BOMA's COMPENDIUM

1. Excerpt from Environmental Commissioner of Ontario's Annual Energy Conservation Progress Report 2016/2017.

2. Excerpt from Union's IRRs to BOMA.

3. Excerpt from Union's Submission on Mid-Term Review.

4. Excerpt from EGD's Submission on Mid-Term Review.

5. Union's letter dated July 28, 2016 to OEB with respect to Green Investment Fund Attribution.

In 2015, conservation budgets and spending were lower than this. This is because the new framework was not finalized until December 2014, so DSM program budgets for both utilities were kept at 2014 levels for 2015.

In their 2015-2020 plans, EGD and Union both identified additional initiatives and spending for 2015, over and above the 2015 program budgets, that would help transition to the higher level of program activity planned for 2016-2020. Projected 2015 spending for these incremental items amounted to $4.92 million for EGD and $1.4 million for Union. These amounts were not built into their rates but would require approval by the OEB at a later date.

DSM budgets and actual spending for both 2015 programs and incremental activities are shown in Table 5.3. Total DSM spending for both utilities was $68 million in 2015. Both utilities spent their full program budgets, with Enbridge spending several million dollars more, due to the popularity of its Home Energy Conservation program (utilities are allowed to access some additional funding if programs are more successful than anticipated). Union spent 4% of its revenue and EGD spent 3.4% of its revenue on DSM programs in 2015.

The story was different for spending on incremental activities. Given the uncertainty surrounding the OEB's approval of this spending (which was eventually given, but not until January 2016), neither company ended up spending more than a small portion of their incremental funding.

Table 5.3. 2015 DSM Budget vs Spending for the Gas Utilities

Activity	Enbridge		Union	
	2015 Budget ($)	**2015 Actual Spending ($, % of Budget)**	**2015 Budget ($)**	**2015 Actual Spending ($, % of Budget)**
2015 DSM Programs	32,801,939	35,220,594 (107%)	32,587,879	32,178,765 (99%)
Incremental Spending on New Framework Activities	4,920,291	559,378 (11%)	1,400,000	213,879 (15%)
Totals	**37,722,230**	**35,779,972 (95%)**	**33,987,879**	**32,392,645 (95%)**

Source: Union Gas, *2015 Demand Side Management Draft Annual Report* (2016) at 73; Enbridge Gas Distribution, *2015 Demand Side Management Draft Annual Report* (2016) at 106.

5.1.6 Cost-Effectiveness

In order to ensure that DSM provides value to customers, the OEB requires that most programs pass a cost-benefit test before being offered. The required test has been the Total Resource Cost (TRC) test, which compares the costs of conservation (primarily the program administration cost and the incremental cost of energy-efficient technologies) against the benefits (primarily the financial value of energy savings). In the new framework, the test now increases the benefits by including a 15% adder to account for the non-energy benefits (including emissions reductions) associated with the programs. This modified test is referred to as the TRC-Plus test. Whether using the TRC or TRC-Plus test, a value of greater than one indicates that a program is expected to be cost-effective.

Cost-benefit calculations are performed again after programs have been delivered. Enbridge adopted the TRC-Plus test in reporting 2015 results, while Union will do so in 2016. In 2015, Union's portfolio had a TRC ratio of 2.73, indicating program benefits were almost three times as high as the costs. Enbridge's results showed a TRC-Plus ratio of 3.61. This cannot be directly compared with Union's results due to the difference in the test used.

Costs and benefits can also be looked at from the perspective of the utility. How much does the utility need to pay to save a cubic metre of gas? In simple terms, the total DSM program cost in 2015 was $68.173 million[11] (including the cost of initiatives that did not have directly measurable gas savings, but excluding shareholder incentives) and the total cumulative gas savings were 2,433,699,754 m^3.[12] The (non-discounted) cost per cubic metre of gas saved is 2.8¢/m^3.

Put into the context of Ontario's carbon price (as established by its new cap and trade program), 2.8 ¢/m^3 would be equivalent to paying $15/t CO_2e over the lifetime of the conservation measures.[13] This price is lower than the market price of GHG allowances, which was established at just over $18/t CO_2e in Ontario's first two auctions. What's more, this estimated cost of conservation does not even include the additional benefits for natural gas distributors that would accrue from distributing less gas.

These results suggest that utilities should examine spending more on conservation (beyond their approved DSM budgets), as part of their cap and trade compliance plans (see Section 5.2.2). Over the long term, more conservation may be a less expensive way to meet cap and trade compliance obligations than purchasing allowances, although this is not guaranteed (the incremental cost of conservation tends to increase as more conservation programs are implemented.) This will benefit gas customers who will bear the full burden of the cost of purchasing cap and trade allowances. In other words, when conservation is cheaper for customers than cap and trade allowances, it should be turned to first.

Utilities should examine spending more on conservation as part of their cap and trade compliance plans.

1.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: EB-2016-0296, Exhibit 3, p. 25 of 47 Updated

Preamble: For 2017, there is only one customer abatement program included in Union's compliance plan that is incremental to the DSM plan. Through the Government of Ontario's GIF Union has entered into an agreement with the Ministry of Energy to receive funding of $42 million to enhance the Home Reno Rebate offering and achieve additional GHG emissions reductions through 2018.

What differentiates the GIF funded Home Reno Rebate from Union's existing program. How will the savings be differentiated to insure additional GHG emission reductions are from the GIF program elements? Will Union include the customer savings and costs from the home energy efficiency retrofit program in its DSM monitoring and reporting system? Will such savings contribute to any shareholder incentives?

Response:

With funding from the Green Investment Fund ("GIF"), Union enhanced the Home Reno Rebate offering. The enhancements include the following three changes:

1. Expanded eligibility for participation, including:
   - Homes that use oil, propane, or wood as their primary heating fuel (rather than just natural gas)
   - Homes that use natural gas as their primary heating fuel but are not serviced by Union or Enbridge Gas Distribution

2. New rebates for:
   - High-efficiency oil furnaces and boilers
   - High-efficiency propane furnaces and boilers
   - High-efficiency wood burning systems
   - Air-source heat pumps
   - Smart thermostats

3. Increased rebate levels for measures already included in the offering.

Homes that participate in the enhanced Home Reno Rebate Offering, and their associated GHG emission savings, will be attributed to either Union's DSM portfolio or the GIF based on the following rules:

performance metrics as discussed in the response at Exhibit B.APPrO.5) will serve to test the prudence of Union's activities. Such reviews should provide ratepayers with assurance that they will incur just and reasonable rates.

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1. 100% of the results from homes outside of Union's franchise area will be attributed to the GIF.
2. 100% of the results from homes within Union's franchise that use a primary heating option other than natural gas will be attributed to the GIF.
3. 100% of the results directly related to the smart thermostat will be attributed to the GIF.
4. For all other results, there will be a two-phased approach to attribution each year. During Phase 1, 80% of the results will be attributed to Union and 20% will be attributed to the GIF. If at any point in a given year Union exhausts its DSM funding available, or elects to stop using DSM funds for the enhanced Home Reno Rebate offering, Phase 2 of attribution will begin. During Phase 2, 100% of the offering's results will be attributed to the GIF. Phase 1 will reset on January 1st of each year.

For further details on the attribution agreement for GHG emissions savings between Union and the Ministry of Energy, refer to:

http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/536605/view/UNION_Ltr_2015-2020%20DSM%20Plan_Green%20Investment%20Fund%20Letter_20160728.PDF

Union tracks all customer savings and costs from the enhanced Home Retrofit Program, regardless of whether the homes are attributed to Union's DSM portfolio or the GIF. Homes attributed to Union's DSM portfolio will count towards Union's DSM Resource Acquisition scorecard and shareholder incentive. Homes attributed to the GIF will not count towards Union's DSM portfolio and will not contribute to any DSM shareholder incentive.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: EB-2016-0296, Exhibit 2, p.5 of 10

Preamble: The UFG volume forecast, for 2017 is 89,851,375. It is based on the forecasted total throughput volumes for Union multiplied by the Board approved UFG Volume percentage of 0.219%.

Has Union Gas done any studies which bear out the Board' approved UFG volume percentage? How does Union intend to address these emissions? How does the Board approved volume percentage compare to other major natural gas distributors? While Enbridge's unaccounted for volumes, represent over 80 per cent of its facility related emissions, what are the factors that make Union Gas' share 28%?

a) Are the GHG emissions forecasts reasonable and appropriate?

b) Is the carbon price forecast reasonable and appropriate?

Response:

Please see the response to Exhibit B.FRPO.3.

As stated in its response to Exhibit B.FRPO.6, Union undertakes periodic reviews of its Unaccounted for Gas ("UFG") volumes. The Board-approved UFG volume percentage is determined using a three-year historical weighted average of UFG volumes and throughput. Please see Attachment 1 for Union's UFG volumes for the year ending December 2013. It is Union's view that its UFG volume percentage compares favourably to other major natural gas distributors.

a) Yes. The GHG emission forecast is reasonable and appropriate. The GHG emissions forecast is based on volume forecasts prepared in accordance with the existing OEB approved methodology, with GHG emissions calculated following the methodologies identified in the Ontario Ministry of the Environment and Climate Change's "Guideline for Quantification, Reporting and Verification for GHG Emissions - January 2017."

b) Yes. Union believes that its recommended carbon price forecast of $17.70/tonne is reasonable and appropriate for setting the 2017 Compliance Plan rates. See Exhibit 2, pp.8-10 and Exhibit 2, Schedule 2 for the calculation and rationale. Also, please see the response at Exhibit B.BOMA.8.

REFUSAL TO TRADE AGREEMENT

BOMA INTERROGATORY #10

INTERROGATORY

Issue 1

Ref: 1.5 - Cost Consequences and General (Conflict of Interest)

(a) Will EGD (the utility), or a related party, as defined in Ontario Regulation 144/16, register as a market participant, to allow it to participate in the cap and trade? Does it intend to buy, sell, trade, take derivative position on, or in any other way participate in the carbon market for its own account (or that entity's account); in other words, in the case of the utility, in any capacity other than on behalf of its ratepayers?

