be determined by a regulator. Neme specifically stated (Tr. 10, p. 43) in respect of payback periods:

“I mean, there are tradeoffs here, and I do believe that imposing that kind of limitation would improve the free rider rate or would reduce it. It would probably lead to more savings from project that are longer lasting, you know, more durable, but there will be a cost to it as well. There will be some non-free rider, cheap, shorter terms savings that could have been acquired from operational and efficiency improvements that would otherwise not have been undertaken that you would forego.”

76. In other words, it is important to recognize that if a payback threshold is applied, certain customers who are currently in the pipeline for participation in various programs will be excluded, and this will have an impact on Enbridge's targets and budgets. It is also contrary to the goal of achieving all cost-effective DSM.
77. The prefiled evidence in respect of Enbridge's custom projects indicates that they have been designed to minimize free riders, not based on a financial barrier such as a payback but rather on activities related to project development. Knowledge development, opportunity identification, opportunity quantification, engineering analysis and implementation planning are all significant barriers and ones which rival financial barriers. Enbridge's energy solutions consultants directly assist its commercial/industrial customers overcoming these barriers. The simple fact is that Enbridge's relatively small incentives for commercial/industrial projects are not likely to take a project from a three-year payback to a one-year payback situation. Implementing a one-year payback period has the potential to eliminate a material number of projects. This would require a significant re-evaluation of targets, scorecards and free rider rates.
78. In addition, Board Staff witness, Mr. Woolf, admitted that he was unaware that Enbridge has a 50% free rider rate for its industrial projects [Tr. 12, p. 181]. Under cross-examination, he admitted that it would amount to double counting if you included a payback period and did not reduce the applicable prescriptive free rider to reflect the fact that the payback threshold is in place. This suggests a reality that Mr. Shepherd highlighted in a question to Mr. Woolf during his cross-examination that the implementation of a payback period requirement would necessitate the re-measurement of net-to-gross (i.e., free ridership and spillover) values [Tr. 12, pp. 67/68].
79. There is no evidence in this proceeding which would assist the Board determining the net to gross ratio free rider rate that should be applied in the event that a payback threshold of one year is implemented. Given that the free rider rates being used by the Utilities are based upon an Ontario specific study undertaken by Summit Blue in 2008, Enbridge submits that the best evidence remains the Summit Blue findings.

Capping Metrics at a 150% Contribution

80. GEC witness Mr. Neme states in his report that the Board might consider putting a cap on the contribution that a particular metric can make to an overall scorecard. Under cross examination, he offered that a 150% cap might not be appropriate and that one could set 200% as the cap, for example [Tr. 11, p. 135]. Mr. Neme accepted that having such a cap might result in the company discontinuing a successful program part way during the year [Tr. 11, p. 132].
81. What this means, for example, is that if participant levels in a program reach a 150% cap and further participants would no longer add any value to the score card, a utility would naturally be incented to discontinue the program. The end result is that no specific cap figure has been reviewed for appropriateness. There is, therefore, no evidence which is currently before the Board which supports a specific cap figure.
82. The fact is that the Company is desirous of successfully achieving all metrics, and the weighting given to the metrics is intended to provide an appropriate balance across various metric. While Mr. Neme referenced a program which involved an over achievement by the Company, as noted by Mr. Ott [Tr. 6, p. 13], in respect of the 2012 scorecard, one of the Company's metrics was minus 103%. Having a weighted scorecard with several metrics allows the Company to try and still achieve successful results despite under performance in one area. Mr. Neme acknowledged that a cap would have this constraint [Tr. 11, p. 133]. It is the Company's view that it is artificial and inappropriate to include a cap for over achievement and not include one for under achievement. The goal should be to allow the Company to continue to pursue successful programs. As noted by Company witness, Mr. Paris, a cap would sacrifice extreme positive performance, like the great participation rate enjoyed by the HEC program [Tr. 5, p. 62]. The Company therefore opposes any cap on metrics.

Program Evaluation

83. On August 21, 2015, the Board issued a letter setting out the DSM evaluation governance structure that will be in place for the purposes of the DSM Plan. DSM program evaluations will be overseen by the Board and will involve the retention of a third party evaluation contractor. The Board will look to a new evaluation advisory committee to provide input and advice to the Board on the evaluation and audit of DSM

results. In short, DSM program impact evaluations will be undertaken pursuant to this new governance structure.