(b) If yes, what entity within the EGD family will be a registered market participant? Has any EGD related entity registered as a market participant?

(c) If yes, what arrangements will be made to ensure that the ratepayers will be protected from any conflicts of interest, preferential treatment of non-regulated EGD affiliated companies, sharing of information with these entities, and the like, which could lead to higher costs for ratepayers?

(d) Given the scope for abatement activities in EGD's franchise, why has EGD not proposed a full slate of abatement activities for 2017 analogous to the GIF program and addition to the DSM program? Would any profits from cap and trade activities be credited to the ratepayers' account?

(e) Please confirm that EGD includes no abatement investments in its compliance plan for 2017, other than the GIF program.

(f) What is the basis of the calculation of the 2017 savings from the GIF program? What will be the percentage of the 2017 savings in 2018, 2019, and 2020?

(g) (i) Does EGD have full cost recovery for its administration of the Green Investment Fund? (ii) Please provide a copy of the Agreement between EGD and the Ontario Government, pertaining to EGD GIF program. What was the rationale for the $46 million EGD raised from the government? What is the proposed budget for each year of the compliance period?

Witnesses: A. Langstaff
J. Murphy
F. Oliver-Glasford
J. Tideman

RESPONSE

(a) No.

(b) This is not applicable, as per the answer to (a) above.

(c) This is not applicable, as per the answer to (a) above.

(d) Please refer to Board Staff #19 filed at Exhibit I.1.EGDI.STAFF.19. Profits, should any arise, would be factored into the total compliance costs.

(e) Confirmed.

(f) The basis of the calculation is Natural Resources Canada's Hot 2000 energy modeling software. The illustrative allocation of volume savings from the GIF program is outlined in Exhibit C, Tab 3, Schedule 4, page 3, Table 2. The current year's savings are considered to be partially effective and have been allocated at 50% with the previous year's volume savings being 100% fully effective. The allocation of 2017 savings in the year's 2018 to 2020 will be fully effective at 100%. Any natural gas savings and resulting GHG emission reductions from the 2017 GIF activities will be taken into account when the 2017 and subsequent years forecasts are trued up and will be documented in the annual monitoring and reporting submitted to the Board.

(g) (i) Yes

(ii) The Ontario Transfer Payment Agreement ("TPA") between the Minister of Energy and Enbridge dated March 31, 2016 relates to Enbridge's GIF activities which involve the extension of several of its DSM programs. None of the funding that may become payable to the Company for such activities are costs included in the Company's Compliance Plan and are therefore not costs proposed to be recoverable in rates. While it is anticipated that GIF funded activity may generate natural gas savings and therefore result in GHG emission reductions in 2017, given the uncertainty of the savings (the program is only really ramping up in 2017) and further given the immaterial contribution that such savings might contribute to GHG emissions reductions this year, the Company has not adjusted its 2017 GHG emissions forecast to reflect any GIF funded forecast reductions. As noted in its pre-filed evidence at Exhibit B, Tab 2, Schedule 1, page 2, at paragraph 7:

Witnesses: A. Langstaff
J. Murphy
F. Oliver-Glasford
J. Tideman

The GIF-funded customer-related abatement is incremental to anything that has been built into volumes for 2017 and incremental to Enbridge's approved DSM plan. The volume reductions associated with this program have not been included in Table 1, as they are minor relative to the total volumes and are not confirmed at this time. It is anticipated that the volume reduction will be approximately 13,000 10 3m3 , however, this is a test case on reporting and submitting verified volume reductions and will be documented in the annual monitoring and reporting submitted to the Board and used for true up purposes.

Enbridge is therefore of the view that the filing of the TPA would not be of any benefit to the Board in this proceeding. It respectfully declines to produce same.

Enbridge is unable to provide a response for "What was the rationale for the $46 million Enbridge Gas Distribution raised from the government?" at this time. Please provide the reference or source that is the basis for this question.

It is Enbridge's understanding that the Government of Ontario views the $100 million maximum GIF spending by the two Utilities as being a "down payment" on its Climate Change Action Plan. GIF has an expiry of the end of 2018 so it does not operate over the term of the compliance period. While not relevant for the purposes of this proceeding as no GIF costs are being included in Enbridge's Compliance Plan, in the interests of being responsive, the maximum total spend by Enbridge under the GIF is $58 million.

Witnesses: A. Langstaff
J. Murphy
F. Oliver-Glasford
J. Tideman

BOMA INTERROGATORY #11

INTERROGATORY

Issue 1.4

Ref: Compliance Plan

EGD has stated that it included no customer abatement activities incremental to DSM, save for the GIF program, savings from no new activity, no savings for long-term investments, and no offsets in its 2017 plan. When does EGD anticipate a secondary market for allowance/credit will be available to buy, sell, and trade allowance, in Ontario?

RESPONSE

The secondary market for allowances and credits is already active. An Ontario Carbon Emission Allowance ("OCA") with a delivery date of December 2017 can now be bought, sold and traded on the Intercontinental Exchange ("ICE").

Witnesses: A. Langstaff
J. Murphy
F. Oliver-Glasford

BOMA INTERROGATORY #7

INTERROGATORY

Issue 1

Ref: EB-2016-0300, Exhibit C, Tab 3, Schedule 4, p2 of 7

Preamble: In 2016 Enbridge entered into an agreement with the Ministry of Energy ("MOE") to offer an advanced home energy audit and retrofit program over the course of three years through the GIF. The primary objective of this program is to help homeowners save on their energy bills year after year while also reducing overall GHG emissions. The whole home retrofit program was designed to be similar to Enbridge's existing DSM offer, the Home Energy Conservation program, and is available to all customers regardless of primary fuel type. In addition, the funding was also meant to increase the deployment of the Adaptive Thermostats offer, also consistent with the Company's DSM program, as well as funding to pursue educational and behavioural-based GHG reductions.

Given the similarity of the whole home retrofit program to its Home Energy Conservation, how will Enbridge determine which savings are incremental?

RESPONSE

Please refer to LIEN Interrogatory #3(b) filed at Exhibit I.1.EGDI.LIEN.3.

Witnesses: M. Lister
J. Tideman

RESPONSE

(a) The scope and process for the DSM Mid-Term Review will ultimately be determined by the Board. At a minimum, Enbridge's expectation for the scope of the Mid-Term review would include the items set out in Schedule D of the February 24, 2016 DSM Decision (EB-2015-0049), as well as the function of DSM and any incremental energy efficiency activity within Compliance Planning needs or requirements. Since the DSM Framework and the DSM Decision were released prior to the release of Government policies and legislation with respect to climate change goals, as well as prior to the introduction of Cap and Trade, an important function of the Mid-Term review should also be to ensure alignment among goals, expectations, and intended outcomes.

(b) Enbridge anticipates that stakeholder opinions will be sought, and that the Ontario Energy Board will determine who are the necessary participants to the Mid-Term Review.

(c) & (d) Enbridge has been considering options around merging the two Frameworks at a conceptual level only. Enbridge expects that the issue of convergence, or not, will be a discussion within the DSM Mid-Term review. Enbridge has not conducted any detailed cost/benefit analyses.

Witnesses: M. Lister
F. Oliver-Glasford

September 1, 2017

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB-2017-0127 - Union Gas Limited – DSM Mid-Term Review – Part One Submission

Enclosed is Union Gas Limited's submission for Part One of the Mid-Term Review of the 2015-2020 Demand Side Management Framework for Natural Gas Distributors.

If you have any questions concerning this submission, please contact me at (519) 436-4558.

Yours truly,

[*Original Signed by*]

Adam Stiers
Manager, Regulatory Initiatives

c.c.: Myriam Seers (Torys)
Valerie Bennett, OEB Case Manager

DSM MID-TERM REVIEW

PART ONE: SUBMISSION OF UNION GAS LIMITED

On June 20, 2017 the Ontario Energy Board ("OEB") issued a letter outlining the consultation process by which it will undertake the Mid-Term Review of the 2015-2020 Demand Side Management ("DSM") Framework for Natural Gas Distributors (the "DSM Framework"). The letter stated that the Mid-Term Review will be separated into two parts. In the first part, the OEB will undertake a review of the OEB-approved 2015-2020 DSM Framework in the context of the Cap-and-Trade program. The second part requires submission of the DSM Mid-Term studies and reports as set out in the OEB's DSM Decision on Union's 2015-2020 DSM Plan.[1] This is Union Gas Limited's ("Union") submission for part one of the Mid-Term Review.

This submission is organized according to the two issues that the OEB invited parties to comment on as follows:

1. Overview
2. Issue 1 – *The Relationship Between the Current Suite of DSM Programs and Actual Cap-and-Trade Activities of Customers with their own Compliance Obligations*
    - 2.1. Background
    - 2.2. Relationship Between DSM and Customer Cap-and-Trade Activities
    - 2.3. Conclusions
3. Issue 2 – *The Attribution of Costs and Savings to Ratepayer-Funded DSM Programs where Natural Gas Utilities Offer Carbon Abatement Programs in the Market*

[1] EB-2015-0029, Decision and Order.

3.1. Background
3.2. Attribution Between DSM and Other Sources of Influence
3.2.1. Partnership Attribution
3.2.2. Net-to-Gross Adjustments
3.3. Development of Incremental Energy Conservation Programs
3.4. Maintaining Aggressive Pursuance of DSM Programs
3.5. Conclusions

1. OVERVIEW

The introduction of Ontario's Cap-and-Trade program in 2017 has transformed the energy conservation landscape and imposed challenging greenhouse gas ("GHG") emissions reduction targets. Union's submission explores the complimentary nature of Union's current suite of DSM programs and Ontario's Cap-and-Trade program, it outlines the actions that regulators must take to ensure the unique co-existence of these programs and it encourages changes to the existing DSM Framework to facilitate its adaptation to the new energy conservation landscape. Union requests that all recommendations and changes within its submission be made effective for the 2018 DSM program year.

Union's existing DSM programs reduce customers' energy consumption and subsequently customers' energy costs and Cap-and-Trade compliance costs. By reducing energy consumption, DSM programs reduce Cap-and-Trade compliance costs for all customers regardless of who manages their compliance obligation. In order for Ontario's GHG emissions reduction targets to be met, regulators and government must clearly distinguish ratepayer-funded

DSM programs from incremental government-funded Cap-and-Trade programs to ensure that these programs remain complimentary and not cannibalistic.

With regard to the existing DSM Framework, the outdated DSM shareholder incentive mechanism must be enhanced to reflect a new and more complex energy conservation landscape. To accomplish this, the OEB must fairly recognize any reduction in energy consumption and adequately incent the utilities to aggressively pursue further DSM opportunities. Similarly, the OEB should eliminate the increase to utility DSM targets directed in its Decision and Order on the utilities 2015-2020 DSM Plans or else direct a corresponding increase to budgets in order to enable the utilities to fund additional customer participation.[2] Finally, evaluation and audit processes must evolve to reflect the increasingly complex energy conservation landscape. This includes shifting to a standardized net-to-gross adjustment methodology.

2. ISSUE 1 – *THE RELATIONSHIP BETWEEN THE CURRENT SUITE OF DSM PROGRAMS AND ACTUAL CAP-AND-TRADE ACTIVITIES OF CUSTOMERS WITH THEIR OWN COMPLIANCE OBLIGATIONS*

2.1 BACKGROUND

Union is committed to identifying all options that support Ontario's GHG reduction goals, including the design and delivery of energy conservation programs. Union's current DSM portfolio consists of energy conservation programs that help customers (residential, commercial and industrial) reduce their energy consumption and costs. For two decades, Union's DSM

[2] EB-2015-0029, Decision and Order, p. 66.

programs have saved approximately 8.7 billion lifetime m^3 of natural gas, equivalent to 16.3 Mt CO_2e, by providing:

1. Education, to inform customers of potential energy conservation activities within their home or facility;
2. Technical expertise, to help identify and to support the implementation of specific energy conservation projects within the customer's home or facility; and,
3. Financial incentives, to offset the upfront costs associated with implementing energy conservation projects, making it more likely customers will undertake a project.

Similarly, Union's DSM marketing efforts, which include mass-market initiatives (such as bill-inserts and website content) as well as one-on-one relationships via utility account managers, are an integral part of promoting energy conservation activities throughout the province.

2.2 Relationship Between DSM and Customer Cap-and-Trade Activities

With the introduction of Ontario's Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities (the "Cap-and-Trade Framework") in 2016, followed by the implementation of Ontario's Cap-and-Trade program in 2017, the province has established challenging GHG emissions reduction targets. Union's DSM programming, current and future, will be one tool to meet these targets, as the reduction of our customers' natural gas consumption via energy conservation programs directly results in a reduction of their GHG emissions. Furthermore, when a customer implements an energy conservation project via a utility DSM program, the customer avoids not only future energy costs, but also future Cap-and-Trade

compliance costs. In other words, any DSM program that provides an economic benefit by reducing energy consumption will now also provide an economic benefit by reducing the cost of GHG emissions. As the cost of GHG emissions increases over time, the economic benefit of DSM programs will also increase.

The economic benefit of utility DSM programs is applicable to both types of customers as defined by the Cap-and-Trade Framework: customers with their own compliance obligations (large final emitters, capped participants and voluntary participants); and customers whose compliance obligations are managed by Union. At this time, Union does not see any value in differentiating DSM programs based on who is responsible for the customer's Cap-and-Trade compliance obligations. Instead, DSM program design and/or program eligibility should be determined based on customers' operational and behavioural characteristics, consistent with Union's current approach. For example, if Union were to modify the DSM program for large volume customers, rate classes should be used to distinguish customer eligibility for the revised program (as opposed to who manages the customer's Cap-and-Trade compliance obligations), as they more appropriately reflect customer characteristics.

2.3 CONCLUSIONS

In summary:

1. Union has been committed to energy conservation for two decades through its suite of DSM programs. Union's current suite of DSM programs directly supports customer Cap-and-Trade activities by providing education, technical expertise, and financial incentives

to facilitate energy conservation projects. DSM programs reduce customer's energy costs, as well as their GHG emissions and subsequently their Cap-and-Trade compliance costs.

2. By reducing consumption, DSM programs support the reduction of Cap-and-Trade compliance costs for customers that manage their own compliance obligations and for customers whose compliance obligations are managed by Union.
3. Union does not believe that there is any value in differentiating program design based on who manages the compliance obligations. Instead, DSM programs should be designed based on customers' unique operational and behavioural characteristics, consistent with Union's current approach to DSM program design.

3. ISSUE 2 – *THE ATTRIBUTION OF COSTS AND SAVINGS TO RATEPAYER-FUNDED DSM PROGRAMS WHERE NATURAL GAS UTILITIES OFFER CARBON ABATEMENT PROGRAMS IN THE MARKET*

3.1 BACKGROUND

The DSM Framework provides a tested, transparent, and streamlined process for the utilities to design and deliver ratepayer-funded energy conservation programs using OEB-approved methodologies. Furthermore, the DSM Framework enables collaborative assessment of the utilities' energy conservation program plans and results by the OEB and interested stakeholders. With the implementation of Ontario's Cap-and-Trade program in 2017, a second framework has been created to support the evaluation of utility carbon abatement as a compliance option. The Cap-and-Trade program provides additional options for incremental energy conservation programs.

3.2 Attribution Between DSM and Other Sources of Influence

Savings related to ratepayer-funded DSM programs and other sources of influence (including other energy conservation programs) should be attributed to those influences respectively. With respect to the attribution of costs and savings between DSM and other sources of influence, it is Union's view that there are two concepts to consider, partnership attribution and net-to-gross adjustments.

3.2.1 Partnership Attribution

Union defines partnership attribution as the attribution of costs and savings between a utility DSM program and other partnered sources of funding, outside of the DSM Framework. For example, Union currently administers the enhanced Home Reno Rebate Offering, a program that is funded by ratepayers through the DSM Framework as well as by the provincial government through the Green Investment Fund. In this case, a partnership attribution agreement exists between the utility and the provincial government that sets out how the costs and savings resulting from the program will be attributed to each partner. The partnership attribution agreement was informed by the OEB's Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020) (the "Guidelines"). Specifically, the Guidelines state: [3]

> *"Attribution of savings between rate-regulated natural gas utilities and other parties (e.g., governments, non-rate-regulated private sector, etc.) should be based primarily on the shares established in a partnership agreement reached prior to the program's launch."*

[3] EB-2014-0134, Guidelines, p.22.

Union also filed a summary of the partnership attribution agreement with the OEB prior to the launch of the program,[4] as per direction from the Guidelines: [5]

> *"The natural gas utilities are also expected to file expected spending for each of the partners participating in the delivery of the program before the program is launched and the actual amount spent by each partner within each program year has taken place."*

Union's view is that the current partnership attribution process set out in the Guidelines is appropriate and should be maintained going forward for all partnerships between ratepayer-funded DSM programs and other partnered sources of funding (including Climate Change Action Plan ("CCAP"), GreenON, and federal programs), for two reasons:

1. It provides the utilities the ability to leverage ratepayer-funded DSM programs using other sources of funding, resulting in enhanced energy conservation for customers; and,
2. It ensures reasonable attribution outcomes are reached, as all involved parties are required to agree to their share of the costs and benefits from the program.

Further, Union submits that the attribution outcome should be accepted by the OEB provided that all involved parties agree to the attribution of costs and benefits from the programs.

[4] EB-2015-0029, Union Letter (July 28, 2016).
[5] EB-2014-0134, Guidelines, p.22.

3.2.2 NET-TO-GROSS ADJUSTMENTS

Net-to-gross adjustments (which include free-ridership and spillover adjustments), attribute savings specifically influenced by an energy conservation program. For example, if the deemed savings for a high-efficiency technology offered by a program is 100 m^3 of natural gas per year, and the net-to-gross adjustment is 0.9, then the program would only claim 90 m^3 of natural gas per year towards its results. It would therefore be assumed that the remaining 10 m^3 is attributed to non-partnered, outside influences and/or customers who would have installed the measure regardless of having received an incentive to do so.

Historically, net-to-gross adjustments have been determined for natural gas utilities in Ontario via self-reported studies where a sample of past program participants are asked whether their participation was attributable to the program. With the launch of Ontario's Cap-and-Trade program in 2017 and the corresponding influx of delivery agents administering energy conservation programs in the province, the energy conservation landscape has become more complex. As a result of this complexity, it is increasingly difficult for participants to identify exactly what influenced their decision to undertake an energy conservation project. Energy conservation influences in Ontario now include:

1. Natural gas DSM programs;
2. Electricity Conservation and Demand Management ("CDM") programs;
3. Government-funded energy conservation programs (including CCAP and GreenON); and,
4. Increasing energy prices due to the Cap-and-Trade program.

Further, energy conservation program experts across North America have identified fundamental concerns with the effectiveness of measuring net-to-gross adjustments using the self-reported methodology. Research Into Action Inc.,[6] with input from expert Dr. Jane Peters, set out these concerns in its August 2017 report to Enbridge Gas Distribution ("Enbridge"), which Union has reviewed. Union expects this report will be filed by Enbridge in its DSM Mid-Term submission due at the same time as this submission. Research Into Action Inc. states that the self-reported methodology can lead to inaccurate net-to-gross adjustments, due to the following:

- Difficulty for participants to accurately attribute energy conservation decisions between themselves and the energy conservation program.
- Difficulty for participants to identify the hypothetical alternative (i.e. what energy conservation decisions would they have made absent the energy conservation program).
- Tendency for participants to rationalize past decisions in ways that are consistent with their current attitude, as opposed to their prior attitude. For example, if a participant has become more energy-conscious due to the energy conservation program's influence, when asked to self-report the programs' influence on previous decisions they are more likely to consider their current attitude towards energy conservation, as oppose to their attitude at the time of the decision.
- Tendency for participants to provide socially desirable responses. For example, if the participant believes it is socially desirable to be energy-conscious, they may respond to a self-reported survey in a way that indicates they would have done the "right" thing

[6] Research Into Action Inc. is a social marketing and evaluation research firm headquartered in Oregon, specializing in evaluation research and market assessment design and analysis services in the fields of energy efficiency, renewable energy and natural resource management.

themselves – even if it was in fact the energy conservation program that influenced their behaviour.