84. Program process evaluations will remain the responsibility of the Utilities. In this regard, the Utilities noted that Board Staff expert, Synapse, made a number of recommendations in respect of process evaluations in its report (Exhibit L.OEBStaff.1, Appendix A, pp.A1-A3). Many of Synapse's recommendations were already contemplated by Enbridge and/or the Company has agreed to Synapse's recommendations having regard to annual budgets and appropriate prioritization. In its Undertaking Response at J5.3, the Utilities provided commentary regarding those process evaluation recommendations which they accept and will be implemented. For example, Enbridge is willing to ensure, where possible, that it surveys non-participants in its process evaluation activities.

Avoided Costs

85. Enbridge has for the purposes of its TRC screening of program offerings included avoided commodity and distribution infrastructure costs. The calculation of avoided costs undertaken for the purposes of the development of this Multi-Year DSM Plan is similar to how avoided costs have been determined in prior proceedings. In addition, in accordance with the Framework, Enbridge used the TRC plus methodology, which includes a 15% non-energy benefits adder. While neither of the Minister's Directives nor the Framework are specific as to the exact valuation of non-energy benefits included in the adder, as demonstrated by Enbridge's witness Ms. Oliver-Glasford [Tr. 5, pp. 13 and 14 and at Exhibit K5.1, p. 19], the 15% adder is the equivalent of more than 80% of the calculated costs of carbon using a 2018 vintage mean price of \$15.22 CDN per tonne. While the Company freely admits that once the Province's intentions in respect of a carbon emissions cap and trade regime are known, it may be appropriate to review the amounts included in avoided costs, but at this time, it is reasonable to say that a significant portion of the current value of carbon is captured by the TRC 15% adder.
86. It does not appear that any party has questioned the use of the TRC plus test by the utilities. There is no evidence that increasing the 15% adder to reflect the full value of carbon and other environmental attributes would screen additional program offerings as cost effective to a material extent for the purposes of this proceeding. The portfolio of

program offerings which Enbridge proposes remain highly cost effective so there is no issue about cost effective programs not being considered because they failed the TRC plus test.

87. Much attention was focused at the hearing on certain alleged avoided costs as calculated by Mr. Chernick and expressed by Mr. Neme for the purposes of attempting to demonstrate that such avoided costs will have a downward effect on a customer's bills. Stated differently, it appears that GEC is attempting to show that there is greater room for the utilities to spend more on DSM programs by reason of these additional avoided costs because they reduce the bill impact on residential customers to less than the \$2.00 per month guidance set out in the Framework. This is simply incorrect for a number of reasons.
88. First, while past DSM efforts have and continue to provide program participants savings by avoiding commodity costs that they would otherwise incur but for the energy efficiency savings which continue, the impact of these savings already exists. Even assuming that some of the avoided costs raised by GEC have resulted in savings which continue, such savings are already embedded in customers' bills. GEC is, in effect, saying that further DSM spending should be permitted because customers' bills would otherwise be higher today but for the spending of prior years. Adding more costs for DSM activities to customers' bills today can only be seen as a bill increase. Customers do not see the savings from prior years. As bill impacts to residential ratepayers is an issue of concern to the Board, then it is the impact to current rates, not bills which would otherwise have been in existence but for historic DSM programs.
89. Second, the Company accepts that carbon costs may be truly avoidable costs in future. Ratepayers are not currently required to pay anything for carbon emissions. This will continue until at least 2017. Indeed, given the Minister's Directives to the IESO and to the Board wherein the Minister has required a mid-term review and that the review should, through the potential study which is currently underway, consider how carbon reduction may be used to screen prospective DSM programs and inform future budgets, it appears that the Minister is signaling that no costs for carbon will be introduced onto residential ratepayers' bills until sometime after 2018. All of this, of course, is speculative until the Government issues the applicable regulations. It is equally

plausible that the Government of Ontario may exempt residential ratepayers from paying anything for carbon emissions on their gas bills. Mr. Neme admitted in response to this suggestion while under cross that “anything is possible” [Tr. 11, p. 110]. The point is that carbon is not an informed issue for this proceeding.