- Difficulty for participants to recognize all elements of the energy conservation program's influence. For example, the participant may not be aware of the utility's marketing efforts towards contractors or equipment vendors, which may have indirectly influenced their behaviour.

Union's recent experience with self-reported net-to-gross studies has shown that their cost is disproportionate to the value they provide, such that they burden ratepayers with unnecessary costs that could be better spent on other more effective evaluation activities. For example, the most recent self-reported net-to-gross study is expected to cost ratepayers approximately $500,000.[7] Furthermore, the nature of the self-reported methodology (requiring surveys to be commissioned after the program year has concluded) delays the utilities' ability to finalize program results, financial reporting, and ultimately to dispose of deferral account balances in a timely manner. This is evident in the case of the utilities outstanding 2015 DSM evaluation and audit results which are delayed in part due to post-program evaluation practices including completion and implementation of the self-reported net-to-gross study noted above.

The 2015 DSM evaluation and audit process is more than a year behind schedule and lacks the efficiency, collaboration, transparency, stability and predictability claimed by the OEB as part of

[7] The 2017 study determined net-to-gross adjustments for Union and Enbridge's custom program offerings in the Commercial/Industrial and Large Volume customer markets.

its justification for assuming control of the process.[8] The OEB still has not released the 2015 Final Evaluation and Audit Report and, as Union understands it today, this report may be subject to amendment in order to incorporate the outstanding spillover results of a net-to-gross study. The OEB informed the utilities on August 29, 2017 that the results of the spillover portion of the net-to-gross study will not be available until January 2018. This regulatory instability and inefficiency negatively impacts Union's ratepayers and discredits the evaluation and audit process. Further, this delay is cause for concern for both Union with regard to financial reporting and for ratepayers who will bear the burden of disposition of 2015 DSM deferral balances in 2018.

Finally, using the self-reported methodology to retroactively adjust the utilities' DSM results creates an unstable environment for the utilities, the OEB, and non-utility stakeholders to assess current and future DSM programming. At a time when energy conservation programs are becoming increasingly important to meeting Ontario's GHG emissions reduction targets, the ambiguity caused by potential retroactive adjustments unnecessarily impedes the utilities' ability to optimize GHG emissions reduction plans.

For these reasons, Union submits that it is no longer reasonable to utilize the self-reported methodology to determine net-to-gross adjustments. Union requests that the OEB modify the net-to-gross adjustment methodology for the current DSM Framework to a standard net-to-gross

[8] EB-2014-0134, Union Submission, p. 38; EB-2014-0134, Report of the Board, Section 7.

adjustment for all programs within the range of 0.7 to 0.8, excluding Union's Low-Income, Market Transformation and Large Volume Direct Access programs which should not be subjected to net-to-gross adjustments due to their unique characteristics. Alternatively, the OEB could direct the development of a negotiated adjustment by customer market via initiation of an Evaluation Advisory Committee ("EAC") led process, applicable for the remainder of the 2015-2020 DSM Framework period and adjust as required for each subsequent DSM Framework period.[9] The requested approach would significantly reduce ratepayer costs (both capital and resource) associated with determining net-to-gross adjustments, it would eliminate the outdated self-reported methodology for natural gas utilities in Ontario and it would avoid continued delay of annual evaluation and audit processes and subsequent disposition of DSM deferral accounts.

3.3 Development of Incremental Energy Conservation Programs

Union supports the development and implementation of incremental energy conservation programs through the Cap-and-Trade program. In fact, the OEB provided the utilities the tools (Marginal Abatement Cost Curve ("MACC") and the Long Term Carbon Price Forecast) necessary for the assessment of the cost-effectiveness of Cap-and-Trade abatement programs.[10] Through thorough analysis using these tools, Union has determined that there are no cost-effective incremental energy conservation programs that would be prudent to pursue at this time.

[9] The EAC consists of representatives from OEB Staff, Union and Enbridge, non-utility stakeholders, independent experts, and the Independent Electricity System Operator, as well as observers from the Environmental Commissioner of Ontario and the Ministry of Energy. The purpose of the EAC is to provide input and advice with respect to DSM evaluation.

[10] The MACC and Long Term Carbon Price Forecast were completed for the OEB by ICF and were released on May 31, 2017 and July 20, 2017 respectively.

As evident by the Minister of Energy's directive to the Independent Electricity System Operator ("IESO") on August 4, 2017, as well as by recent GreenON Requests for Proposals ("RFP"), the provincial government has begun commissioning Cap-and-Trade energy conservation programs that duplicate the utilities' DSM programs. In the August 4, 2017 letter, the Minister of Energy outlined a directive for the IESO to collaborate with the GreenON to: [11]

> *"support, directly or through contracted third parties, the design and delivery of Green Ontario Fund Programs with a focus on reducing greenhouse gas emissions associated with energy usage and energy sources from Ontario residences and businesses, such as:*
>
> - *Residential Direct Install and Energy Review*
> - *Province-wide Smart Thermostat Rebate Program*
> - *Low Carbon Technology Incentives Program for Homes and Multi-Unit Residential Buildings*
> - *Low Carbon Technology Incentives Program for Small and Medium-Sized Commercial Businesses*
> - *Direct Install and Energy Review for Manufacturing Small and Medium-Size Enterprises*
> - *Programs targeted to on-reserve Indigenous customers*
> - *Programs targeted to low-income customers"*

As an example of duplicative programming, the IESO has issued an RFP for the delivery of the Residential Direct Install and Energy Review program listed above, which competes directly

[11] http://www.ieso.ca/corporate-ieso/ministerial-directives

with Enbridge's Home Energy Conservation program and Union's enhanced Home Reno Rebate Offering.[12]

Union submits that in order for Ontario's GHG emissions reduction targets to be met it is crucial that regulators and government clearly distinguish ongoing DSM programs from new Cap-and-Trade programs, by ensuring Cap-and-Trade programs are truly incremental to existing DSM programs. Union's position is supported by Ontario's Environmental Commissioner, who states in an August 2017 report *"Given its climate mitigation potential, funding for gas conservation is also being made available by the Ontario government from cap and trade proceeds. Careful oversight will be needed to ensure that these initiatives do not conflict and that utility programs continue to be delivered effectively"*.[13]

In order to advance the development of incremental energy conservation programs while ensuring that these initiatives do not conflict with the utility's DSM programs, a new approach should be considered. This approach could include utilizing funds from government (i.e. CCAP, GreenON, federal programs) to advance programs that otherwise would not proceed within the DSM Framework. For example, the existing DSM Framework requires energy conservation programs to provide more societal benefit than they cost to implement, measured using a Total Resource Cost Plus ("TRC-Plus") result of greater than 0.7 for Low-Income programs and 1.0

[12] The GreenON Residential Direct Install and Energy Review program offers direct installation of smart thermostats in residential homes, while the utility programs offer a rebate to residential customers for the purchase of a smart thermostat.
[13] Environmental Commissioner of Ontario, August 2017 - Annual Energy Conservation Progress Report 2016/2017 (Volume Two), p. 11.

for all other programs.[14] As noted above, there are no cost-effective incremental energy conservation programs to pursue as part of Ontario's Cap-and-Trade program. However, by eliminating these cost-effectiveness constraints for incremental government-funded energy conservation programs, new opportunities can be explored and implemented through the provincial Cap-and-Trade program without conflicting with the utilities' DSM programs. Furthermore, Union will continue to support the advancement of incremental energy conservation programs, including pursuing a role in the delivery of future programs, in partnership with the government.

3.4 MAINTAINING AGGRESSIVE PURSUANCE OF DSM PROGRAMS

In order for Ontario's GHG reduction goals to be met, it is essential that Union continues to aggressively pursue DSM program development and implementation in addition to supporting the development of incremental energy conservation programs.

In the OEB's DSM Framework, the OEB stated that *"[to] effectively motivate the gas utilities to both actively and efficiently pursue DSM savings and to recognize exemplary performance, the Board considers it appropriate to continue making a shareholder incentive available."*[15] Union submits that an effective shareholder incentive mechanism for natural gas utilities in Ontario is a critical part of aggressively pursuing DSM results.

[14] Market Transformation programs are not subjected to the TRC-Plus test.
[15] EB-2014-0134, Report of the Board, p. 20.

When the current DSM Framework and shareholder incentive mechanism were established in 2014, Ontario's Cap-and-Trade program did not exist. At the time, few if any energy conservation programs competed with utility DSM programs for customer participation. As a result, Union's ability to achieve a reasonable shareholder incentive relied solely on its ability to increase customer participation. As such, the current shareholder incentive mechanism is designed in a manner that awards the majority of the shareholder incentive for above-target achievement, with no shareholder incentive available below 75% scorecard achievement.

With the introduction of the Cap-and-Trade program (and subsequently GreenON) in 2017, achieving customer participation in DSM programs is becoming increasingly difficult due to the influx of competing energy conservation programs. In general, each customer has a limited amount of discretionary funding available to invest in energy conservation projects. Therefore, customers now need to choose which programs to participate in, instead of simply choosing whether or not to participate. This concern is amplified given that GreenON is expected to fund energy conservation programs at budget levels significantly higher than those available for DSM programs. This provides GreenON programs the ability to offer more lucrative customer incentives, attracting customer participation towards projects eligible under those programs, and away from projects eligible under Union's DSM programs. For example, the GreenON Residential Direct Install and Energy Review program has $40 million in funding for just one residential measure over a seven-month term. In comparison, Union's annual 2017 DSM budget

for all measures and programs, across all customer markets, is $58.5 million.[16] To date the approximate total for energy efficiency (or conservation) funding through GreenON is $218 million. Upon release of Ontario's CCAP (June 2016), ICF Canada estimated that $1.8 billion of the Ministry of the Environment and Climate Change's ("MOECC") estimated $8.3 billion in CCAP funds would be used to fund energy efficiency (or conservation) programs.