90. Third, GEC refers to the DRIPE effect, and Mr. Chernick attempts to confirm in his report that this phenomenon exists in the United States and should therefore, by extension, apply to Ontario's markets. Mr. Welburn, from Enbridge's Gas Supply Department, confirmed in evidence that while the DRIPE phenomena may be worth further study, there are a number of factors and complexities which need to be considered before any credible conclusions can be drawn. Under examination [Tr. 7, pp. 132-133], Mr. Welburn confirmed that Enbridge is now using longer range forecasts to help inform its forecasting of cold weather snaps to allow it to procure supply in advance of the weather events. Mr. Welburn confirmed that by the practice during 2014/2015 of maintaining storage deliverability into the winter season, Enbridge likely had a significant impact on the costs of natural gas at Dawn. This buying practice is but one of the factors which any analysis of DRIPE must take into effect.
91. Mr. Welburn also confirmed that the DRIPE phenomena must also take into account any impact on transportation tolls which might increase rateably in the event of a demand reduction. Finally, the fact that natural gas production from shale formations, such as Marcellus and Utica, has increased significantly from 2008 has resulted in a significant shift in the pricing structure of gas across North America. This point was reiterated by Mr. Quinn in his cross-examination of Mr. Chernick [Tr. 7, p. 136]. Mr. Chernick further agreed under cross-examination by Mr. Quinn that while further study of basis DRIPE specifically may be warranted, the value put forth by Mr. Chernick for this effect should not be considered as a placeholder [Tr.11, p. 47].
92. Mr. Welburn's comments are further supported by the report filed by Union Gas prepared by ICF entitled “Case Marks Evaluation of Union Gas Avoided Costs”. ICF notes at page 4 that:

“DRIPE can be more significant in isolated markets, as it depends on the supply and demand situation of a specific region, and supply constrain regions are more vulnerable to spikes in natural gas prices (Exhibit A, Tab 2, Appendix C, Page 4, Section 2.2.4).”

93. In summary, it was Mr. Welburn's view that the supply and transportation price impacts resulting from a reduction in demand that were discussed by GEC are the result of only looking at a few select considerations. Mr. Welburn advised that if the Board is to consider such impacts, it will be important to take a broader perspective of market influences. He added that Enbridge does not believe there is sufficient information to make the determinations made by GEC, especially given the complexity of having storage near its franchise and the unique nature of services, such as the multi-point balancing that is being discussed and which is offered by Union Gas to direct purchase customers [Tr. 7, pp. 36 and 37].
94. Fourth, as confirmed by Mr. Welburn in evidence, commodity costs, transportation tolls and storage are included in Enbridge's avoided gas cost values. This is because Enbridge incorporates each of these costs into its SENDOUT analysis. They are therefore embedded in the avoided gas costs. It is for this reason that Navigant did not include these costs in its analysis of determining the appropriate value for distribution infrastructure avoided costs.
95. Finally, GEC suggested that the avoided distribution costs which Enbridge, through Navigant, calculated was inappropriate. While Enbridge admitted that the figures it provided to Navigant, the independent third party consultant retained for such purposes, lacked approximately \$55 million in distribution infrastructure costs that were inadvertently missed but which should have been provided, the additional costs would have had only a marginal impact on overall avoided costs. As noted by Ms. Mills, the impact of these additional costs would result in a marginal increase of less than 1% in the Water Heating and Industrial load profiles and an increase of less than 2% in the Space Heating and Space and Water Heating load profiles and that on average, over a 30-year time period, the avoided distribution costs account for approximately 1.5% - 5% (dependent on load profile) of the total Avoided Gas Costs, as indicated in response to Undertaking JT1.28 and at Tr. 7, p. 72.
96. In addition, Ms. Thompson confirmed in evidence (Tr. 7, p. 36 and Exhibit K7.3) that in a more recent review of the costs which have not yet been provided to Navigant, perhaps up to half of these amounts will be determined to not be load related. This is important because as noted by GEC expert Mr. Neme at page 41 of his report (Exhibit L.GEC.1):

“DSM cannot address every type of infrastructure need. It only has potential value as an alternative if the infrastructure projects that are being driven, at least in part, by load growth. Even then it will not always be applicable – either because the load reduction required is too great, or because it is needed too soon, because the economics of a particular application are not favorable, etc.”

97. GEC witness, Mr. Chernick, of his own volition, determined that the avoided infrastructure costs which Enbridge should use should be \$548 million, more than double the correct amount (Chernick Report, Exhibit L.GEC.2, pages 41-42). Ms. Thompson, on behalf of the Company, stated in evidence that Mr. Chernick’s additions were erroneous as they were not load related. This included all of the costs of the Segment B of the GTA project which Mr. Chernick added [Tr. 7, pp. 30 -36].

98. Enbridge agrees with Mr. Neme that only load-related infrastructure should be included in the analysis. Relocated and replacement pipe unrelated to load should not be included. Ms. Thompson confirmed that the portion of projects attributable to load growth is included in avoided distribution costs [Tr. 7, p. 33]. Ironically, Mr. Chernick admitted in examination during the Technical Conference that the best practice would be to review each project on an individual basis to determine what component is load-related (Tech. Conf. Tr. 3, p. 103). This is, in effect, what Ms. Thompson confirmed Enbridge is doing. At Tr. 7, p. 83, Ms. Thompson stated:

“With the different categories, so reinforcements, replacements, relocations, and sales, those are pretty distinct categories, and even to the extent that there are different parties that often work on those different types of projects, depending on where they fit within the organization, so for us and what we do within the distribution planning group, we’re able to make the pretty clear distinction as to what is load-growth-related, versus what’s not load-growth-related, because it is the nature of what we do with infrastructure planning and forecast development.”

99. It was noteworthy that counsel for GEC questioned Enbridge’s witnesses about the impact of avoided distribution infrastructure, in response to which Ms. Oliver-Glasford stated [Tr. 7, p. 48] that she could not confirm in the real world that there have been actual deferrals or offsets of pipeline infrastructure. Ms. Oliver-Glasford reminded GEC’s counsel that what they are undertaking is a theoretical exercise given that these savings are broad based across Enbridge’s franchise area, whereas determining that there has been geographically targeted deferral or offsets is a very different proposition. In other

words, the avoided infrastructure costs used for the purposes of TRC screening are not transferable to a bill impact analysis in the real world.

100. Accordingly, it is the Company's position that its avoided costs should not be adjusted for the purposes of its TRC screening of programs. While the company has committed to updating its avoided commodity costs in the fourth quarter of 2015, and will use these for future TRC screening purposes, the company sees no purpose in undertaking a lengthy, and complex review of the other avoided costs (with the eventual exception of carbon). In terms of materiality, it should be recognized that the distribution infrastructure avoided costs and any DRIPE impact are and will continue to be only a fraction of total avoided costs given that natural gas commodity savings make up over 90% of the total of avoided costs.

Integrated Resource Planning

101. Enbridge is committed to conducting an Integrated Resource Planning ("IRP") study and as such responded to the Board's request to file a proposed study outline. For the development of the scope of work for this study, Enbridge brought together key personnel from the Distribution Planning, Gas Supply and DSM Groups to inform and discuss the concept of IRP and to develop a study outline. While IRP understandably involves a culture shift within the Company, the members of the IRP Study working group are committed to fully exploring the relationships between the various areas for the purposes of IRP.
102. There has been a fair amount of discussion by several parties about the similarity of natural gas IRP and electric IRP and that the concepts of electric IRP can easily be adopted for gas IRP. While this appears theoretically to be reasonable, practical application has proven differently.
103. One obvious difference as noted by Enbridge witness, Ms. Thompson, [Tr.7, p. 104], is that unlike electricity distribution where a power outage can be restored with minimal impact, if a gas shutdown occurs, the gas utility cannot simply flip a switch and turn the gas back on. A visit to affected residential customers may be required to restore service. Differences such as these highlight the risk inherent to transplanting electricity concepts directly into the very different natural gas sector and the importance of a

thorough due diligence process. Another difference is that DSM calculates savings franchise-wide on an annual basis versus on a peak load basis. Given the gas distribution systems are built to meet peak hourly and daily load, it is the relationship between DSM programs that affect peak load and projected future infrastructure needs that need to be considered.