Unless adjustments are made to the utilities' shareholder incentive mechanism, the changes in the energy conservation landscape discussed above will significantly impede the utilities' ability to successfully deliver DSM programs in the final years of the 2015-2020 DSM Framework. Consistent with the OEB's guidance in the DSM Framework, Union expects that shareholder incentives should "*take into consideration the relative difficulty in achieving other goals the Board expects the gas utilities to achieve (e.g., programs that deliver long-term savings, accessible low-income programs, integration and coordination with electricity conservation programs, conservation first in infrastructure planning, etc.)*".[17] In order to ensure aggressive pursuance of DSM results in light of increasing pressure from competing energy conservation programs, Union requests that the OEB adjust the shareholder incentive mechanism in the following ways:

1. **Remove the minimum 75% scorecard result required for shareholder earnings –** The utilities' initial DSM program results are not recognized until a 75% scorecard result is achieved. However, the energy conservation and corresponding GHG emissions

[16] EB-2015-0029, Decision and Order, Schedule A.
[17] EB-2014-0134, Report of the Board, p. 9.

reductions associated with these results are as valuable as those achieved beyond the 75% threshold. Prior to the implementation of the Cap-and-Trade program and corresponding GreenON programs, stretching the utility's DSM achievements beyond the 75% target in order to earn an incentive could be seen as reasonable. While Union will continue to pursue above-target achievement, new pressures from government-funded programs will make this increasingly difficult. This change ensures that where meaningful DSM results are achieved by a utility, there are adequate corresponding incentives awarded, ensuring continued focus on all available energy savings in Ontario.

2. **Reverse the distribution of shareholder incentive above/below each scorecard target, resulting in 60% of the maximum incentive to be earned at target, and the remaining 40% earned above target –** This change more appropriately rewards at-target achievement in a new and increasingly competitive landscape where above-target achievement is not possible due to pressure from competing programs.

The results of these changes are outlined in Table 1 below.

Table 1
Result of Proposed Shareholder Incentive Mechanism Changes

Scorecard Achievement	Current Maximum Shareholder Incentive Achieved	Proposed Maximum Shareholder Incentive Achieved
0%	0%	0%
25%	0%	15%
50%	0%	30%
75%	0%	45%
100%	40%	60%
125%	70%	80%
150%	100%	100%

Furthermore, in an effort to revise the 2015-2020 DSM Framework given the new energy conservation landscape discussed above, Union requests that the OEB alleviate pressure from the utility's DSM scorecard targets caused by the OEB's direction to increase targets by 10%.[18] This decision was made by the OEB in January 2016, prior to the introduction of Ontario's Cap-and-Trade program, when stretching the utilities' targets could be considered reasonable. It is Union's view, however, that an increase to targets without a corresponding increase to budgets (to accommodate for the additional customer incentives required to achieve the increased targets) is not appropriate. Union requests that the OEB reduce Union's targets by 10%, effective for the 2018 DSM program year. Alternatively, if the OEB prefers to maintain the target increase, the OEB could instead increase Union's DSM budget by 10%, effective for the 2018 DSM program year, providing Union the ability to fund the additional participation (via customer incentives) required to achieve the increased targets.

3.5 CONCLUSIONS

In summary:

1. In order for Ontario's GHG emissions reduction targets to be met it is crucial that regulators and government clearly distinguish ongoing DSM programs from nascent Cap-and-Trade programs. Government funds (i.e. CCAP, GreenON, federal programs) should be used to advance incremental energy conservation programs that otherwise would not proceed within the existing DSM Framework (i.e. programs that do not pass DSM cost-

[18] EB-2015-0029, Decision and Order, p. 66.

effectiveness requirements).

2. For attribution between a utility DSM program and other partnered sources of funding (including CCAP, GreenON, and federal programs), the existing partnership attribution process as outlined in the OEB's Guidelines is appropriate and should be maintained.
3. The existing self-reported net-to-gross adjustment methodology is costly and ineffective. Therefore, the net-to-gross adjustment methodology should be modified to a standard adjustment for all programs within the range of 0.7 to 0.8, excluding Union's Low-Income, Market Transformation and Large Volume Direct Access programs which should not be subjected to net-to-gross adjustments.
4. The existing shareholder incentive should be enhanced to account for the changing landscape in energy conservation programs in Ontario. Specifically, Union is requesting that the OEB remove the 75% minimum scorecard threshold for earnings, and reverse the distribution of shareholder incentive above/below each scorecard target. This results in 60% of the maximum incentive to be earned at target and the remaining 40% of the maximum incentive to be earned above target.
5. The OEB's January 2016 decision to increase Union's targets by 10%, without a corresponding increase to budgets (to accommodate for the additional customer incentives required to achieve the increased targets), is not appropriate. Union requests that the OEB reduce Union's targets by 10%, effective for the 2018 DSM program year. Alternatively, Union requests that the OEB increase Union's DSM budget by 10%, effective for the 2018 DSM program year, providing the utility the ability to fund the additional participation (via customer incentives) required to achieve the increased targets.

ENBRIDGE

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September 1, 2017

VIA COURIER AND RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

Re: Ontario Energy Board
EB-2017-0127 / EB-2017-0128 – DSM Mid-Term Review
Comments of Enbridge Gas Distribution Inc.

In accordance with the Ontario Energy Board's letter issued on June 20, 2017, enclosed please find the submission of Enbridge Gas Distribution Inc.

Please contact the undersigned if you have any questions.

Sincerely,

(Original Signed)

Bonnie Jean Adams
Regulatory Coordinator

Attach.

DEMAND SIDE MANAGEMENT MID-TERM REVIEW

EB-2017-0127/0128

SUBMISSION FROM ENBRIDGE GAS DISTRIBUTION INC.

September 1, 2017

Executive Summary

1. On January 20, 2016, the Ontario Energy Board ("the Board" or "the OEB") issued its Decision and Order regarding Enbridge Gas Distribution Inc.'s ("Enbridge" or the "Company") and Union Gas Ltd.'s ("Union") 2015 to 2020 Demand Side Management ("DSM") Plans in EB-2015-0029/0049. The Board's Decision and Order characterized the DSM Mid-Term Review to be undertaken before June of 2018 as an opportunity to, "assess performance on annual metrics, budget levels, impact on customer rates and shareholder incentives. The mid-term review will also allow the OEB to consider the DSM Framework relative to the overall energy conservation landscape, including any new or revised government direction."[1]

2. In its subsequent letter dated June 20, 2017, the Board clarified that the DSM Mid-Term Review would include "...review of the DSM Framework in the context of the Cap and Trade Program."[2] The letter further requested that by written submission on September 1, 2017 interested parties comment on two issues. First, the OEB requested comments regarding "Consideration of the relationship between the current suite of DSM programs and actual C&T activities of customers with their own compliance obligations."[3] Second, the OEB requested comments regarding "Consideration of the attribution of costs and savings to ratepayer-funded DSM programs where natural gas utilities offer carbon abatement programs in the market."[4]

3. The following submission responds to the two specific issues highlighted in the Board's June 20, 2017 letter. In specific response to the second issue identified by the Board, Enbridge highlights the impact that Cap and Trade has had on the DSM

[1] EB-2015-0029/0049, Decision and Order, January 20, 2016, p.85
[2] EB-2017-0127/0128, DSM Mid-Term Review, June 20, 2017, p. 2
[3] Ibid, p. 3
[4] Ibid

Framework, and offers recommendations to better align the DSM Framework with the Cap and Trade Framework as part of the Board's review.

4. In sum, Enbridge believes that Cap and Trade has increased the complexity of Ontario's energy efficiency landscape, while simultaneously increasing the importance of regulated DSM. While the number of agents involved in energy efficiency is increasing, the Cap and Trade Program has also increased the value proposition of DSM for ratepayers and positioned DSM as an essential component of the cost-effective management of Enbridge's customers' greenhouse gas ("GHG") emissions. In order to maximize the benefits of DSM within the context of a carbon-priced environment Enbridge believes it is essential to modernize the policies of the DSM Framework to align with the Cap and Trade Framework and the new reality that Cap and Trade has created.

5. Both Framework alignment and value for ratepayers will be maximized where ratepayer and shareholder benefits are closely linked, ensuring that both of these parties realize meaningful benefits through the aggressive reduction of energy use and GHG emissions amongst Enbridge's customers. The following proposed solutions, outlined in greater detail within the body of this submission, represent the best available opportunities to achieve this alignment and maximize benefits for all parties:
    i. Modernize the approach to calculating and applying net to gross values to reflect the complex policy environment created by Cap and Trade;
    ii. Re-align DSM budgets and targets to recognize the increased need for a robust DSM presence in the energy efficiency market as a result of Cap and Trade; and
    iii. Align the timing and magnitude of benefits as between shareholders and ratepayers by revising the weighted scorecard incentive formula, maintaining the annual incentive cap of $10.45 million per utility approved by the Board.

INTRODUCTION

6. 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 an ardent supporter of the efficient use of natural gas and the associated reductions in GHG emissions which the Company helps facilitate. Between 1995 and the end of 2016, Enbridge helped its customers save approximately 11.1 billion m3 of natural gas; the equivalent of 20.8 million tonnes of atmospheric carbon dioxide.[5] The Company is proud of its energy efficiency efforts to date, and intends to play an integral role in assisting the Province to meet its GHG reduction targets.[6]

7. Enbridge's most recent Multi-Year DSM Plan (2015-2020) was filed on April 1, 2015 in response to the OEB's Report of the Board: Demand Side Management Framework for Natural Gas Distributors (2015-2020) and accompanying Filing Guidelines (together the "DSM Framework"). The Company's proposed Multi-Year DSM Plan was responsive to the Board's direction and carefully considered both the guiding principles and the key priorities outlined in the Framework.

8. The Board released its Decision and Order (the "Decision") regarding Enbridge's Multi-Year DSM Plan on January 20, 2016. In light of the broad spectrum of issues addressed in the gas utilities' DSM Plans and the subsequent arguments of the utilities and interested parties, the Board's Decision made determinations in a number of important areas including, but not limited to, DSM programs, budgets, scorecard design elements, targets and various matters of a policy nature.

9. In its Decision the Board approved the majority of DSM offers as filed, generally expressing support and noting that the programs proposed balanced the main

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[5] Assumes 1.875kg of CO2 are emitted for each m3 gas that is consumed
[6] Ministry of the Environment and Climate Change (2016) "Ontario's Climate Change Action Plan 2016," Government of Ontario, p.13.

components of the DSM Framework.[7] The Board did however reject some of the gas utilities' proposed DSM programs including My Home Health Record; a third-party delivered offer proposed by Enbridge which comprised a significant portion of the Company's Market Transformation Program. In rejecting Enbridge's My Home Health Record offer and subsequently reducing the overall budget of Enbridge's Market Transformation Program, the Board determined that overheads associated with market transformation should be reduced proportionally.

10. One of the most significant elements of the Board's Decision was the application of a 10% increase to all 2016 targets, without any commensurate increase to DSM budgets to fund the incremental 10% in customer financial incentives that would be required to facilitate these results. In the Board's view the targets as filed were not sufficiently aggressive, and an increase to targets without a proportional increase to budgets would encourage greater cost-efficiency.[8] It is worth noting that expert evidence brought forward by the Green Energy Coalition in EB-2015-0029/0049 indicated that Enbridge's proposed targets for key sectors such as large commercial and industrial customers and the residential sector were consistent with historical experience.[9] As such, the 10% increase applied in conjunction with a shift of the upper level of target achievement from 125% to 150% of target resulted in stretch targets that in Enbridge's view are not achievable.

11. Another element of the Board's Decision regarding DSM targets was the establishment of a Target Adjustment Mechanism ("TAM") to establish all future targets beyond 2016 using a formula driven by prior years' results (e.g. 2017 targets would be established based upon 2016 results among other inputs). The TAM, which was based upon a proposal by Union specific to a few CCM metrics, would be applied to all metrics within utility DSM scorecards. The Board also determined that when applying the TAM to market transformation targets an annual

[7] EB-2015-0029/0049, Decision and Order, January 20, 2016, p.10, p.24, p.32
[8] Ibid, p.66
[9] EB-2015-0029/0049, Exhibit L.GEC.1, pp.34

productivity factor of 10% should be applied to ensure aggressive target increases, as well as a 2% productivity factor to low income and resource acquisition targets.

12. The Province's Climate Change Action Plan ("CCAP") was released on June 8, 2016 on the heels of the Government of Ontario's Low Carbon Economy and Climate Change Mitigation Act ("the Act") released on May 18, 2016 which outlined the province's greenhouse gas reduction targets out to 2020 among other matters. The CCAP, which signaled a strong commitment to reach the Province's greenhouse gas reduction targets, introduced the Government's intention to create a "Green Bank" which would reinvest Cap and Trade auction proceeds into GHG reducing initiatives and programs.

13. On July 1, 2016, Ontario's Cap and Trade Regulation was released instructing that the first Compliance Period would begin January 1, 2017. The Board subsequently issued its Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities ("the Cap and Trade Framework") on September 26, 2016. The Cap and Trade Framework outlined compliance options available to the utilities to meet their obligations including allowances, offset credits and abatement activities. The Cap and Trade Framework provided that the utilities would be responsible for deciding the exact makeup of activities to be included in their Compliance Plans, including how to best prioritize and pace compliance options, including abatement activities. The Board asserted that any potential overlap between DSM and abatement activities could be addressed through the evaluation, measurement and verification ("EM&V") process of the DSM Framework, and that the DSM Mid-Term review would provide an appropriate opportunity to assess the DSM Framework in light of the Cap and Trade Framework[10].

14. On November 15, 2016, the Company filed its 2017 Compliance Plan (EB-2016-0300) with the Board. In its 2017 Compliance Plan Enbridge stated its

[10] EB-2015-0363 Report of the Board: Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities, September 26th, 2016, p. 28

agreement with the Board regarding the potential for overlap between DSM programs and future Compliance Plans. Further, the Company affirmed its view that DSM is an abatement activity, and that the relationship between DSM and Compliance Planning should be considered during the DSM Mid-Term review.

15. On December 15, 2016 the Ministry of the Environment and Climate Change ("MOECC") announced legislation to bring into effect the Ontario Climate Change Solutions Deployment Corporation, formerly referred to as the Green Bank. This Corporation was formed to dispense Cap and Trade proceeds held in the Greenhouse Gas Reduction Fund ("GGRF") to initiatives identified in the CCAP.

16. On December 16, 2016 Enbridge submitted written comments to the Ministry of Energy regarding Ontario's 2017 Long Term Energy Plan. In its comments, the Company expressed its belief that the most effective way to dispense funds held in the GGRF was to leverage existing program delivery channels, including Enbridge's existing DSM programming, in order to maximize expediency and efficiency.

17. On June 20, 2017 the Board issued a letter regarding the DSM Mid-Term Review, noting that it would include "...review of the DSM Framework in the context of the Cap and Trade Program."[11] Enbridge is supportive of the Board's reasoning, and submits that the vast majority of the DSM Framework remains appropriate. What follows are the views of Enbridge Gas Distribution Inc. on these matters, with a high degree of relevance to the 2017 and 2018 Compliance Plans and the two subsequent DSM Mid-Term Review submissions that will follow on October 1, 2017 and January 15, 2018.

18. It should be noted that as of the time of the preparation of this submission the Company has not had the benefit of receiving the Board's decision in EB-2016-0300 with respect to Enbridge's 2017 Cap & Trade Compliance Plan.

[11] EB-2017-0127/0128 DSM Mid-Term Review, June 20th, 2017, p. 2

Given the EB-2016-0300 Decision could contain information or direction relevant to Enbridge's submissions in the DSM Mid-Term Review regarding the alignment of DSM and Cap & Trade, the Company reserves the right to file a supplementary submission in this proceeding following the Board's release of its decision on the Company's 2017 Compliance Plan.

Issue 1: DSM and Customers with Compliance Obligations

19. The first issue on which the Board requested comment in its June 20, 2017 letter is: "Consideration of the relationship between the current suite of DSM programs and actual C&T activities of customers with their own compliance obligations."[12]

20. Enbridge does not see a requirement to differentiate between participants and non-participants in Cap and Trade when determining eligibility for its DSM programs.

21. Ultimately the objective of Cap and Trade is to reduce the emissions of consumers and businesses in Ontario. Whether participating directly, as Large Final Emitters do, or indirectly, as small consumers do all sectors which fall under the Cap and Trade regulations will now pay a financial cost for the emission of greenhouse gases. Within the context of DSM, this means that the business case for both participants and non-participants to undertake energy efficiency projects has improved.

22. Though these parties may experience the costs of Cap and Trade in a different way, the end result is largely the same. For this reason, the Company does not see a rationale for drawing a distinction between these two groups within the context of DSM. Just as non-participants do, participants in Cap and Trade will have the opportunity to ease their compliance burdens by participating in DSM and taking advantage of the technical expertise and financial incentives made available to them.

23. To the degree that an argument may be put forth to cease delivery of DSM programming to large customers that have been deemed Large Final Emitters this discussion should proceed on its own merits, irrespective of the implementation of Cap and Trade. This was effectively the case in EB-2015-0029/0049 in which the

[12] EB-2017-0127/0128 DSM Mid-Term Review, June 20th, 2017, p. 3

Board determined that Union should reinstate its Large Volume program[13], which presumably would service many customers that are also Large Final Emitters. The implementation of Cap and Trade should not materially alter this outcome.

24. It is not clear from the wording of the June 20, 2017 letter whether the Board intended this issue to also encompass those Cap and Trade participants that participate voluntarily. Enbridge's views regarding voluntary Cap and Trade participants are the same as those regarding Large Final Emitters. Namely, the fact that some customers voluntarily participate in the Cap and Trade program does not diminish the need to provide DSM programs that assist such customers. Many customers who are eligible to become Voluntary Participants do not, and will look to the DSM programs of the gas utilities to assist in their efforts to reduce gas consumption and GHG emissions. Like Large Final Emitters, even Voluntary Participants will likely look to the DSM programs of the gas utilities as a means to reduce GHG emissions and, therefore, the need to purchase the necessary allowances or offset credits. In summary, Enbridge sees little logic in the elimination of gas conservation program eligibility simply because of the volume of a customer's GHG emissions.

[13] EB-2015-0029/0049, Decision and Order, January 20, 2016, p.50

Issue 2: Aligning DSM & Abatement

25. The second issue on which the Board requested comment in its June 20, 2017 letter is: "Consideration of the attribution of costs and savings to ratepayer-funded DSM programs where natural gas utilities offer carbon abatement programs in the market."[14]

26. In its simplest form, the Company believes that DSM is carbon abatement programming. It is a policy instrument that the Board can leverage to help the Government achieve its objectives, and to help ratepayers maximize the benefits of lower GHG emissions and reduced energy costs. There is no need to create duplicative governance for alternate DSM programming. In fact, it would be inefficient to do so. What is needed is a greater alignment of the Cap and Trade and DSM Frameworks to ensure that both are mutually supportive in striving to maximize benefits for ratepayers.

27. In this new context and new policy environment Enbridge wishes to be clear regarding the Company's intention to be at the forefront of carbon abatement activity. Enbridge will continue to offer highly cost effective and meaningful DSM services to the best of its ability and will seek to find ways to partner with government and stakeholders to continue to enhance energy efficiency programming. The Company anticipates that its efforts will also seek to develop other forms of carbon abatement, such as renewable natural gas and geothermal heating and cooling. Enbridge's purpose in this consultation is to enhance the deliverability of energy efficiency in, for, and with the Province of Ontario.

28. In the remainder of this submission Enbridge will outline the impact that the implementation of Cap and Trade has had on the DSM Framework and subsequently provide recommendations to modernize the DSM Framework, enabling alignment with Cap and Trade.