104. The words of one investor-owned utility, Fortis Energy, that had been involved in IRP over the last few years is illustrative of the issue. In an interrogatory response in the BC Utilities Commission proceeding G-189-14 examining FortisBC Energy Utilities, 2014 Long Term Resource Plan, Fortis identified certain practical realities (at Exhibit B-2 IR 1.4). It was asked whether the key purpose of a resource plan was to assess multiple objectives and the tradeoffs between alternative resource portfolios.
105. Fortis agreed that, generally speaking, a key purpose of a utility resource plan is often to assess multiple objectives and the tradeoffs between alternative resource portfolios but it added:

However, this aspect of a resource plan differs depending upon the nature of the utility. Key in this differentiation is how supply side resources are developed or acquired. A vertically integrated utility, such as many electrical utilities, must either acquire power and capacity from the market or produce their own power and capacity. In this regard, a resource plan examines the alternative resource portfolios to determine what might be the best mix of these resources. In other words, the resource plan reviews and assesses the trade-offs between various generation and electrical purchase options.

However, for a gas utility that does not own its own gas reserves and files for approval of its Annual Contracting Plan (in other words, acquires supply side resources from the market) and whose bill is disaggregated showing supply side resources (gas supply) costs separately, the purpose of the Resource Plan is not to assess resource portfolios. Rather, its purpose is primarily to assess energy delivery infrastructure requirements needed to deliver gas to end use customers on the natural gas utility system. To this extent, the Resource Plan examines forecasted load, the potential for demand side resources and the resulting options for adding additional pipe, storage and compression.

In summary, since there are no generation resources to include in alternative portfolios and since there are no alternative portfolios of energy efficiency measures that will have substantially different impacts on supply capacity resources, creating alternative portfolios and conducting portfolio analysis typical of vertically-integrated electric utilities does not make sense for [Fortis]. ”

106. The BC Utilities Commission essentially agreed with this observation and stated in its Commission Order G-189-14 Decision, dated December 3, 2014 that:

The Panel agrees with [Fortis] that the steps required to undertake a resource plan for an integrated electric utility are different than for a gas utility. For example, for an integrated electric utility, the load forecast is a critical first step and a portfolio-based approach can be used to develop and evaluate different portfolios of 'network infrastructure/generation investment/energy purchases/DSM' to meet the expected load. However, for [Fortis] the load forecast is not such a critical first step. Gas is purchased from the market, new gas infrastructure can generally be put in place in less than five years and the addition of one significant customer can quickly overwhelm any refinement in the load forecasting approach for existing customers. The Panel considers that this portfolio approach is less appropriate for [Fortis] than, say, BC Hydro, as DSM, infrastructure and energy supply can generally be evaluated independently of each other.

107. In Enbridge's IRP Scope of Work Planning Study, it identifies, at page 2, the important difference between the deferral of infrastructure used for screening purposes and the actual deferral of infrastructure that is required in an IRP setting. At page 2, Exhibit C, Tab, Schedule 3, the Company notes that the primary objective of broad based DSM is to obtain participant and societal savings across the entire franchise area. In the process, DSM programs will have an indirect impact on the need for distribution infrastructure. This effect is sometimes referred to as "passive deferral of infrastructure" and will be captured as part of the avoided distribution cost included in the TRC test, which screens DSM programs. In contrast, distribution planning is concerned with maintaining the safety and integrity of the distribution system under all conditions, including the situation of maximum use. Distribution planning looks at peak hour requirements in each network and subnetwork of the distribution system based on the history of individual customer usage in that network and design day conditions.
108. Accordingly, a key task of the IRP Study will be to examine the impacts of DSM on peak hour demand in the distribution system. Enbridge is proposing that it undertake case studies in its franchise areas with respect to potential impacts on subdivision planning and deferral of reinforcement projects. This approach appears to have been well received by many intervenors, including BOMA and GEC.
109. In the meantime, Enbridge has included a preliminary transition plan (Exhibit C, Tab 1, Schedule 3, page 10). Enbridge proposes to consider DSM as part of its future

infrastructure planning efforts by developing and testing transition activities as part of the study of DSM and infrastructure planning. This will be done by using real examples of planned infrastructure projects as case studies in the research. The case study examples will then be used to develop and test the methods by which DSM alternatives will be assessed.

110. The Company therefore believes that it has put forth a well-considered scope of work for its IRP Study, which was supported by Synapse in their evidence (Exhibit L.OEBStaff.1, p. 128). The Company submits that its scope of work appears broadly supported by intervenors and is fully compliant and responsive to the objectives of the Framework.