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[14] EB-2017-0127/0128 DSM Mid-Term Review, June 20, 2017, pg. 3

29. The political and regulatory environment in which the Board established the DSM Framework in 2014 and subsequently issued in its Decision and Order in EB-2015-0029/0049 in early 2016 has changed considerably as a result of Cap and Trade. In particular, this significant change in government policy has resulted in an influx of funding and delivery agents in Ontario's energy efficiency space, while simultaneously elevating the economic value and strategic importance of regulated natural gas DSM far above historic levels. Both of these new dynamics create the requirement for necessary enhancements to the DSM Framework.

Increase in Funding and Delivery Agents due to Cap and Trade

30. Cap and Trade has fundamentally altered both the quantity of funding available to reduce GHG emissions and the number of agents involved in the distribution of such funding. Above all else this noticeable increase in funding sources, public attention, and the number of actors engaged in Ontario's efforts to combat climate change should be a welcome and positive development. This situation does however create challenges in effectively coordinating such funding and activities both within and outside of the OEB's regulation.

31. While the Company is not proposing a large expansion of its DSM customer abatement activities as part of the Mid-Term Review, it is important that parties recognize the realities of the current market and the resulting need for modifications to current DSM methodologies.

32. Unfortunately, the current budget and target setting DSM methodologies are directionally working at odds with Cap and Trade. Rather than ensuring meaningful customer incentives to drive incremental activity, the current methodologies of the Target Adjustment Mechanism and the associated "productivity factors" of 2% or 10% annually, as the case may be, actually reduce customer incentives available by assigning productivity to customer incentives. Under this structure, the only place to achieve lower program costs is by reducing customer incentives. Ironically, it is expected that greater customer incentives will be needed to

encourage ever greater levels of conservation and GHG emission reductions moving forward. As a result, the current DSM Framework will require the cannibalization of DSM programs; preserving some at the expense of others.

33. Focusing first on activity inside of regulation, on July 1, 2016 Ontario's Cap and Trade Regulation came into effect and Enbridge became a mandatory participant with compliance obligations related to its facility emissions and the majority of its customers' emissions. As previously noted, one of the options offered to utilities to meet their compliance obligation was to undertake various GHG abatement activities intended to reduce the number of allowances and/or offset credits that would otherwise need to be purchased in order to remain compliant. In Section 2.1, Table 2 of the Cap and Trade Framework, the Board lists potential carbon abatement measures a utility may undertake including renewable energy and fuel switching, building retrofits, renewable natural gas, and customer abatement activities.

34. Enbridge believes that customer incentives remain an important feature in the delivery of energy efficiency programming to drive abatement, though the Company anticipates that some parties may argue that a reduction in such incentives may be in order due to the creation of a carbon cost. If this assertion were true, there would be no need for the CCAP and associated GreenON funding, which will be offering programs likely to incorporate rich incentives relative to DSM programming. While likely to dispense more funds than ratepayer-funded DSM in its current form, these other agencies do not operate in the same construct for cost effectiveness testing that the gas utilities do; potentially reducing Enbridge's ability to drive meaningful results. As Ontario's Environment Commissioner has pointed out, "natural gas utility conservation programs make good sense – delivering roughly three dollars in benefits for every dollar spent."[15]

[15] Every Joule Counts, Ontario's Energy Use and Conservation Year in Review, Environmental Commissioner of Ontario, August, 2017, p. 11.

35. While an increase in customer incentives beyond the rate of inflation in future years is both likely and necessary, the impact of the 10% increase in targets and the annual "productivity" increases in targets applied in EB-2015-0029/0049 without a proportionate increase in budgets is such that the Company is left attempting to attract more participants with fewer dollars per participant in customer incentives.

36. This being said, Enbridge submits that this Mid-Term Review is an opportunity to learn from recent experience and amend current policies and methodologies in order to generate greater savings and emission reductions from the current suite of approved DSM abatement programs. By using the DSM Mid-Term Review to align the methodologies which govern DSM abatement activities with the requirement to maximize emission abatement, and subsequently minimize the cost of allowances and/or offset credits, the Board can increase benefits for ratepayers using a proven and effective tool that is already in place; utility-led DSM. Without implementing needed modifications the savings achieved through ratepayer funded DSM will be less than would otherwise be the case, meaning that emission abatement cannot be maximized.

37. The Board goes on to state in its Cap and Trade Framework that the utilities will "likely develop targeted programs for their residential, commercial and industrial customers... and will allocate costs to the appropriate customer classes, similar to DSM programs"[16]. Enbridge notes that service-based customer abatement "programs" are but one of many available avenues to abate GHG emissions, with many other activities that more closely resemble infrastructure investments, such as low-carbon technologies, or supply-side activities, such as renewable natural gas. However, for ease of communication the remainder of this submission will use the term "customer abatement" in a manner that does not address such activities, instead focusing only on the subset of customer abatement programs focused on energy efficiency which resemble DSM.

[16] EB-2015-0363 Report of the Board: Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities, September 26, 2016, p. 29

38. Enbridge submits that because the Company's obligation is specific to emissions resulting from natural gas volumes, practically speaking it is likely that most of the current opportunities for "targeted [abatement] programs" referenced in the Cap and Trade Framework are essentially DSM programs. Whether entitled "DSM" or "abatement", the activities being undertaken are the same activities; namely the use of consumer education, technical expertise, financial incentives, and other methods to help customers reduce their natural gas consumption.

39. In its Cap and Trade Framework the Board states that any overlap between additional energy efficiency focused abatement programs and DSM would be appropriately addressed through the EM&V process of the DSM Framework, and that the DSM Mid-Term Review would provide an appropriate venue to consider the linkages between the DSM and Cap and Trade Frameworks.

40. Enbridge believes that the creation of a new, different, and separately governed framework or similar policy guidance specific to the same or similar customer abatement programs would be sub-optimal. For this reason Enbridge believes that in the event incremental regulated energy efficiency abatement programs are desirable, the most appropriate and efficient approach is to use the DSM Framework created by the Board as a foundation, and that any incremental activity should be built upon the utilities' successful DSM Plans as opposed to being developed and governed separately.

41. The implementation of Cap and Trade has also increased the complexity of Ontario's energy efficiency environment outside of the OEB's regulation. Shaping much of the increased attention on energy efficiency is a provincial mandate set by the Ontario government. Attainment of Ontario's short, medium and long-term

emission reduction targets[17] will be supported through the collection and re-distribution of proceeds from the Cap and Trade market. As outlined in the CCAP[18], funds from the GGRF have been earmarked to enhance existing energy efficiency efforts, launch new energy efficiency programs, and create a new government agency known as the Ontario Climate Change Solutions Deployment Corp., (also known as "GreenOn", formerly known as the "Green Bank").

42. Looking at the full Provincial landscape, energy efficiency now boasts a growing number of new and existing market actors and funding sources. In addition to established natural gas DSM by the gas utilities and electricity Conservation & Demand Management[19,20] administered by the Independent Electricity System Operator ("IESO") and electric utilities, several other sources have come to the fore to promote and deliver energy efficiency:

    i. The Green Investment Fund[21] ("GIF"), created in early 2016 has distributed $325 million to promote emission reduction projects, many of which champion energy efficiency. These efforts include but are not limited to augmentation of Enbridge's DSM program[22] in addition to many other delivery agents such as Canadian Manufacturers and Exporters ("CME"), Ontario Centre of Excellence ("OCE") and the Ministry of Municipal Housing and Affairs.

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[17] Reduction of emissions to 15% below 1990 levels by 2020, 37% below 1990 levels by 2030 and 80% below 1990 levels by 2050. See *Climate Change Action Plan (2016-2020),* Government of Ontario (June 8, 2016)
[18] *Climate Change Action Plan (2016-2020),* Government of Ontario (June 8, 2016)
[19] $1.8B allocated to local distribution companies to promote energy efficiency as per Target and Budget Allocation Methodology, Conservation First Framework LDC Tool Kit, Ontario Power Authority, December 16, 2014
[20] Within the IESO's CDM portfolio, industry associations like the Heating, Refrigeration and Air Conditioning Institute of Canada ("HRAI") and Canadian Manufacturers and Exporters ("CME") have initiated programs to assist small and medium-sized manufacturers in reducing greenhouse gas emissions through improved energy efficiency.
[21] "Green Investment Fund" Government of Ontario, February 4th, 2016 https://www.ontario.ca/page/green-investment-fund
[22] "Home Energy Conservation Incentive Program" Government of Ontario, https://ohecip.ca/en/

ii. Drawing from the proceeds of Cap and Trade, the Ontario government recently announced the provision of $200 million in new funding[23] to promote energy efficiency retrofits in schools across the province. The Government continues to make similar announcements up to the time of this submission including $100 million in new funding for municipalities[24] and up to $657 million to help social housing apartment buildings complete repairs and retrofits while lowering emissions[25].

iii. Also drawing from the GGRF, Ontario is investing $377 million over the course of the 2017-2018 fiscal year in GreenON to "make it easier for households and businesses to adopt proven low-carbon technologies."[26]

iv. At the federal level, $2 billion has been directed to support the Low Carbon Economy Fund[27], $1.4 billion of which will be used to support provinces and territories in achieving the emissions reduction priorities contained in the Pan-Canadian Framework on Clean Growth and Climate Change.

v. OCE recently partnered with Sustainable Development Technology Canada[28] to offer $45 million to drive commercialization[29] of technologies that reduce greenhouse gas emissions for industrial production sites and throughout the industrial value chain.

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[23] "Schools Receiving $1.4 Billion for Repairs and Renewal this year ," Government of Ontario, June 13, 2017 https://news.ontario.ca/opo/en/2017/06/schools-receiving-14-billion-for-repairs-and-renewal-this-year.html

[24] "Ontario Supporting Municipalities in Fighting Climate Change," Ministry of the Environment and Climate Change, August 14, 2017, https://news.ontario.ca/ene/en/2017/08/ontario-supporting-municipalities-in-fighting-climate-change.html

[25] "Ontario Making Major Investments in Social Housing Repairs and Retrofits," Ministry of Housing, August 24, 2017, https://news.ontario.ca/mho/en/2017/08/ontario-making-major-investments-in-social-housing-repairs-and-retrofits.html?utm_source=ondemand&utm_medium=email&utm_campaign=p

[26] Ontario Budget (2017), Chapter III: Creating Opportunities and Security, pp.95, http://www.fin.gov.on.ca/en/budget/ontariobudgets/2017/budget2017.pdf

[27] "Low Carbon Economy Fund," Government of Canada, June 15th, 2017 https://www.canada.ca/en/environment-climate-change/news/2017/06/low_carbon_economyfund.html

[28] "Sustainable Development Technology Canada", Government of Canada https://www.sdtc.ca/en

[29] "Target GHG Collaborative Technology Development Program," Ontario Centres of Excellence http://www.oce-ontario.org/programs/strategic-initiatives/TargetGHG/targetghg-collaborative-technology-development-program/how-it-works

43. Enbridge notes that the natural gas utilities' efforts to reduce energy use and GHG emissions pre-date all of the above, making Enbridge and Union the entities with the most experience delivering customer abatement programs in Ontario. As a result, there exists an unprecedented opportunity for the gas utilities to lead in this market and assist other parties in both achieving results efficiently and coordinating collective efforts rationally. These developments should be a welcome one for Ontario's rate and tax payers, as the gas utilities, under the regulation of the OEB, conduct their DSM activities within a context that requires cost-efficiency, evaluation, verification, and program delivery review.

44. The challenge for governments, regulators and market players will be to ensure that governance structures respond appropriately to the new realities created by Cap and Trade in such a way that public or ratepayer funds are spent prudently, and the customer's needs are always forefront in decision-making.

45. With all of the above in mind, the Company does not oppose the current policy contained within the DSM Filing Guidelines to the Framework regarding the attribution of savings. In the scenario where Enbridge collaborates with a local distribution company ("LDC") or the IESO to promote energy efficiency, the Board's DSM Filing Guidelines clearly articulate that "all the natural gas savings should be attributed to rate-regulated natural gas utilities and vice versa for electricity savings."[30] This arrangement is appropriate and purposeful, removing upfront barriers to collaboration and, in the best of outcomes, setting the stage for increased energy savings, decreased costs, or both.

46. Where Enbridge collaborates with a party other than a LDC however, the DSM Framework states that savings should be attributed according to a "partnership agreement reached prior to the program's launch".[31] Where Enbridge is the recipient of funds other than rate regulated DSM funds to either deliver on behalf of

[30] EB-2014-0134, Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020), December 22, 2014, p.22
[31] Ibid

another party or augment its existing DSM programming, this approach to attribution is appropriate; allowing the parties involved to create a policy which reflects the context, objectives and interests relevant to the situation at hand.

47. Enbridge is concerned however that the requirement for collaborating parties to conclude an agreement regarding the attribution of energy savings will create a disincentive to partner with other entities where program delivery is not consolidated within the gas utilities (e.g. industry associations, Government agencies other than the IESO). All else being equal, if collaborating parties are forced to claim fewer savings as a result of collaboration, a rational economic actor would avoid partnerships in order to reach performance targets. While ignoring potential partnerships may be to the benefit of the delivery agent in this scenario, it is hard to imagine such an approach being in the best interest of consumers, who should be permitted to participate in all available energy efficiency programs in light of their collective funding of such programs in the first place.

48. Enbridge submits that where the gas utilities are informally partnering with other delivery agents to the mutual benefit of the customer, the Board should only consider the influence of these other parties within the context of net to gross adjustments. In the Company's view, attribution and net to gross are effectively two sides of the same coin; different terms for evaluating the degree to which a program delivery agent influenced a customer's decisions. To the degree that by some methodology, whether it be an explicit attempt to quantify influence through a net to gross study or a fixed negotiated approach, attribution should simply be included within established net to gross values rather than be incorporated into results as a distinct adjustment.[32]

49. In light of the close relationship between attribution and net to gross evaluation, Enbridge further submits that the confluence of these many funding sources and delivery agents has created a complex environment where traditional policies to

[32] Appendix A – Research Into Action (Jane Peters, 2017), p.25

uniongas
A Spectra Energy Company

July 28, 2016

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

RE: EB-2015-0029 – Union Gas Limited – 2015-2020 Demand Side Management ("DSM") Plan – Green Investment Fund Attribution

The Ontario Energy Board ("Board") issued its final 2015 to 2020 Report on the DSM Framework for Natural Gas Distributors (the "Framework") and the Filing Guidelines to the DSM Framework ("the Guidelines") on December 22, 2014 (EB-2014-0134). These documents were developed to guide Union Gas Limited ("Union") and Enbridge Gas Distribution Inc. ("Enbridge") (collectively "the utilities") in the preparation of their 2015-2020 DSM Plans.

On January 20, 2016, and updated February 24, 2016, the Board issued its Decision and Order on the utilities' respective DSM Plans (EB-2015-0029/EB-2015-0049).

Subsequent to the Board's Decision and Order, Union entered into an agreement with the Ministry of Energy to provide funding, through the Ontario Green Investment Fund, to Union to enhance its residential Home Reno Rebate offering. The enhancements include:

- Expanded eligibility for participation, including:
  - Homes that use oil, propane, or wood as their primary heating fuel
  - Homes that use natural gas as their primary heating fuel but are not serviced by Union or Enbridge
- New rebates for:
  - High-efficiency oil furnaces and boilers
  - High-efficiency propane furnaces and boilers
  - High-efficiency wood burning systems
  - Air-source heat pumps
  - Smart thermostats
- Increased rebate levels for measures already included in the offering

All other elements of the Home Reno Rebate offering remain unchanged and as approved by the Board.

The agreement also provides funding to Union to develop a new residential Behavioural offering. Union does not currently administer a residential Behavioural offering within its DSM portfolio.

In situations where Union delivers a DSM offering in partnership with another party (e.g., governments, non-rate-regulated private sector), the Guidelines outline the following requirements at page 22:

> *"**Attribution of Benefits Between Rate-Regulated Natural Gas Utilities and Other Parties***
>
> *Attribution of savings between rate-regulated natural gas utilities and other parties (e.g., governments, non-rate-regulated private sector, etc.) should be based primarily on the shares established in a partnership agreement reached prior to the program's launch.*
>
> *Where the natural gas utilities' allocated share of natural gas savings in the partnership agreement is more than 20% of the share that would have been allocated based on a "percentage of total dollars spent" basis, an explanation for the difference should be provided. The natural gas utilities are also expected to file expected spending for each of the partners participating in the delivery of the program before the program is launched and the actual amount spent by each partner within each program year has taken place. As partnerships do not always evolve as originally planned, this additional information will help the Board and stakeholders to assess the reasonableness of the shares allocated in the partnership agreement reached prior to the program's launch and the actual contribution the natural gas utilities made to the program.*
>
> *The share allocated to the natural gas utilities will be used to determine the credited achievement for each of the relevant metrics used to evaluate the program."*

Union is filing this letter to outline the expected spend, term, and attribution agreement from the agreement with the Ministry of Energy.

Expected Spend

Funding for enhancements to Union's Home Reno Rebate offering is provided to Union by the Ministry of Energy, through the Green Investment Fund, in the amount of $40 million.

Funding for the development of a new residential Behavioural offering is provided to Union by the Ministry of Energy, through the Green Investment Fund, in the amount of $2 million.

Union's Board-approved DSM budget is outlined in Schedule A of the EB-2015-0029/EB-2015-0049 Decision and Order, in the table entitled "Union Gas Limited 2016 to 2020 DSM Budgets and Targets".

Term

The enhancements to Union's residential Home Reno Rebate offering will begin in 2016.

The development of a new residential Behavioural offering will begin in 2017.

The partnership agreement ends May 31, 2019.

Attribution Agreement

While funding from the Green Investment Fund will drive incremental participation, Union's existing Home Reno Rebate offering continues to be the foundation of the offering. For this reason, attribution of the enhanced Home Reno Rebate offering's results will not be determined simply based on the source of funding. Instead, attribution between Union and the Green Investment Fund will occur based on the following rules:

1. 100% of the results from homes outside of Union's franchise area will be attributed to the Green Investment Fund.
2. 100% of the results from homes within Union's franchise that use a primary heating fuel other than natural gas will be attributed to the Green Investment Fund.
3. 100% of the results directly related to the smart thermostat will be attributed to the Green Investment Fund.
4. For all other results, there will be a two-phased approach to attribution each year. During Phase 1, 80% of the results will be attributed to Union and 20% will be attributed to the Green Investment Fund. If at any point in a given year Union exhausts its DSM funding available, or elects to stop using DSM funds for the enhanced Home Reno Rebate offering, Phase 2 of attribution will begin. During Phase 2, 100% of the offering's results will be attributed to the Green Investment Fund. Phase 1 will reset on January 1st of each year.

Attribution levels for Phase 1 were established based on the estimate that the Green Investment Fund incentive enhancements will account for approximately twenty percent (20%) of the total per-home average incentive amount.

Attributable results include the number of homes participating in the enhanced Home Reno Rebate offering, the amount of energy saved by the enhanced Home Reno Rebate offering, and the amount of GHG emissions avoided by the enhanced Home Reno Rebate offering. Savings will be determined based on HOT2000, except for smart thermostats, which will use prescriptive savings assumptions from the joint Union and Enbridge Technical Reference Manual.

For the Behavioural offering, 100% of the results will be attributed to the Green Investment Fund.

Union will report the actual spend and results within its DSM Annual Reports and in its annual disposition of DSM deferral and variance accounts proceeding.

If you have any questions concerning this submission please contact me at 519-436-5334.

Yours truly,

[*Original Signed by*]

Vanessa Innis
Manager, Regulatory Initiatives

c.c.: Josh Wasylyk, Board Staff
Alex Smith (Torys)
EB-2015-0029 Intervenors