Potential Study

111. As noted earlier, Enbridge retained Navigant Consulting for the purposes of completing the Natural Gas Energy Efficiency Potential Study, dated January 15, 2015 (Exhibit C, Tab 1, Schedule 1). This Potential Study was used at a high level to provide guidance towards the development of Enbridge's DSM Plan and targets. Enbridge believes that the Potential Study is also of relevance for the purpose of guiding the Board and stakeholders in respect of the level of savings that can reasonably be achieved by Company at different DSM budget levels.
112. Navigant acknowledges that all potential studies including this one carry some uncertainty - see excerpt from its "Responses to Stakeholders Comments", dated January 15, 2105 (EB-2015-0049, Exhibit C, Tab 1, Schedule 2, Page 5 of 36).

"Methods employed in this study are common throughout the industry, consistent with best practices, and have been utilized in dozens of studies throughout the country, including for all four IOUs in California (with minor modifications to the approach). Any forecast of technology adoption is fraught with uncertainty, regardless of the approach used and level of rigor employed. As such, all studies of this nature should be taken as one of several inputs into the target setting, regulatory, and detailed program design process. Using our best judgment, we expect that a 90% confidence interval on the achievable estimates in this study would likely include values that are plus or minus 20% of those reported. So, modifications to results that are likely to result in very small percentages of changes in savings are well within the overall "noise" or uncertainty of this study, or any potential study."

113. In his evidence as part of the Green Energy Coalition (EB-2015-0049, Exhibit L.GEC.1, Page 22 of 47), Mr. Neme makes the following statement:

“Enbridge’s recent potential study is fraught with so many methodological problems that it has almost no value for informing conclusions regarding achievable savings potential.”

114. Enbridge is of the view that Mr. Neme’s claims are not reasonable based on the evidence submitted to the Board. Mr. Welch, an expert in modelling energy efficiency adoption and project manager from Navigant Consulting, provided a thorough response during the oral hearing to one of the key concerns raised by Mr. Neme. Mr. Welch was prepared to address the additional concerns raised by Mr. Neme, but in the interest of time he did not. Mr. Welch’s testimony clearly confirmed that Mr. Neme’s views in respect of the Potential Study methodology were not correct.

Accounting Treatment, Deferral Accounts

115. Enbridge is proposing the creation of several additional deferral/variance accounts and a modest revision to the DSMVA. Starting with this account, Enbridge is proposing that certain limited amounts from the 2015 Incremental Budget that are not spent in 2015 be recorded in the DSMVA and used for similar purposes in 2016. The other traditional DSM accounts, being the LRAMVA, DSMIDA, and the Carbon Dioxide Offset Credit Deferral Account methodologies would remain unchanged.
116. The Company is proposing a Cost Efficiency Incentive Deferral Account (DSMCEIDA) which will record any remaining budget in respect of programs that achieve 100% target. These monies, consistent with the Framework at page 24, will then be rolled forward and used in the following year for the purposes of achieving results in that year. The monies carried forward would be in addition to the approved budget level for the following year and would enable the gas utilities to work toward achieving the following year’s annual target.
117. The Company has also proposed the DSM Participant Incentive Deferral Account (DSMPIDA) which will be used to record the variance in incentive payments earned and paid to participants in a particular year versus the amounts budgeted for that year. In short, the need for this account arises from the existence of multi-year DSM program offerings, like the Savings by Design program. Builders enrolled in the program have up

to three years to build residential homes which meet with requirements of the program. As it is only in the year in which the home is actually built and confirmed to meet the program's requirements that an incentive is paid, the budgeted amount for such incentives in the year in which a builder enrolls, which includes the future incentive amounts, needs to be rolled forward. The proposed methodology for this account is set out at Exhibit B, Tab 1, Schedule 6, page 7 (Updated).

118. Finally, the Company proposes a DSM Information Technology Capital Spending Variance Account. Briefly, this account will record the difference between the amounts included in Enbridge's DSM budget for IT Capital Spending in each of the years 2016 through 2020 (which is \$1 million per year) and the amounts actually spent upgrading the DSM IT system which costs are anticipated to be mostly incurred in 2015 and 2016. The estimated cost as noted at Exhibit B, Tab 1, Schedule 6 is approximately \$5 million. It is noteworthy that during Enbridge's recent Custom IR application, it was made clear to the Board that the capital budget for Enbridge's IT systems did not include any amounts for the DSM IT system. The Company made available on one of its panels Mr. Steve McGill, who was in a position to speak to the Company's DSM IT needs. It is noteworthy that no questions were asked of Mr. McGill in this regard.

On Bill Financing

119. The Company has indicated that it is prepared to discuss this issue further with stakeholders. As noted in the oral evidence of Enbridge witness Mr. McGill, the Company currently has the capability of including an on bill financing option on its bills, but a number of issues and questions will first need to be addressed by the Board and stakeholders. These include the appropriateness of the Utilities using shareholder or ratepayer monies to offer low or no interest loans to certain ratepayers. The Company anticipates that there is likely to be push back from financial institutions and HVAC entities which are currently in the market or who wish to enter the market.
120. There is also the question of the existing Open Bill Access Agreement which was reached with stakeholders and which was approved by the Board. What changes would need to be considered to that agreement to facilitate on bill financing is an outstanding question. Another question is what existing commercial arrangements are in place which may not be compatible with Enbridge, in effect, entering the financing market?

Finally, it is to be expected that some parties may question whether under the Undertaking to the Lieutenant Governor, Enbridge would be permitted to enter into the financing market versus simply providing access on its bill to private lenders and other companies. In short, the Company submits that this is an area that requires further exploration before any decisions can be made.

Bill Impacts

121. As identified by Ms. Oliver-Glasford during her presentation, after the Company built up its budgets for each year of the Plan, it applied a top down direction using guidance from the Framework, and particularly the \$2 per month rate impact on residential ratepayers. As noted evidence, Exhibit B, Tab 2, Schedule 4, the Company calculated the rate allocation impact of its programs assuming an achievement level of 100% of target. Use of the 100% target is reasonable in the Company's view having regard to the fact that the Company has historically never earned the 150% shareholder maximum incentive. To use such a level would, as a practical matter, likely lead to underspending in that budgets would be built on an assumed bill impact that will not likely materialize. This being said, the Company did file evidence about bill impacts using 150% of target achievement for illustrative purposes (Exhibit I.T2.EGDI.CME.10).
122. Page 18 of the Framework provides that overall costs increases to other rate classes are general proportional with the guidance provided in respect of residential customers. In its prefiled evidence at Exhibit B, Tab 2, Schedule 4, the Company sets out the average annual bill impact per customer as a percentage in several tables. The Company is of the view that the rate impacts to the other ratepayers are not materially proportionately dissimilar, although amounts may vary over the six years of the Plan depending on which rate classes' projects actually occur.
123. The Company notes that the Board specifically stated in the Framework, at page 17, that:

"The Board is centrally concerned with two factors that must be balanced: ensuring the gas utilities have sufficient funding available to pursue all cost-effective natural gas savings in their franchise areas, and that the costs to undertake such efforts are reasonable for those customers who will not participate in a program."

124. It should be recalled that the Framework was developed following a comprehensive and extensive consultation process undertaken by the Board in respect to the Minister's Directive. The Board first established a working group with broad representation from stakeholders. Under the guidance of Board Staff, a draft Framework was issued for review and comment by the various stakeholder groups. In fact, 24 stakeholders submitted comments, including, in effect, two submissions made by GEC and a series of papers from the Toronto Atmospheric Fund which were authored by Mr. Neme.
125. Looking at GEC's submissions, it is clear that what it was requesting from the Board during the Framework consultative, namely, significantly higher budgets and the inclusion in the avoided costs used for the TRC screening of amounts greater than what the Board requires in the Framework by means of the 15% adder. The Board weighed the submissions of the parties and, pursuant to its statutory requirement to only approve rates which are just and reasonable, the Board issued the Framework.
126. The Utilities naturally and appropriately developed their Plans consistent with the Framework. These are the Plans that have been presented to the Board. GEC has suggested that there is a means of increasing the DSM budgets, despite the \$2 per month impact limit on residential ratepayers, by hypothesizing that there are other costs which will be avoided which will reduce the bills of non-participants and therefore, in effect, free up room for more spending. We have already addressed Enbridge's concerns with these costs earlier.
127. In addition, the Company attempted, through cross-examination and the Table put to GEC's witnesses, at Exhibit K11.2, page 50, to demonstrate that the reductions on non-participant bills as hypothesized by GEC were not material, even if they do exist. The fact is that in at least two important respects, namely carbon and avoided distribution infrastructure costs, the costs have either not yet materialized, as there is no cap and trade system in place, and the distribution infrastructure which GEC relies upon for its hypothetical bill reduction effect is in fact in the ground and generating costs to all ratepayers. Plain and simply, it is one thing to use a ten-year trend line of load-related infrastructure to determine for the purposes of the TRC screening test what infrastructure may have been avoided, and quite another thing to argue that pipe in the ground which generates annual depreciation and return on rate base costs has a

downward impact on rates. Adding to the avoided cost equation all of the costs of segment B of the GTA Project certainly does not stand for the proposition that this plant in the ground will generate bill savings for non-participants.

Integration and Collaboration

128. There are really two aspects to discuss. The first is the appropriateness of integration and cooperation between the gas utilities. The second relates to the integration and collaboration with electric LDCs and the IESO.
129. Turning first to the gas utilities, as noted by the witnesses on the Joint Panel, Enbridge and Union have different franchises and different profiles of customers. Stated differently, there are not necessarily natural synergies which exist in all areas. However, both Utilities have committed to cooperate and collaborate where appropriate. Examples of this already exist, including the Technical Evaluation Committee, the undertaking of joint studies, and the development of the technical reference manual. This being said, the Joint Panel witnesses both indicated that they do not believe there is compatibility between the DSM IT systems of the two Utilities [Tr. 13, p. 18].
130. In respect of Enbridge's collaboration with LDCs, as noted in the prefiled evidence, Exhibit B, Tab 1, Schedule 2, and Exhibit B, Tab 4, Schedules 1 and 2, the Company has reached out to a good number of electric LDCs and other organizations with a view to promoting further collaboration. Notably, Enbridge has been dealing with several LDCs and the IESO regarding the development and its involvement in LDC pilot programming. Business case development discussions are occurring. Priority areas include low-income programming, residential whole home retrofits, and residential new construction. Enbridge has included in its evidence, at Exhibit B, Tab 4, Schedule 1, Table 1, a summary and overview of the DSM / CDM coordination activities in which it is currently engaged.
131. To further promote collaboration and integration with LDCs, the Company is proposing a collaboration and innovation fund ("CIF"), which includes in each year of the Plan \$1 million which will be used to facilitate the ongoing development of innovative and collaborative pilots and research. Further details about the collaborative pilot projects in the works are set out at Exhibit B, Tab 4, Schedule 2, Table 1. In addition, the Company

updated its evidence in response to Board Staff Interrogatory 30 (T11.EGDI.Staff.30), indicating examples of early collaborative progress with initiatives likely to launch in the latter half of 2015.

Mid-Term Review

132. The Minister of Energy has required that the DSM Framework be subject to a mid-term review aligned with the mid-term review of the Conservation First Framework, which must be completed by June 1, 2018. The Utilities' witnesses, Ms. Oliver-Glasford and Ms. Lynch, indicated on the Joint Panel that for a review to be completed on time, the review would ideally be commenced by no later than the third quarter of 2017. As required by the Framework, the mid-term review would examine the completed IRP Study, the scope of work for which Enbridge has filed at Exhibit C, Tab 1, Schedule 3. The mid-term review is also an appropriate time to consider the results of the Potential Study which is being conducted, and its consideration, as required by the Minister in his letter to the Board dated February 4, 2015, of how such "potential DSM benefits as carbon reduction and DRIPE may be used to screen prospective DSM programs and inform future budgets."
133. While it is within the prerogative of the Board to determine the breadth of the mid-term review, including the budgets and targets currently proposed for 2019 and 2020 by Enbridge, as noted in the Company's response to Undertaking J6.2, it is hoped that the Board will not believe it necessary to revisit the areas set out in this undertaking response. As well, it is important to make one further observation. For DSM to effectively continue beyond the mid-term review, the Utilities require some certainty that funding will continue and that there will not be significant reductions in budget levels. The knowledge that funding will continue over future years is important to the success of a number of the Company's offers.

Conclusion

134. Enbridge's Multi-Year DSM Plan provides the foundation for a new and invigorated era of natural gas DSM in Ontario. In a time of great change within the energy industry, the Company's proposal represents an important step in the Province's journey to put Conservation First.

135. Enbridge's Plan has been built on its many years of experience which informed the development of fair but challenging targets that will allow for the effective mobilization of the Board's Framework. The Plan is fair to participants and non-participants and is responsive to the needs of customers and stakeholders. It is therefore very much in the public interest.

All of which is respectively submitted.